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VOLUME 1

Classic/Early Modern (Antiquity to 1945)

Edited by
Eugene F. Provenzo, Jr.

With the assistance of
Asterie Baker Provenzo

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1. 'Of Education', *Michel de Montaigne*
   Michel de Montaigne, *Essays of Michael, Seigneur de Montaigne* (London: Printed for T. Basset, M. Gilliflower and W. Hensman, 1685–1686).
   Published by G. Bell & Sons.

2. 'Of Custom and Education', *Francis Bacon*
   Essays, Civil and Moral. The Harvard Classics (New York: P. F. Collier & Son, 1909–1917).
   Published by P. F. Collier & Son.

3. 'The Great Didactic', *John Amos Comenius*
   John Amos Comenius, *Three Thousand Years of Educational Wisdom* (Cambridge: Harvard University Press, 1947), pp. 339–346.
   Published by Harvard University Press.

4. 'Of Education', *John Milton*
   Tractate on Education. Vol. III, Part 4, *The Harvard Classics* (New York: P. F. Collier & Son, 1909–14).
   Published by P. F. Collier & Son.

5. 'The Orbis Pictus', *John Amos Comenius*
   John Amos Comenius, *Selections from the Orbis Pictus Sensualium* (London: John and Benjamin Sprint), pp. 1, 3, 4, 5, 118, 119, 126, 127. John Amos Comenius's *Visible World*, translated into English by Charles Hoole 1887. Reprint by C.W. Bardeen Publisher, London.
   Published by C. W. Bardeen.

6. 'Selections from *Some Thoughts Concerning Education*', *John Locke*
   English Philosophers of the Seventeenth and Eighteenth Centuries, The Harvard Classics, No. XXXVII (New York: P. F. Collier & Son, 1910).
   Published by P. F. Collier & Son.

7. 'The Education of Women', *Daniel Defoe*
   English Essayes: Sidney to Macaulay, The Harvard Classics, Vol. XXVII (New York: P.F. Collier & Son, 1909–14).
   Published by P. F. Collier & Son.

8. 'The Laws of Education (Selection from *The Spirit of Laws*)', *Charles Montesquieu*
Charles de Secondat, Baron de Montesquieu, *The Spirit of Laws*. Translated by Thomas Nugent, revised by J. V. Prichard (London: G. Bell & Sons, Limited, 1914).
Published by G. Bell & Sons, Limited.

9. 'Selection from *The Autobiography of Benjamin Franklin*', *Benjamin Franklin*
Benjamin Franklin, *The Autobiography of Benjamin Franklin*, *The Harvard Classics* (New York: P.F. Collier & Son, 1909–14).
Published by P. F. Collier & Son.

10. 'Selection from *Émile*', *Jean-Jacques Rousseau*
Jean-Jacques Rousseau, *Émile or On Education*. Translated by Barbara Foxley (London: J.M. Dent and Sons Ltd, 1911).
Reprinted by permission of Everyman's Library, an imprint of Alfred A. Knopf.

11. 'Selection from *Notes on the State of Virginia*', *Thomas Jefferson*
Thomas Jefferson, *Notes on the State of Virginia* (Philadelphia: Prichard and Hall, 1788).
Published by Prichard and Hall.

12. 'Of the Mode of Education Proper in a Republic', *Benjamin Rush*
Benjamin Rush, *Essays, Literary, Moral & Philosophical* (Philadelphia: Thomas & Samuel F. Bradford, No. 8, South Front Street, 1798).
Published by Thomas & Samuel F. Bradford.

13. 'Selection from *Leonard and Gertrude*', *Johann Heinrich Pestalozzi*
J. A. Green (ed.), *Pestalozzi's Educational Writings* (New York: Longmans, Green & Co., 1912), pp. 46–53.
Published by Longmans, Green & Co.

14. 'On National Education', *Mary Wollstonecraft*
Mary Wollstonecraft, *A Vindication of the Rights of Woman* (London, 1891), pp. 237–253.
Published by Johnson.

15. 'Brief Encyclopaedia of Practical Philosophy', *Johann Friedrich Herbart*
Johann Friedrich Herbart, *Three Thousand Years of Educational Wisdom* (Cambridge: Harvard University Press, 1947), pp. 508–517.
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16. 'An Address to the Public; Particularly to the Members of the Legislature of New York, Proposing a Plan for Improving Female Education', *Emma Hart Willard*
Emma Hart Willard, *Woman and the Higher Education* (New York: Harper & Bros., 1893).
Published by Harper & Bros.

17. 'Selection from *Improvements in Education, as It Respects the Industrious Classes of the Community*', *Joseph Lancaster*
Joseph Lancaster, *Improvements in Education, as it Respects the Industrious Classes of the Community* (London: Darton and Harvey, 1803).
Published by Darton and Harvey.

18. 'The Education of Human Nature', *Friedrich Froebel*
Friedrich Froebel, *Froebel's Chief Writings on Education*. Translated in English by S.S.F. Fletcher and J. Welton (London: Arnold, 1912), pp. 31–45.
Published by Arnold.

19. 'First Annual Report of the Massachusetts School Board (1837)', *Horace Mann*
Horace Mann, *Report, together with the Report of the Secretary of the Board of the Massachusetts State Board of Education* (Boston, 1837), pp. 29–33.
Published by The Massachusetts State Board of Education.

20. 'Twelfth Annual Report of the Massachusetts School Board (1848)', *Horace Mann*
Lawrence A. Cremian (ed.), *Report, together with the Report of the Secretary of the Board of the Massachusetts State Board of Education* (Boston, 1848), pp. 84–97.
Published by The Massachusetts State Board of Education.

21. 'On Education', *Ralph Waldo Emerson*
Henry Saraiva (ed.), *Education: An Essay and Other Selections by Ralph Waldo Emerson* (New York: Houghton Mifflin, 1909).
Published by Houghton Mifflin.

22. 'Report of the Committee of Ten', *National Education Association*
Published for the National Educational Association by the American Book Company, pp. 83–99.
Published by American Book Company.

23. 'My Pedagogic Creed', *John Dewey*
The School Journal, LIV(3) (1897): 77–80.

24. 'The Function of Education in Democratic Society', *Charles W. Eliot*
The Outlook, LVII (1897): 103–116.

25. 'Psychology and the Teaching Art', *William James*
William James, *Talks to Teachers on Psychology: And to Students on Some of Life's Ideals* (New York: Henry Holt and Company, 1899).
Published by Henry Holt and Company.

26. 'Child-Study and Its Relation to Education', *Granville Stanley Hall*
The Forum, XXIX (1900): 688–693, 696–702.

27. 'Educational Methods', *Jane Addams*
Jane Addams, *Democracy and Social Ethics* (New York: Macmillan, 1902), pp. 98–119.
Published by Macmillan.

28. 'On Education and Society', *Émile Durkheim*
Émile Durkheim, Translated by Peter Collins from *L'évolution Pédadogique en France* included in Jerome Karabel and A. H. Halsey, (eds), *Power and Ideology in Education* (New York: Oxford University Press, 1977), pp. 92–105.
Published by Oxford University Press. Reprinted with permission.

29. 'Industrial Education for the Negro', *Booker T. Washington*
Booker T. Washington, *The Negro Problem: A Series of Articles by Representative American Negroes Today* (New York: James Pott and Co., 1903).
Published by James Pott and Co.

30. 'The Talented Tenth', *W. E. B. Du Bois*
W. E. B. Du Bois, *The Negro Problem*: A Series of Articles by Representative American Negroes Today (New York: James Pott and Co., 1903).
Published by James Pott and Co.

31. 'The School and Social Progress', *John Dewey*
John Dewey, *The School and Society* (Chicago: University of Chicago Press, 1907), pp. 19–44.
Published by The University of Chicago Press.

32. 'The Contribution of Psychology to Education', *Edward L. Thorndike*
The Journal of Educational Psychology, 1 (1910): 5–12.
Published by American Psychological Association.

33. 'History of Methods', *Maria Montessori*
Maria Montessori, *The Montessori Method*. Translated by Anne Everett George (New York: Frederick A. Stokes Company, 1912), pp. 28–47.
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34. 'The Uses of Intelligence Tests', *Lewis M. Terman*
Lewis M. Terman, *The Measurement of Intelligence* (Boston: Houghton Mifflin, 1916).
Published by The Riverside Publishing Company, 1916.

35. 'A Modern School', *Abraham Flexner*
American Review of Reviews, 53 (1916): 465–474.

36. 'Aims in Education', *John Dewey*
John Dewey, *Democracy and Education* (New York: Macmillan, 1916).
Published by Macmillan.

37. 'The Project Method', *William Heard Kilpatrick*
Teachers College Record, 19 (1918): 319–334.
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38. 'The Problem of the School', *Antonio Gramsci*
David Forgacs (ed.), *A Gramsci Reader: Selected Writings 1916–1935* (London: Lawrence and Wishart, 1999), 'The Problem of the School' L'Ordine Nuovo, 27 June, 1919, pp. 58–70.
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39. 'The Aims of Education', *Alfred North Whitehead*
Alfred North Whitehead, *The Aims of Education and Other Essays* (Macmillan, 1929).
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40. 'The American Experimental School', *Harold Rugg*
Teachers College Record, 30(5) (1929): 407–424.
Published by Teachers College, Columbia University. Reprinted with permission.

41. 'Dare the Schools Build a New Social Order', *George S. Counts*
George S. Counts, *Dare the Schools Build a New Social Order* (New York: John Day, 1932).
Published by Southern Illinois University Press. Reprinted with permission by the George S. Counts Estate.

42. 'Orientation', *George S. Counts*
The Social Frontier, 1(1) (1934): 3–4.
Published by Teachers College, Columbia University. Reprinted with permission.

43. 'On Education', *Albert Einstein*
Albert Einstein, *Out of My Later Years*. From an address at Albany, N.Y., on the occasion of the celebration of tercentenary of higher education in America, October 15, 1936. Translated by Edna Arnonet (New York: Philosophical Library, 1950).
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44. 'The Crisis in Contemporary Education', *Mortimer J. Adler*
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45. 'A Manifesto on Democracy and Education in the Current Crisis', *Faculty of Teachers College, Columbia University*
Teachers College Record, 42(2) (1940): 99–115.
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46. 'As We May Think', *Vannevar Bush*
The Atlantic Monthly (1945): 101–108.
Published by The Atlantic Monthly.

47. 'The School in American Culture', *Margaret Mead*
Society, 39(1) (2001): 54–62. Abridgement of the 1950 Inglis Lecture at Harvard University originally published by Harvard University Press.
Published by Harvard University Press. Reprinted with Courtesy of The Institute for Intercultural Studies, Inc., New York.

48. 'The Tradition of the West', *Robert M. Hutchins*
Robert M. Hutchins, *The Great Conversation: The Substance of a Liberal Education* (Chicago: Encyclopedia Britannica, 1952).
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49. 'Schools and Systems of Social Status', *Howard S. Becker*
Phylon, 1st(2): 159–170.
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Robert A. Solo (ed.), *Economics and the Public Interest* (New Brunswick, New Jersey: Rutgers University Press, 1955).
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51. 'Foreword to A.S. Neill's *Summerhill*', *Erich Fromm*
A. S. Neill, *Summerhill* (Hart Publishing Company, 1960).
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52. 'A Talk to Teachers', *James Baldwin*
Saturday Review, December 21, 44(28) (1961): 42–44.
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53. 'Vulnerability in Education', *Jules Henry*
Teachers College Record, 68(21 (1966).
Published by Teachers College, Columbia University. Reprinted with permission.

54. 'Life in Classrooms', *Philip W. Jackson*
Philip W. Jackson, *Life in Classrooms* (New York: Holt, Rinehart & Winston, 1968), pp. 4–19.
Published by Holt, Rinehart & Winston.

55. 'Should the Teacher Always Be Neutral?', *George S. Counts*
Phi Delta Kappan, 51(4) (1969): 52–56.
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56. 'Student Social Class and Teacher Expectations: The Self-Fulfilling Prophecy in Ghetto Education', *Ray C. Rist*
Harvard Educational Review, 40(3) (1970): 411–451.
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57. 'Why We Must Disestablish Schools', *Ivan Illich*
Ivan Illich, *Deschooling Society* (New York: Harper and Row, 1970).
Published by Harper and Row.

58. 'The Adult Literacy Process as Cultural Action for Freedom', *Paulo Freire*
Harvard Educational Review, 68(4) (1998): 480–498. Reprinted from 1970 First Publication.
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59. 'The Process of Education Revisited', *Jerome S. Bruner*
Phi Delta Kappan, 53(1) (1971): 66–72.
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60. 'Handle with Care: Necessary Precautions in the Anthropology of Schools', *Harry F. Wolcott*
Murray L. Wax, Stanley Diamond and Fred O. Gearing (eds), *Anthropological Perspectives on Education* (New York: Basic Books, Inc., 1971), pp. 98–117.
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61. 'Unequal Education and the Reproduction of the Social Division of Labor', *Samuel Bowles*
Review of Radical Political Economics. (3) (1971): 137–153.
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62. 'From Voluntarism to Bureaucracy in American Education', *Michael B. Katz*
Michael B. Katz (ed.), *Education in American History* (New York: Praeger, 1973), pp. 38–50.
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63. 'Cultural Reproduction and Social Reproduction', *Pierre Bourdieu*
Richard Brown (ed.), *Knowledge, Education, and Cultural Change* (London: Tavistock, 1973), pp. 487–511.
Published by Tavistock. Reprinted with permission.

64. 'Public Education and the Education of the Public', *Lawrence Cremin*
Teachers College Record, 77(1) (1975): 1–12.
Published by Teachers College, Columbia University. Reprinted with permission.

65. 'The Means of Correct Training', *Michel Foucault*
Michel Foucault, *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan (New York: Pantheon Books, 1977), pp. 188–205.
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66. 'Class and Pedagogies: Visible and Invisible', *Basil Bernstein*
Basil Bernstein, *Studies in the Learning Sciences* (Paris: O.E.C.D., 1975). Reprinted with revisions and additions by Basil Bernstein in Jerome Karabel and A. H. Halsey, (eds), *Power and Ideology in Education* (New York: Oxford University Press, 1977), pp. 511–534.
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67. 'Servitude of the Mind? Education, Dependency, and Neocolonialism', *Philip G. Altbach*
Teachers College Record, 79(2) (1977): 187–204.
Published by Teachers College, Columbia University. Reprinted with permission.

68. 'In Pursuit of Equity, Ethics, and Excellence: The Challenge to Close the Gap', *Jesse L. Jackson*
Phi Delta Kappan, 60(3) (1978): 191–193.
Reprinted with permission of Phi Delta Kappa International, www.pdkintl.org.

69. 'Can Our Schools Get Better?', *John I. Goodlad*
Phi Delta Kappan, 60 (1979): 73–83.
Reprinted with permission of Phi Delta Kappa International, www.pdkintl.org.

70. 'Introduction: Mind and Nature', *Gregory Bateson*
Gregory Bateson, *Mind and Nature* (New York: E.P. Dutton, 1979), pp. 3–21.
Copyright © 1979 by Gregory Bateson. Used by permission of Dutton, a division of Penguin Group (USA) Inc.

71. 'Social Class and the Hidden Curriculum of Work', *Jean Anyon*
Journal of Education, 162(1) (1980): 67–92.
Published by Boston University, School of Education. Reprinted with permission of the author.

72. 'Curriculum as Cultural Reproduction: An Examination of Metaphor as a Carrier of Ideology', *C. A. Bowers*
Teachers College Record, 82(2) (1980): 267–288.
Published by Teachers College, Columbia University. Reprinted with permission.

73. 'The Day Our Children Disappear: Predictions of a Media Ecologist', *Neil Postman*
Phi Delta Kappan, 62 (1981): 425–433.
Reprinted with permission of Phi Delta Kappa International, www.pdkintl.org.

74. 'A Concept of Power for Education', *David Nyberg*
Teachers College Record, 82(4) (1981): 535–551.
Published by Teachers College, Columbia University. Reprinted with permission.

75. 'Bodyreading', *Madeleine R. Grumet*
Teachers College Record, 87(2) (1985): 175–193.
Published by Teachers College, Columbia University. Reprinted with permission.

76. 'Valuing Teachers: The Making of a Profession', *Linda Darling-Hammond*
Teachers College Record, 87(2) (1985): 205–218.
Published by Teachers College, Columbia University. Reprinted with permission.

77. 'Imagination and Learning', *Kieran Egan*
Teachers College Record, 87(2) (1985): 155–174.
Published by Teachers College, Columbia University. Reprinted with permission.

78. 'In Search of a Critical Pedagogy', *Maxine Greene*
Harvard Educational Review, 56(4) (1986): 427–441.
Copyright © by the President and Fellows of Harvard College. All rights reserved. For more information, please visit www.harvardeducationalreview.org.

79. 'The Functions and Uses of Literacy', *Shirley Brice Heath*
Suzanne de Castell, Allan Luke and Kieran Egan (eds), *Literacy, Society and Schooling* (New York: Cambridge University Press, 1986), pp. 15–26.
Published by Cambridge University Press, reproduced with permission.

80. 'The Silenced Dialogue: Power and Pedagogy in Educating Other People's Children', *Lisa Delpit*
Harvard Educational Review, 58(3) (1988): 280–298.
Copyright © by the President and Fellows of Harvard College. All rights reserved. For more information, please visit www.harvardeducationalreview.org.

81. 'Postmodernism and the Discourse of Educational Criticism', *Henry A. Giroux*
Journal of Education, 170(3) (1988): 5–30.
Published by Boston University, School of Education. Reprinted with permission of the author.

82. 'Metaphor and Meaning in the Language of Teachers', *Eugene F. Provenzo, Jr., Gary N. McCloskey, Robert B. Kottkamp and Marilyn M. Cohn*
Teachers College Record, 90(4) (1989): 551–573.
Published by Teachers College, Columbia University. Reprinted with permission.

83. 'The Violation of People at Work in Schools', *Arthur G. Wirth*
Teachers College Record, 90(4) (1989): 535–549.
Published by Teachers College, Columbia University. Reprinted with permission.

84. 'Multicultural Education as a Form of Resistance to Oppression', *Christine E. Sleeter*
Journal of Education, 171(3) (1989): 51–71.
Published by Boston University, School of Education. Reprinted with permission of the author.

85. 'Why Doesn't This Feel Empowering? Working through the Repressive Myths of Critical Pedagogy', *Elizabeth Ellsworth*
Harvard Educational Review, 59(3) (1989): 297–324.
Copyright © by the President and Fellows of Harvard College. All rights reserved. For more information, please visit www.hkpress.com/harvardeducationalreview.org.

86. 'Democratic Education in Difficult Times', *Amy Gutmann*
Teachers College Record, 92(1) (1990): 7–20.
Published by Teachers College, Columbia University. Reprinted with permission.

87. 'Post-Critical Pedagogies: A Feminist Reading', *Patti Lather*
Education and Society, 9(1–2) (1991): 103–111.
Published by James Nicholas Publishers. Reprinted with permission of the author.

88. 'Radical Pedagogy as Cultural Politics: Beyond the Discourse of Critique and Anti-Utopianism', *Henry A. Giroux and Peter L. McLaren*
Donald Morrison and Marcial Zavarzadeh (eds), *Texts for Change: Theory/Pedagogy/Politics* (Urbana, Illinois: University of Illinois Press, 1991), pp. 152–186.
Copyright 1991 by the Board of Trustees of the University of Illinois. Used with permission of the University of Illinois Press.

89. 'The Three Curricula that All Schools Teach', *Elliot W. Eisner*
Elliot W. Eisner, *The Educational Imagination: On the Design and Evaluation of School Programs* (New York: Macmillan, 1994), pp. 87–107.
© 2002, reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

90. 'Feminist Politics in Radical Pedagogy', *Carmen Luke*
Carmen Luke and Jennifer Gore (eds), *Feminisms and Critical Pedagogy* (New York: Routledge, 1992), pp. 25–53.
Published by Routledge.

91. '"Dreamt into Existence by Others": Curriculum Theory and School Reform', *William F. Pinar*
Theory into Practice, XXXII(3) (1992): 228–235.
Copyright 1992 by the College of Education, The Ohio State University. All rights reserved. Reprinted with permission.

92. 'Educational Reform and the Ecology of Schooling', *Elliot W. Eisner*
Teachers College Record, 93(4) (1992): 610–627.
Published by Teachers College, Columbia University. Reprinted with permission.

93. 'Excellence as a Guide to Educational Conversation', *Nel Noddings*
Teachers College Record, 94(4) (1993): 740–741.
Published by Teachers College, Columbia University. Reprinted with permission.

94. 'Beyond the Methods Fetish: Toward a Humanizing Pedagogy', *Lilia I. Bartolomé*
Harvard Educational Review, 64(2) (1994): 173–194.
Copyright © by the President and Fellows of Harvard College. All rights reserved. For more information, please visit www.hkpress.com/harvardeducationalreview.org.

95. 'Democracy and Education', *Noam Chomsky*
Noam Chomsky, Mellon Lecture, Loyola University Chicago, October 19, 1994. Available at http://www.zmag.org/chomsky/talk/9410-education.html
Copyright 1994 Noam Chomsky. Reprinted with permission.

96. 'Engaged Pedagogy', *bell hooks*
bell hooks, *Teaching to Transgress: Education as the Practice of Freedom* (London: Routledge, 1994), pp. 13–22.
Published by Routledge.

97. 'When Basic Skills and Information Processing Just Aren't Enough: Rethinking Reading in New Times', *Allan Luke*
Teachers College Record, 97(1) (1995): 95–115.
Published by Teachers College, Columbia University. Reprinted with permission.

98. 'Multicultural Education and Curriculum Transformation', *James A. Banks*
The Journal of Negro Education, 64(4) (1995): 390–400.
Published by Howard University, School of Education, The Journal of Negro Education. Reprinted with permission.

99. 'The Challenges of National Standards in a Multicultural Society', *Cherry A. McGee Banks*
Educational Horizons, 75(3) (1997): 126–132.
Published by Pi Lambda Theta. Reprinted with permission of the author.

100. 'Dancing with Bigotry: The Poisoning of Racial and Ethnic Identities', *Lilia I. Bartolomé and Donaldo P. Macedo*
Harvard Educational Review, 67(2) (1997): 222–246.
Copyright © by the President and Fellows of Harvard College. All rights reserved. For more information, please visit www.harvardeducationalreview.org.

101. 'Rewriting the Discourse of Racial Identity: Towards a Pedagogy and Politics of Whiteness', *Henry A. Giroux*
Harvard Educational Review, 67(2) (1997): 285–320.
Copyright © by the President and Fellows of Harvard College. All rights reserved. For more information, please visit www.harvardeducationalreview.org.

102. 'The Death of Child Nature: Education in the Postmodern World', *David Elkind*
Phi Delta Kappan, 78(3) (1997): 241–245.
Reprinted with permission of Phi Delta Kappa International, www.pdkintl.org.

103. 'Theory, Practice, and the Education of Professionals', *Lee S. Shulman*
The Elementary School Journal, 98(5) (1998): 511–526.
Copyright © University of Chicago, acting through its Press May 1998. Published by University of Chicago Press. Reprinted with permission via Copyright Clearance Center's Rightslink Service.

104. 'Voluntary and Involuntary Minorities: A Cultural-Ecological Theory of School Performance with Some Implications for Education', *John U. Ogbu and Herbert D. Simons*
Anthropology & Education Quarterly, 29(2) (1998): 155–188.
Published by American Anthropological Association.

105. 'Curriculum, after Culture, Race, Nation', *John Willinsky*
Discourse: Studies in the Cultural Politics of Education, 20(1) (1999): 89–112.
© 1999 Taylor & Francis Ltd. Reprinted by permission of Taylor & Francis Ltd, http://www.tandf.co.uk/journals via Copyright Clearance Center's Rightslink Service.

106. 'Social Justice, Curriculum, and Spirituality', *David E. Purpel*
David E. Purpel, *Moral Outrage in Education* (New York: Peter Lang Publishing, Inc., 1999), pp. 153–172.
Published by Peter Lang Publishing. Reprinted with permission.

107. 'New Standards and Old Inequalities: School Reform and the Education of African American Students', *Linda Darling-Hammond*
The Journal of Negro Education, 69(4) (2000): 263–287.
Published by Howard University, School of Education, The Journal of Negro Education. Reprinted with permission.

108. 'The Universal Right to Education', *Joel Spring*
Joel Spring, *The Universal Right to Education: Justification, Definition and Guidelines* (Mawah, N.J.: Lawrence Erlbaum Associates, Inc., 2000), pp. 157–163.
Reproduced with permission of Taylor & Francis Group LLC – Books; permission conveyed through Copyright Clearance Center, Inc.

109. 'The Care Tradition: Beyond "Add Women and Stir"', *Nel Noddings*
Theory into Practice, 40(1) (2001): 29–34.
Copyright 2001 by the College of Education, The Ohio State University. All rights reserved. Reprinted with permission.

110. 'Toward an Eco-Justice Pedagogy', *C.A. Bowers*
Published online at http://ecobowers.net/pdf/anecojusticepedagogy 2003.pdf
Reprinted with permission of the author. Other articles and books of author are available at www.http://ecobowers.net.

111. 'Globalizing Education: Perspectives from Above and Below', *Michael Singh, Jane Kenway and Michael W. Apple*
Michael W. Apple, Jane Kenway and Michael Singh (eds), *Globalizing Education: Policies, Pedagogies & Politics* (New York: Peter Lang Publishing, Inc., 2005), pp. 1–29.
Published by Peter Lang Publishing. Reprinted with permission.

112. 'The Need for Transcendence in the Postmodern World', *Vaclav Havel*
The Futurist, 29(4) (1995): 46–50.
Published by World Future Society. Reprinted with permission

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Eugene F. Provenzo, Jr.
University of Miami

Editor's Introduction: Understanding the Social and Cultural Foundations of Education

Eugene F. Provenzo, Jr.

Defining the Field

The Social and Cultural Foundations of Education is commonly understood to include the disciplinary fields of Comparative Education, Educational Anthropology, Educational Sociology, the History of Education, and the Philosophy of Education. Topical areas include: Cultural Studies and Education, Cognition, Culture and Education, Eco-Justice Education, Cultural Studies, Globalization and Education, Multiculturalism, Policy Studies, and Educational Technology. It is, by definition, an interdisciplinary field with many overlapping areas.

The phrase "Social Foundations of Education" was first used by George S. Counts and J. Crosby Chapman in their 1924 book *The Principles of Education*.[1] Obviously the field of Educational Thought and Philosophy has a rich history going back to the Ancient Classical theorists such as the Greek philosopher Plato (428–427 BC–348/347 BC) and the Roman Rhetorician Quintilian (ca. 35–100 CE). In the United States, by the beginning of the twentieth century, scholars such as R.M. MacIver in sociology, Ellwood Cubberly in history, and William Heard Kilpatrick in philosophy used the lens of the social sciences and humanities to study and teach about education in a cultural context.[2]

The modern field as we know was largely created by the faculty at Teachers College, Columbia University during the late 1920s. In 1928, a group was formed under the leadership of the philosopher Kilpatrick that came to be known as the Teachers College Discussion Group. It included scholars such as Harold Rugg, John L. Childs, R. Bruce Raup, George S. Counts, Jesse H. Newlon, and Goodwin Watson. Later, they would be joined by Kenneth D. Benne and R. Freeman Butts.[3]

At Teachers College an eight-credit course required of all students in the college, Education 200F, was introduced during the winter term of 1934–35.[4] Underlying the course was the assumption that the educational system and its schools reflected the social, cultural, and political forces at work in society. Thus, the field of Social and Cultural Foundations is largely interpretive and

contextual. As a result, it should not be surprising that there has been considerable debate over what issues and methodological approaches should shape the field. As the Council of Learned Societies in Education explains:

> From its origin in the 1930s, Foundations of Education has been subjected to a variety of interpretations and approaches. There are those who have promoted the idea that Foundations of Education should be assembled around educational issues, using the issues as curriculum-selecting and curriculum-organizing principles. Some have insisted that interdisciplinary and generalist concerns should supersede the commitments of Foundations of Education scholars to specific disciplines. Others have held to the priority of close disciplinary ties for Foundations of Education scholars. Some have promoted the desirability of curriculum liaisons between Foundations of Education scholars and teacher educators in other fields, for example, administration, counseling and guidance, urban education, and curriculum and instruction. Still others have argued for the establishment of working ties between Foundations of Education scholars and community groups and for involvement in areas of concern that go beyond the school enterprise.[3]

There "are distinguished advocates for each of these approaches."[4] Which approach is most appropriate is clearly a subjective judgment.[5] Leading figures such as Lawrence Cremin, former President of Teachers College and his colleague and mentor, R. Freeman Butts, saw the definition of the field quite differently. The Social Foundations of Education for Cremin was discipline based. In his model, one uses the methods from a disciplinary specialty such as philosophy or history to understand and contextualize the field of Education.

Although also a historian by training, and, in fact, a mentor and collaborator with him on a number of historical works, including a major history of American textbook,[6] Butts' approach was significantly different from that of Cremin. In a 1971 paper written for the American Association of Colleges of Teacher Education, entitled "An Inquiry Approach for Foundational Studies," he quoted Martin Levit to the effect that:

> . . . Foundational studies should be focused on the critical, comparative and comprehensive evaluation of socio-educational policies . . . no discipline is able to validate its truth-claims by its own resources . . . no discipline contains or is connected with enough warranted premises to make, by itself, justified recommendations for educational policies and programs. . . . Because, this is so, we stand in great need of more comprehensive and interconnected perspectives as a foundation for more rational educational policies.[7]

The question therefore arises as to how an editor of a work, such as the present one, should define the field. In selecting key historical and contemporary texts in the Social and Cultural Foundations of Education, which are essential and which can be excluded?

The problem is clearly challenging. The approach I have taken is both historical and based on key topics and issues. Chronologically, the project has been broken down into four volumes: Volume 1. *Classic/Early Modern (Antiquity to 1945)*; Volume 2. *Modern (1932–1979)*; Volume 3. *Postmodern Educational Thought (1979–1991)* and Volume 4. *Postmodern Educational Thought (1991 to Present)*. Included within these four volumes are a wide range of historical, philosophical, and sociological studies. Some can be identified specially as works in philosophy, and others as policy studies, others as sociological studies. What unifies them is that they consistently ask fundamental questions about schools and society. For example, the selection in Volume 1 by the British philosopher John Locke (1632–1704) puts forward the question of what is a necessary and sufficient education, and how is it that people actually learn. More recently, selections from the contemporary philosopher Nel Noddings asks how an ethic of care is essential to well-regulated and functioning schools and children. These are the type of questions around which the field is essentially formulated.

Foundational Questions for the Field of Educational and Cultural Studies

The Social Foundations of Education, while studied in universities and colleges throughout the world, is clearly rooted in the progressive and democratic tradition. According to Kathy Hytten, the Social Foundations of Education and the derivative and corollary field of Education and Cultural Studies pose the following key question: "What should be the ultimate purposes of education in a democratic society?"[9]

Hytten points to the fact that this question, and others like it, is "a metaphysical question, one that requires us to consider the reasons why we do something – the why, or the end goal." According to Hytten, too often in the field of Education "we neglect metaphysical questions and focus instead on engineering ones."[10]

Hytten's "engineering questions" are goal oriented: "Should students be able to choose their schools? How can we efficiently implement an educational strategy such as cooperative learning? What is the best way to teach biology? How can we better assess students?"[12] What these questions avoid, according to Hytten, is the question: *What is the purpose of schooling?*

The rest of this Introduction is devoted to a series of questions that the editor believes address this issue. These questions have been published or are about to be published by the editor in several other works. These include an introductory college textbook, *Teaching and Learning in American Society: A 21st Century Perspective*,[11] and a three-volume encyclopedia, *The Encyclopedia of the Social and Cultural Foundations of Education*.[14] Most of the content of the rest of this Introduction is drawn directly from these two works, in particular the introductory essay included in Volume 3 of the encyclopedia.

The idea of using a series of core questions for understanding and interpreting social and cultural issues in Education is by no means new. In 1960, for example, the educational anthropologist and sociologist Jules Henry developed "A Cross-Cultural Outline of Education," which included many of the same essential questions and concepts outlined below. In 1969 Philip W. Perdew outlined in an article, "What are the Foundational Questions?" many of the key questions for the field.[15] More recently, Joe L. Kincheloe and Shirley R. Steinberg have taken a similar approach in their book *Thirteen Questions*, in which they provide contrasting interpretations of 13 key questions in the field of Education and Cultural Studies. Their insight that "Teacher education often ignores questions of educational meaning, focusing its attention on techniques of delivering information"[16] is important and addresses one of the most important limitations of how we prepare teachers for the "real world." The approach taken by Steinberg and Kincheloe is also closely related to what C.J.B. Macmillan and James W. Garrison refer to as *ereotetic* teaching – that is, teaching that relies on questioning as a central pedagogic technique.[17]

Like any "map," this set of questions provides an overview and metaphor for the field. Earlier theorists provide useful guidelines. For example, Philip W. Perdew maintains that the criteria for the selection of such questions should include:

1. They are abstract or theoretical.
2. They have broad application to many specific or practical situations.
3. For their solution, they draw upon data in more than one field.
4. They have the potential for generating new data.
5. They are problems in *education*, not in philosophy, sociology, psychology, or any other discipline, although they may generate data which will be useful to other disciplines.[18]

Perdew's criteria are worth careful consideration. They also suggest that the development of such a list is subject to constant revision, as new territories are explored, and older, more defined geographies and landscapes are reexamined.

In my Introductory essay for Volume 3 of the Sage *Encyclopedia of the Social and Cultural Foundations of Education*, I include a list of basic questions about the nature and purpose of schooling and education that critical educational social theorists have asked in recent years. I include them as examples of the types of questions that have been proposed by many of those working in the Social and Cultural Foundations of Education. The list is not definitive and is intended simply to provide a "scrapbook" of some of the questions that are being asked by researchers and theoreticians in the field. My own questions replicate or are variations of many these questions. I have deliberately clustered them by topic.

Basic Questions for the Social and Cultural Foundations of Education

As mentioned earlier, the following list draws on the sources mentioned above. I have attempted to develop a somewhat more refined list.

1. **What is taught in schools?** Who determines the curriculum? Does the content reflect a specific social or political set of values? Is the censorship of certain ideas necessary to protect students from "dangerous" or inappropriate ideas? What should be included in textbooks?
2. **What are the fundamental images or metaphors used to define the culture?** Are there certain cores or "root" metaphors that are used in the culture and the educational system? What do these images and metaphors reflect?
3. **What is the focus or primary purpose of education in a specific culture or society?** What is the aim or purpose of education? Whom does it benefit? Is it to produce loyal subjects or citizens? Is it to pass on traditions? Is it to produce workers? Is it to control the individual or groups? Is it to maximize the potential of individuals or groups?
4. **Who is it that teaches?** Men? Women? High-status individuals? Low-status individuals? Do the people who teach create or control the curriculum they teach?
5. **Should schools act as agents for social change or as a means of maintaining the status quo?** To what extent should teachers act as agents for promoting change or for maintaining the dominant values and beliefs of the culture? Should teachers be restricted in what they are allowed to teach their students?
6. **Who is to be educated?** In a democratic society such as the United States, is equal education for all possible or even desirable? Does the gifted child need the same support and resources as the average child or the handicapped child? What is equitable? Should ethnic groups and language minorities receive different training than other groups?
7. **What makes a good school?** Does the definition of a good school differ, depending on the social and economic background of its students? Can we compare schools with different types of clients who have different types of needs?
8. **What narratives should be emphasized in the curriculum of the schools?** Whose stories are to be told? What cultures are to be represented? What should be the purpose of instruction?
9. **What types of obligations do the schools have beyond simply educating students?** Should schools address the moral development of students, for example, or provide health services? What should be the focus of the schools?

10. **Should schooling be compulsory?** If so, for how long? What is considered a sufficient education? Should students be compelled to learn things they or their parents oppose on moral and personal grounds?
11. **Should private schools be encouraged or discouraged?** Should they receive direct or indirect support from the government? Do private schools benefit certain groups in the culture? If yes, how?
12. **What role should religion play in schooling?** Should selected religious practices or sects be allowed in schools? Should certain religious groups be excluded? What is equitable?
13. **Who should control the schools?** Should schools be controlled by parents, administrators, or state and federal governments? Should education and schools be under the control of elite? Who is capable of making the most informed decisions concerning what is needed by the educational system?
14. **What constitutes the necessary and proper means of training teachers?** Who should be allowed to teach? To what extent should teachers have the right to act according to the dictates of their own values?
15. **To what extent should schools be used as a means of correcting or compensating for past social injustices?** Should schools be used to desegregate society and bring about greater equality?
16. **To what extent should schools provide instruction that has in the past been provided by the family and other social groups?** Should subjects such as sex education or personal ethics and values be taught in schools?
17. **To what extent is the media, in the form of television, movies, popular music, video games, and computers, taking the place of more traditional family- and school-based instruction?** Is most of the education children receive coming from media sources? How is this type of education different from other types of learning? How is it related to commercial interests in our society?
18. **Who benefits most from new educational technologies such as computers?** Do the privileged have the most to gain from new computer technologies like the Internet? Are there differences in the services provided to students based on their social or economic class? Is the use of technology encouraged more for boys than girls?
19. **What is considered useful knowledge?** Whose knowledge is taught in the classroom? Is there a "canon" that is taught? Where does it come from? Does its adoption benefit certain groups over others?
20. **How does race affect what goes on in schools?** Does the racial background of students affect how and what they are taught? Are there hidden curriculums at work in schools and the culture reflecting racial bias and privilege?

21. **How does ethnicity affect what goes on in schools?** Are certain ethnic groups treated differently based on their background and experience? Or, are all ethnic groups treated the same?
22. **How does gender affect what goes on in schools?** Are men educated differently from women? Are women subjected to different treatment and experiences from men? Are alternative sexual orientations discriminated against?
23. **How does social class affect the experience of students in schools?** Are students from lower social-economic groups treated differently from children whose parents are part of the culture's power bloc?
24. **What types of citizens do our schools and the culture want to create?** What knowledge is necessary to make people active and productive citizens?
25. **What constitutes good teaching?** How are teachers trained? What is considered good teaching? Why is it considered good teaching?
26. **Should schools provide social services?** Is it the obligation of schools to provide free lunch and healthcare programs for students in need?
27. **What are the rights of teachers?** What can teachers do or not do? How much control should society have over teachers in the classroom? And in their private lives?
28. **What is the role of business in shaping and influencing the content of education?** What type of influence should business have in shaping the curriculum of schools? Should students be trained for specific jobs demanded by the business system?
29. **What is the significance of the fact that women have dominated the teaching profession since the middle of the nineteenth century?** Has the fact that teaching has been a feminized profession affected the status of teachers – both historically and in contemporary culture? Why are the majority of teachers' women? Why are there fewer men and minorities in the teaching profession than in the general population?
30. **Should there be national standards and guidelines for the curriculum of the schools?** Should the content of curriculum be controlled locally or at a national level of government? Who should determine what gets taught in schools?
31. **What role does popular culture play in the shaping of attitudes about schools, teachers and students?** Is the representation of schools, teachers, and students accurate or does it distort the reality of their experience?
32. **Should teachers be nationally licensed and certified?** Should teachers be "board certified" the way a specialist is in the field of medicine? What should constitute certification?

33. **How is technology used as part of the educational system? What discourses does it encourage or discourage? Is educational technology neutral? Does it benefit some more than others?**

These questions are in fact answered, at least in part, by the articles, book chapters, and other materials included in this collection. In this sense, they provide a study guide to the reader, as he or she works through the materials in these four volumes.

The reader should, within the limitations of the sources provided, be able to develop a sound understanding of Social and Cultural issues affecting school and society. While the materials presented are overwhelmingly European and, more specifically, American, their application across different geographical and cultural settings should be clear. In their content is to be found the basic answers to many of the questions outlined above. Obviously, new questions need to be formulated as new issues about schooling arise. In the years to come, these new questions, and those questions from the above list that have not been adequately addressed, should represent the basic research agenda for the field of the Social and Cultural Foundations of Education – one that is of interest and concern on a global and international basis.

Notes

1. More recently, the Council of Learned Societies in Education has defined the Foundations of Education as:

> . . . a broadly-conceived field of educational study that derives its character and methods from a number of academic disciplines, combinations of disciplines, and area studies, including: history, philosophy, sociology, anthropology, religion, political science, economics, psychology, cultural studies, gender studies, comparative and international education, educational studies, and educational policy studies. . . . The purpose of foundations study is to bring these disciplinary resources to bear in developing interpretive, normative, and critical perspectives on education, both inside and outside of schools.' (Council of Learned Societies in Education, "Standards for Academic and Professional Instruction in Foundations of Education, Educational Studies, and Educational Policy Studies," 2nd edition (San Francisco: Caddo Gap Publishers, 1996). Available online at: http://members.aol.com/caddogap/standard.htm)

2. Debra Miretzky and Steven E. Tozer, "Professional Teaching Standards and Social Foundations of Education," *Educational Studies*, Summer 2000, 31, 2, 108.
3. Steve Tozer and Stuart McAninch, "Social Foundations of Education in Historical Perspective," *Educational Studies*, 1, No. 1 (Fall 1986), 9.
4. Ibid.
5. Ibid.
6. Ibid.
7. R. Freeman Butts quotes Martin Levit in a paper prepared in 1971 for the American Association of Colleges of Teacher Education entitled "An Inquiry Approach for Foundational Studies," that:

> . . . Foundational studies should be focused on the critical, comparative and comprehensive evaluation of socio-educational policies . . . no discipline is able to validate its truth-claims by its own resources . . . no discipline contains or is connected with enough warranted premises to make, by itself, justified recommendations for educational policies and programs. . . . Because, this is so, we stand in great need of more comprehensive and interconnected perspectives as a foundation for more rational educational policies.

See R. Freeman Butts, "Reconstruction in Foundations Studies," *Educational Theory*, 23, 1 (Winter 1974), 28.

For Thomas Howell and Nobuo Shimahara: "The social foundations of education are understood to be interdisciplinary attempts to study education in multi sided perspectives. They are built upon the contributions of various disciplines in the social sciences and humanities." See Thomas Howell and Nobuo Shimahara, "Educational Foundations: Contributions at the Undergraduate Level," *Teachers College Record*, 71, 2 (December 1969), 207.

8. R. Freeman Butts and Lawrence Cremin, *A History of Education in American Culture* (New York: Henry Holt, 1953).
9. See R. Freeman Butts, "Reconstruction in Foundations Studies," *Educational Theory*, 23, 1 (Winter 1973), 28.
10. Kathy Hytten, "The Promise of Cultural Studies of Education," *Educational Theory*, 49, 4 (Fall 1999), 527–544. Accessed online, July 15, 2007.
11. Ibid.
12. Ibid.
13. Eugene F. Provenzo, Jr., *Teaching and Learning in American Society: A 21st Century Perspective* (Boston, MA: Allyn & Bacon, 2002).
14. Eugene F. Provenzo, Jr., ed. *The Encyclopedia of the Social and Cultural Foundations of Education* (Thousand Oaks, CA: Sage Publications, anticipated publication December 2008).
15. Philip W. Perdew, "What are the Foundational Questions?" *Teachers College Record*, 71, 2 (December 1969), pp. 217–224.
16. Kincheloe, Joe L. and Shirely R. Steinberg, eds, *Thirteen Questions: Reframing Education's Conversation*, 2nd edition (New York: Peter Lang, 1995), 3.
17. Macmillan, C.J.B. and James W. Garrison, "An Esoteric Concept of Teaching", *Educational Theory* (Summer/Fall 1983): 157–166. and C.J.B. Macmillan and James W. Garrison, "Esoterics Revisited," *Educational Theory* (Fall 1986), 355–361.
18. Perdew, op. cit., 219.

Introduction: Early Modern and Modern (to 1929)

Eugene F. Provenzo, Jr.

In Western Culture, educational thought can be traced back to Antiquity. Discussions of educational issues and teaching can be found approximately 5,000 years ago in Sumer (modern Iran). Modern educational thought begins with the Ancient Greeks and Romans. Plato (427–347 BCE), in his discussions of the ideas of Socrates, is probably the earliest figure we can identify as an educational philosopher. In *The Republic*, Plato argues that different students should receive various types of education based on their individual interests, abilities and stations in life.

This collection of writings, and more specifically this initial volume, does not focus on the work of Ancient, Medieval, Renaissance or even early modern writers on Education. While we consider the work of Ancient figures such as Plato and Aristotle (348–322 BCE) important, together with Medieval and Renaissance figures such as Thomas Aquinas (1225–1274), and Desiderius Erasmus (1466–1536), they do not fit the characteristics of what we would define as Early Modern and Modern Thought.

The term "Modernity" is a difficult concept to define. When we use the term historically, as in the "emergence of modern culture", we are typically referring to the early Seventeenth century in Europe and the emergence of scientific thought. Modern is associated with the period following the Middle Ages. The Renaissance is perhaps its beginning, but also transitional. As a "rebirth" the Renaissance implies a connection to the past. Modern, in contract, represents a totally new beginning. In this context, we believe that the work of figures such as the Frenchman and essayist Michel de Montaigne (1533–1592) represents a new way of thinking about the child and how he is taught. Likewise, the ideas of a figure such as the Moravian religious leader, John Amos Comenius (1592–1670), represents a new conception of what learning should be about. We begin the four volumes with their work and that of others who represent the origins of modern thought, such as Francis Bacon (1561–1626). Our selections for this volume continue through the nineteenth and into the beginning of the twentieth century with the work of the Progressive educator Harold Rugg.

1

Of Education

Michel de Montaigne

To Madame Diane de Foix, Comtesse de Gurson.

> I never yet saw that father, but let his son be never so decrepit or deformed, would not, notwithstanding, own him: not, nevertheless, if he were not totally besotted, and blinded with his paternal affection, that he did not well enough discern his defects: but that with all defaults, he was still his. Just so, I see better than any other, that all I write here are but the idle of a man that has only nibbled upon the outward crust of sciences in his nonage, and only retained a general and formless image of them; who has got a little snatch of everything, and nothing of the whole, a la Françoise....

The charge of the tutor you shall provide for your son, upon the choice of whom depends the whole success of his education, has several other great and considerable parts and duties required in so important a trust, besides that of which I am about to speak: these, however, I shall not mention, as being unable to add anything of moment to the common rules: and in this, wherein I take upon me to advise, he may follow it so far only as it shall appear advisable.

For a boy of quality then, who pretends to letters not upon the account of profit (for so mean an object as that is unworthy of the grace and favor of the Muses, and moreover, in it a man directs his service to and depends upon others), nor so much for outward ornament, as for his own proper and peculiar use, and to furnish and enrich himself within, having rather a desire to come out an accomplished cavalier than a mere scholar or learned man; for such a one, I say, I would, also, have his friends solicitous to find him out a tutor, who has rather a well-made than a well-filled head; seeking, indeed, both the one and the other, but rather of the two to prefer manners and judgment to mere learning, and that this man should exercise his charge after a new method.

Source: Michel de Montaigne, *Essays of Michael, Seigneur de Montaigne* (London: Printed for T. Basset, M. Gilliflower and W. Hensman, 1685–1686). pp. ...

'Tis the custom of pedagogues to be eternally thundering in their pupil's ears, as they were pouring into a funnel, while the business of the pupil is only to repeat what the others have said: now I would have a tutor to correct this error, and, that at the very first, he should, according to the capacity he has to deal with, put it to the test, permitting his pupil himself to taste things, and of himself to discern and choose them, sometimes opening the way to him, and sometimes leaving him to open it for himself; that is, I would not have him alone to invent and speak, but that he should also hear his pupil speak in turn. Socrates, and since him Arcesilaus, made first their scholars speak, and then they spoke to them. "Obest plerumque iis, qui discere volunt, auctoritas eorum, qui docent." It is good to make him, like a young horse, trot before him that he may judge of his going and how much he is to abate of his own speed, to accommodate himself to the vigor and capacity of the other. For want of which due proportion we spoil all; which also to know how to adjust, and to keep within an exact and due measure, is one of the hardest things I know, and 'tis the effect of a high and well-tempered soul to know how to condescend to such puerile motions and to govern and direct them. I walk firmer and more secure up hill than down. Such as, according to our common way of teaching, undertake, with one and the same lesson, and the same measure of direction, to instruct several boys of differing and unequal capacities, are infinitely mistaken; and 'tis no wonder, if in a whole multitude of scholars, there are not found above two or three who bring away any good account of their time and discipline. Let the master not only examine him about the grammatical construction of the bare words of his lesson, but about the sense and substance of them, and let him judge of the profit he has made, not by the testimony of his memory, but by that of his life. Let him make him put what he has learned into a hundred several forms, and accommodate it to so many several subjects, to see if he yet rightly comprehends it, and has made it his own, taking instruction of his progress by the pedagogic institutions of Plato. 'Tis a sign of crudity and indigestion to disgorge what we eat in the same condition it was swallowed; the stomach has not performed its office unless it have altered the form and condition of what was committed to it to concoct. Our minds work only upon trust, when bound and compelled to follow the appetite of another's fancy, enslaved and captivated under the authority of another's instruction; we have been so subjected to the trammel, that we have no free, nor natural pace of our own; our own vigor and liberty are extinct and gone: "Nunquam tutelae suae fiunt." I was privately carried at Pisa to see a very honest man, but so great an Aristotelian, that his most usual thesis was: "That the touchstone and square of all solid imagination, and of all truth, was an absolute conformity to Aristotle's doctrine; and that all besides was nothing but inanity and chimera; for that he had seen all, and said all." A position, that for having been a little too injuriously and broadly interpreted, brought him once and long kept him in great danger of the Inquisition at Rome.

Let him make him examine and thoroughly sift everything he reads, and lodge nothing in his fancy upon simple authority and upon trust. Aristotle's principles will then be no more principles to him, than those of Epicurus and the Stoics: let this diversity of opinions be propounded to, and laid before him: he will himself choose, if he be able; if not, he will remain in doubt.

"Che, non men che saper, dubbiar m' aggrata," for, if he embrace the opinions of Xenophon and Plato, by his own reason, they will no more be theirs, but become his own. Who follows another, follows nothing, finds nothing, nay, is inquisitive after nothing. "Non sumus sub rege; sibi quisque se vindicet." Let him at least, know that he knows. It will be necessary that he imbibe their knowledge, not that he be corrupted with their precepts: and no matter if he forgot where he had his learning, provided he know how to apply it to his own use. Truth and reason are common to every one, and are no more his who spake them first, than his who speaks them after: 'tis no more according to Plato, than according to me, since both he and I equally see and understand them. Bees cull their several sweets from this flower and that blossom, here and there where they find them, but themselves afterward make the honey, which is all and purely their own, and no more thyme and marjoram: so the several fragments he borrows from others, he will transform and shuffle together to compile a work that shall be absolutely his own; that is to say, his judgment: his instruction, labor and study, tend to nothing else but to form that. He is not obliged to discover whence he got the materials that have assisted him, but only to produce what he has himself done with them. Men that live upon pillage and borrowing, expose their purchases and buildings to every one's view: but do not proclaim how they came by the money. We do not see the fees and perquisites of a gentleman of the long robe; but we see the alliances wherewith he fortifies himself and his family, and the titles and honors he has obtained for him and his. No man divulges his revenue; or at least, which way it comes in: but every one publishes his acquisitions. The advantages of our study are to become better and more wise. 'Tis, says Epicharmus, the understanding that sees and hears, 'tis the understanding that improves everything, that orders everything, and that acts, rules, and reigns: all other faculties are blind, and deaf, and without soul. And certainly we render it timorous and servile, in not allowing it the liberty and privilege to do anything of itself. Whoever asked his pupil what he thought of grammar or rhetoric, and of such and such a sentence of Cicero? Our masters stick them, full feathered, in our memories, and there establish them like oracles, of which the letters and syllables are of the substance of the thing. To know by rote, is no knowledge, and signifies no more but only to retain what one has intrusted to our memory. That which a man rightly knows and understands, he is the free disposer of at his own full liberty, without any regard to the author from whence he had it or fumbling over the leaves of his book. A mere bookish learning is a poor, paltry learning: it may serve for ornament, but there is yet no foundation for any superstructure to be built upon it, according to the opinion of Plato, who says that constancy,

faith, and sincerity, are the true philosophy, and the other sciences, that are directed to other ends, mere adulterate paint. I could wish that Paluel or Pompey, those two noted dancers of my time, could have taught us to cut capers, by only seeing them do it, without stirring from our places, as these men pretend to inform the understanding, without ever setting it to work; or that we could learn to ride, handle a pike, touch a lute, or sing, without the trouble of practice, as these attempt to make us judge and speak well, without exercising us in judging or speaking. Now in this initiation of our studies and in their progress, whatsoever presents itself before us is book sufficient; a roguish trick of a page, a sottish mistake of a servant, a jest at the table, are so many new subjects. And for this reason, conversation with men is of very great use and travel into foreign countries; not to bring back (as most of our young monsieurs do) an account only of how many paces Santa Rotonda is in circuit; or of the richness of Signora Livia's petticoats; or, as some others, how much Nero's face, in a statue in such an old ruin, is longer and broader than that made for him on some medal; but to be able chiefly to give an account of the humors, manners, customs and laws of those nations where he has been, and that we may whet and sharpen our wits by rubbing them against those of others. I would that a boy should be sent abroad very young, and first, so as to kill two birds with one stone, into those neighboring nations whose language is most differing from our own, and to which, if it be not formed betimes, the tongue will grow too stiff to bend.

And also 'tis the general opinion of all, that a child should not be brought up in his mother's lap. Mothers are too tender, and their natural affection is apt to make the most discreet of them all so overfond, that they can neither find in their hearts to give them due correction for the faults they commit, nor suffer them to be inured to hardships and hazards, as they ought to be. They will not endure to see them return all dust and sweat from their exercise, to drink cold drink when they are hot, nor see them mount an unruly horse, nor take a foil in hand against a rude fencer, or so much as to discharge a carbine. And yet there is no remedy; whoever will breed a boy to be good for anything when he comes to be a man, must by no means spare him when young, and must very often transgress the rules of physic: "Vitamque sub dio, et trepidis agat In rebus."

It is not enough to fortify his soul: you are also to make his sinews strong; for the soul will be oppressed if not assisted by the members, and would have too hard a task to discharge two offices alone. I know very well, to my cost, how much mine groans under the burden, from being accommodated with a body so tender and indisposed, as eternally leans and presses upon her; and often in my reading perceive that our masters, in their writings, make examples pass for magnanimity and fortitude of mind, which really are rather toughness of skin and hardness of bones; for I have seen men, women, and children, naturally born of so hard and insensible a constitution of body, that a sound cudgeling has been less to them than a flirt with a finger would have been to me, and that would neither cry out, wince, nor shrink, for a

good swinging beating; and when wrestlers counterfeit the philosophers in patience, 'tis rather strength of nerves than stoutness of heart. Now to be inured to undergo labor, is to be accustomed to endure pain: "labor callum obducit dolori." A boy is to be broken into the toil and roughness of exercise, so as to be trained up to the pain and suffering of dislocations, cholics, cauteries, and even imprisonment and the rack itself; for he may come, by misfortune, to be reduced to the worst of these, which (as this world goes) is sometimes inflicted on the good as well as the bad. As for proof, in our present civil war whoever draws his sword against the laws, threatens the honestest men with the whip and the halter.

And, moreover, by living at home, the authority of this governor, which ought to be sovereign over the boy he has received into his charge, is often checked and hindered by the presence of parents; to which may also be added, that the respect the whole family pay him, as their master's son, and the knowledge he has of the estate and greatness he is heir to, are, in my opinion, no small inconveniences in these tender years.

And yet, even in this conversing with men I spoke of but now, I have observed this vice, that instead of gathering observations from others, we make it our whole business to lay ourselves upon them, and are more concerned how to expose and set out our own commodities, than how to increase our stock by acquiring new. Silence, therefore, and modesty are very advantageous qualities in conversation. One should, therefore, train up this boy to be sparing and a husband of his knowledge when he has acquired it; and to forbear taking exceptions at or reproving every idle saying or ridiculous story that is said or told in his presence; for it is a very unbecoming rudeness to carp at everything that is not agreeable to our own palate. Let him be satisfied with correcting himself, and not seem to condemn everything in another he would not do himself, nor dispute it as against common customs. "I sect sapere sine pompa, sine invidia." Let him avoid these vain and uncivil images of authority, this childish ambition of coveting to appear better bred and more accomplished, than he really will, by such carriage, discover himself to be. And, as if opportunities of interrupting and reprehending were not to be omitted, to desire thence to derive the reputation of something more than ordinary. For as it becomes none but great poets to make use of the poetical license, so it is intolerable for any but men of great and illustrious souls to assume privilege above the authority of custom: "si quid Socrates aut Aristippus contra morem et consuetudinem fecerunt, idem sibi ne arbitretur licere: magnis enim illi et divinis bonis hanc licentiam assequebantur." Let him be instructed not to engage in discourse or dispute but with a champion worthy of him, and, even there, not to make use of all the little subtleties that may seem pat for his purpose, but only such arguments as may best serve him. Let him be taught to be curious in the election and choice of his reasons, to abominate impertinence, and, consequently, to affect brevity; but, above all, let him be lessoned to acquiesce and submit to truth so soon as ever he shall

discover it, whether in his opponent's argument, or upon better consideration of his own; for he shall never be preferred to the chair for a mere clatter of words and syllogisms, and is no further engaged to any argument whatever, than as he shall in his own judgment approve it: nor yet is arguing a trade, where the liberty of recantation and getting off upon better thoughts, are to be sold for ready money: "neque, ut omnia, quae praescripta et imperata sint, defendat, necessitate ulla cogitur."

If his governor be of my humor, he will form his will to be a very good and loyal subject to his prince, very affectionate to his person, and very stout in his quarrel; but withal he will cool in him the desire of having any other tie to his service than public duty. Besides several other inconveniences that are inconsistent with the liberty every honest man ought to have, a man's judgment, being bribed and prepossessed by these particular obligations, is either blinded and less free to exercise its function, or is blemished with ingratitude and indiscretion. A man that is purely a courtier, can neither have power nor will to speak or think otherwise than favorably and well of a master, who, among so many millions of other subjects, has picked out him with his own hand to nourish and advance; this favor, and the profit flowing from it, must needs, and not without some show of reason, corrupt his freedom and dazzle him; and we commonly see these people speak in another kind of phrase than is ordinarily spoken by others of the same nation, though what they say in that courtly language is not much to be believed.

Let his conscience and virtue be eminently manifest in his speaking, and have only reason for their guide. Make him understand, that to acknowledge the error he shall discover in his own argument, though only found out by himself, is an effect of judgment and sincerity, which are the principal things he is to seek after; that obstinacy and contention are common qualities, most appearing in mean souls; that to revise and correct himself, to forsake an unjust argument in the height and heat of dispute, are rare, great, and philosophical qualities. Let him be advised; being in company, to have his eye and ear in every corner, for I find that the places of greatest honor are commonly seized upon by men that have least in them, and that the greatest fortunes are seldom accompanied with the ablest parts. I have been present when, while they at the upper end of the chamber have only been commending the beauty of the arras, or the flavor of the wine, many things that have been very finely said at the lower end of the table have been lost or thrown away. Let him examine every man's talent; a peasant, a bricklayer, a passenger: one may learn something from every one of these in their several capacities, and something will be picked out of their discourse whereof some use may be made at one time or another; nay, even the folly and impertinence of others will contribute to his instruction. By observing the graces and manners of all he sees, he will create to himself an emulation of the good, and a contempt of the bad. Let an honest curiosity be suggested to his fancy of being inquisitive after everything; whatever there is singular and rare near the place where

he is, let him go and see it: a fine house, a noble fountain, an eminent man, the place where a battle has been anciently fought, the passages of Caesar and Charlemagne:

> "Quae tellus sit lenta gelu, quae putris ab aestu, Ventos in Italiam quis bene vela ferat."

Let him inquire into the manners, revenues and alliances of princes, things in themselves very pleasant to learn, and very useful to know.

In this conversing with men, I mean also, and principally, those who only live in the records of history; he shall, by reading those books, converse with the great and heroic souls of the best ages. 'Tis an idle and vain study to those who make it by so doing it after a negligent manner, but to those who do it with care and observation, 'tis a study of inestimable fruit and value; and the only study, as Plato reports, that the Lacedaemonians reserved to themselves. What profit shall he not reap as to the business of men, by reading the lives of Plutarch? But, withal, let my governor remember to what end his instructions are principally directed, and that he do not so much imprint in his pupil's memory the date of the ruin of Carthage, as the manners of Hannibal and Scipio; nor so much where Marcellus died, as why it was unworthy of his duty that he died there. Let him not reach him so much the narrative parts of history as to judge them; the reading of them, in my opinion, is a thing that of all others we apply ourselves unto with the most differing measure. I have read a hundred things in Livy that another has not, or not taken notice of at least; and Plutarch has read a hundred more there than ever I could find, or than, peradventure, that author ever wrote; to some it is merely a grammar study, to others the very anatomy of philosophy, by which the most abstruse parts of our human nature penetrate. There are in Plutarch many long discourses very worthy to be carefully read and observed, for he is, in my opinion, of all others the greatest master in that kind of writing: but there are a thousand others which he has only touched and glanced upon, where he only points with his finger to direct us which way we may go if we will, and contents himself sometimes with giving only one brisk hit in the nicest article of the question, whence we are to grope out the rest. As, for example, where he says that the inhabitants of Asia came to be vassals to one only, for not having been able to pronounce one syllable, which is No. Which saying of his gave perhaps matter and occasion to La Boetie to write his "Voluntary Servitude." Only to see him pick out a light action in a man's life, or a mere word that does not seem to amount even to that, is itself a whole discourse. 'Tis to our prejudice that men of understanding should so immoderately affect brevity; no doubt their reputation is the better by it, but in the meantime we are the worse. Plutarch had rather we should applaud his judgment than commend his knowledge, and had rather leave us with an appetite to read more, than glutted with that we have already read. He knew very well, that a man may say too much even upon the best subjects, and that Alexandridas

justly reproached him who made very good but too long speeches to the Ephori, when he said: "Oh stranger! thou speakest the things thou shouldst speak, but not as thou shouldst speak them." Such as have lean and spare bodies stuff themselves out with clothes; so they who are defective in matter, endeavor to make amends with words.

Human understanding is marvelously enlightened by daily conversation with men, for we are, otherwise, compressed and heaped up in ourselves, and have our sight limited to the length of our own noses. One asking Socrates of what country he was, he did not make answer, of Athens, but of the world; he whose imagination was fuller and wider, embraced the whole world for his country, and extended his society and friendship to all mankind; not as we do, who look no further than our feet. When the vines of my village are nipped with the frost, my parish priest presently concludes, that the indignation of God is gone out against all the human race, and that the cannibals have already got the pip. Who is it, that seeing the havoc of these civil wars of ours, does not cry out, that the machine of the world is near dissolution, and that the day of judgment is at hand; without considering, that many worse things have been seen, and that, in the meantime, people are very merry in a thousand other parts of the earth for all this? For my part, considering the license and impunity that always attend such commotions, I wonder they are so moderate, and that there is no more mischief done. To him who feels the hailstones patter about his ears, the whole hemisphere appears to be in storm and tempest; like the ridiculous Savoyard, who said very gravely, that if that simple king of France could have managed his fortune as he should have done, he might in time have come to have been steward of the household to the duke his master: the fellow could not, in his shallow imagination, conceive that there could be anything greater than a duke of Savoy. And, in truth, we are all of us, insensibly, in this error, an error of a very great weight and very pernicious consequence. But whoever shall represent to his fancy, as in a picture, that great image of our mother Nature, in her full majesty and luster, whoever in her face shall read so general and so constant a variety, whoever shall observe himself in that figure, and not himself but a whole kingdom, no bigger than the least touch or prick of a pencil in comparison of the whole, that man alone is able to value things according to their true estimate and grandeur....

As to the rest, this method of education ought to be carried on with a severe sweetness, quite contrary to the practice of our pedants, who, instead of tempting and alluring children to letters by apt and gentle ways, do in truth present nothing before them but rods and ferules, horror and cruelty. Away with this violence! away with this compulsion! than which, I certainly believe nothing more dulls and degenerates a well-descended nature. If you would have him apprehend shame and chastisement, do not harden him to them: inure him to heat and cold, to wind and sun, and to dangers that he ought to despise; wean him from all effeminacy and delicacy in clothes and lodging, eating and drinking; accustom him to everything, that he may not be

a Sir Paris, a carpet-knight, but a sinewy, hardy, and vigorous young man. I have ever from a child to the age wherein I now am, been of this opinion, and am still constant to it. But among other things, the strict government of most of our colleges has evermore displeased me; peradventure, they might have erred less perniciously on the indulgent side. 'Tis a real house of correction of imprisoned youth. They are made debauched, by being punished before they are so. Do but come in when they are about their lesson, and you shall hear nothing but the outcries of boys under execution, with the thundering noise of their pedagogues drunk with fury. A very pretty way this, to tempt these tender and timorous souls to love their book, with a furious countenance, and a rod in hand! A cursed and pernicious way of proceeding! Besides what Quintilian has very well observed, that this imperious authority is often attended by very dangerous consequences, and particularly our way of chastising. How much more decent would it be to see their classes strewed with green leaves and fine flowers, than with the bloody stumps of birch and willows? Were it left to my ordering, I should paint the school with the pictures of joy and gladness: Flora and the Graces, as the philosopher Speusippus did his...

2

Of Custom and Education

Francis Bacon

Mens thoughts are much according to their inclination; their discourse and speeches according to their learning and infused opinions; but their deeds are after as they have been accustomed. And therefore, as Machiavel well noteth (though in an evil-favored instance), there is no trusting to the force of nature nor to the bravery of words, except it be corroborate by custom. His instance is, that for the achieving of a desperate conspiracy, a man should not rest upon the fierceness of any man's nature, or his resolute undertakings; but take such an one as hath had his hands formerly in blood. But Machiavel knew not of a Friar Clement, nor a Ravillac, nor a Jaureguy, nor a Baltazar Gerard; yet his rule holdeth still that nature, nor the engagement of words, are not so forcible as custom. Only superstition is now so well advanced, that men of the first blood are as firm as butchers by occupation; and votary resolution is made equipollent to custom even in matter of blood. In other things the predominancy of custom is everywhere visible; insomuch as a man would wonder to hear men profess, protest, engage, give great words, and then do just as they have done before; as if they were dead images, and engines moved only by the wheels of custom. We see also the reign or tyranny of custom, what it is. The Indians (I mean the sect of their wise men) lay themselves quietly upon a stack of wood, and so sacrifice themselves by fire. Nay the wives strive to be burned with the corpses of their husbands. The lads of Sparta, of ancient time, were wont to be scourged upon the altar of Diana, without so much as quecking. I remember, in the beginning of Queen Elizabeth's time of England, an Irish rebel condemned, put up a petition to the deputy that he might be hanged in a withe, and not in an halter; because it had been so used with former rebels. There be monks in Russia, for penance, that will sit a whole night in a vessel of water, till they be engaged with hard ice. Many examples may be put of the force of custom, both upon mind and body. Therefore, since custom is the

Source: *Essays, Civil and Moral. The Harvard Classics.* (New York: P. F. Collier & Son, 1909–1917).

principal magistrate of man's life, let men by all means endeavor to obtain good customs. Certainly custom is most perfect when it beginneth in young years: this we call education; which is, in effect, but an early custom. So we see, in languages the tongue is more pliant to all expressions and sounds, the joints are more supple to all feats of activity and motions, in youth than afterwards. For it is true that late learners cannot so well take the ply; except it be in some minds that have not suffered themselves to fix, but have kept themselves open and prepared to receive continual amendment, which is exceeding rare. But if the force of custom simple and separate be great, the force of custom copulate and conjoined and collegiate is far greater. For there example teacheth, company comforteth, emulation quickeneth, glory raiseth: so as in such places the force of custom is in his exaltation. Certainly the great multiplication of virtues upon human nature resteth upon societies well ordained and disciplined. For commonwealths and good governments do nourish virtue grown, but do not much mend the seeds. But the misery is, that the most effectual means are now applied to the ends least to be desired.

3

The Great Didactic

John Amos Comenius

In these schools all youth of both sexes, without exception, can be instructed in the sciences, improved in their morals, filled with piety, and, in suchwise, be equipped in early years for all that belongs to the life here and beyond. This will be done by a concise, agreeable, and thorough form of instruction which:

derives its reasons from the genuine nature of things,

proves its truth by dint of adequate examples taken from the mechanical arts,

arranges the sequence of instruction by years, months, days, and hours, and finally,

shows an easy and safe way for the happy pursuit of all these suggestions.

The Beginning and End of our Didactic will be:

> To seek and find a method by which the teachers teach less and the learners learn more, by which the schools have less noise, obstinacy, and frustrated endeavor, but more leisure, pleasantness, and definite progress, and by which the Christian State will suffer less under obscurity, confusion, and conflict, and will enjoy a greater amount of light, order, peace, and quiet.

. . . . . .

Chapter 2. Man's Ultimate Goal Lies Outside this Life.

. . . All our doing and suffering tells us that we do not achieve our ultimate goal here on earth, but that all that is in us and we ourselves aim farther. For what we are, do, think, talk, contemplate, acquire, and possess is only a kind of ladder on which we always climb toward a higher rung, but never reach the top. After man has begun his life in the form of an amorphous mass he gradually takes on the contours of a body and later on begins to move,

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Source: John Amos Comenius, *Three Thousand Years of Educational Wisdom* (Cambridge: Harvard University Press, 1947), pp. 339–346.

After birth the senses awake, then knowledge arises as a consequence of observation, and finally, will assumes the office of the pilot by addressing itself *to certain things and going away from other things.*

Also within the single levels of development we discover a definite improvement. Just as the rays of the rising sun emerge out of darkness so knowledge of things gradually increases, and as long as life lasts more and more light is added. Also our actions are insignificant, feeble, and awkward at the beginning; but gradually the faculties of the soul unfold together with the faculties of the body, and in a noble mind all this aspires higher and higher without limits; for in this life there is no fulfillment for our wishes and desires. . . .

Chapter 4. There are Three Steps of Preparation for Eternity: Knowledge of Ourself and at the same time of all things. Self-Control, and Direction toward God.

Apparently the highest destination of man is eternal blessedness. But there are also subordinate purposes which are expressed in God's decision at the creation

> 1 Moses 1:26. – And God said, Let us make man in our image, after our likeness; and let them have domination over the fish and the sea, and over the fowl of the air, and over the cattle, and over all the earth.

Therefore man is destined to be among the visible creatures:

1. the reasonable
2. the ruler over all creatures
3. the image and joy of his Creator

Therefore the natural demands upon man are that first he understand all things, second he can rule over all things and himself, and third that he and all things be related to God as the Source. Expressed in well-known terms these demands can be called, first, systematic education, second, virtue or morality, third, religion or piety.

Under systematic education has to be understood the comprehensive knowledge of things, arts, and languages; under virtue not only decorum but also the whole inner and outer order of action; under religion the reverence through which the human mind leans toward and connects itself with the Supreme Being. In the vision of these three demands lies the whole advantage of man, for they alone are the foundation of the present and future life; all other things (health, vigor, beauty, property, prestige, friendship, success, and long life) are only decorations of life if they are granted by God. But they can also be unnecessary luster, useless ballast, and dangerous obstacles if someone struggles for them too ardently, and devotes himself to them so onesidedly that he neglects the more eminent values.

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Chapter 6. If Man is To Be Man He Must be Educated.

Nature gives the germinal capacities for knowledge, morality, and religion, but it does not give knowledge, morality and religion themselves. Rather these are acquired through learning, acting, and praying. Therefore somebody rightly has defined man as an educable animal since he cannot become man unless he is educated.

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Hence all who are born as human beings need education because they are destined to be real men, not wild beasts, dull animals, and clumps of wood. From this also follows: the better one is educated the more he excels others.

Chapter 7. The Education of Man is Best Done in his Early Youth, and Only Then will it Succeed.

It is a property of all things becoming that they can easily be bent and formed as long as they are tender, but that they refuse to obey when they have hardened. Soft wax can be modeled and re-modeled, hard wax will crumble. The young tree can be planted, replanted, trimmed, and bent to any shape; not so the grown. So also the hands and limbs of man can be trained for art and craft only during childhood, as long as the sinews are soft. If someone is to become a good scribe, painter, tailor, smith musician, etc., he must devote himself to his vocation as long as his imagination is still flexible and his fingers still elastic. In the same way piety must be implanted into the hearts during infancy lest it not root. If we want to educate a person in virtue we must polish him at a tender age. And if someone is to advance toward wisdom he must be opened up for it in the first years of his life when his industriousness is still burning, his mind is malleable, and his memory still strong. Says Seneca in his 36th letter, "An old man who occupies himself with the elementary is despicable and ridiculous; youth should learn, old men ought to apply."

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Chapter 8. Youth Must be Educated in Common; for This We Need Schools.

. . . It would be most natural that the parents who have given their children physical life should lead them also toward a rational, decent, and sacred life. . . . But in consequence of the growth of the population and business only few parents have still the necessary skill and time to educate their children. Therefore many parents have followed wise counsel and entrusted their children to selected, erudite, and moral persons for the purpose of education. . . .

It is in the interest of the whole Christian commonwealth that for each well-ordered community a school be established as a common place for educating youth.

Chapter 9. All Youth of Both Sexes must be Entrusted to the Schools.

Not only the children of the rich and noble but all children ought to be educated in the same way whether they are nobles or commoners, rich or

poor, boys or girls, or whether they come from cities, towns, or villages. That is evident for the following reasons:

First, all men are born for the same main purpose; they are to be human beings, i.e., rational creatures, masters over the other creatures, and images of the Creator. . . . God himself often testifies that before Him all things are equal. Therefore if we educate only a few and exclude the rest, we act unjustly not only against our fellow men but also against God who wishes to be known, loved, and praised by all. This will be the case all the more that the light of knowledge shines. For we love to the degree which we know.

Second, we do not know for which calling divine dispensation has destined one or the other of us. So much at least is known, that God has chosen the most perfect tools of his glory out of the poorest, humblest, and unknown people. Thus let us imitate the divine sun which gives light, warmth, and life to the whole earth so that all that is able to live, flower, and bear fruit may do so.

Third, it is no contradiction that some are by nature feeble and dull; this fact but commends, and calls for, the universal cultivation of the minds. . . . Also it is difficult to find a person so defective that he could not be helped in one or the other direction; and if dull people may achieve nothing in scholarship their morals can be improved. After all, experience shows that some less gifted people have acquired so much knowledge that they have surpassed the more gifted. . . . Only those therefore ought to be excluded from education whom God has deprived totally of sense and reason.

Fourth, nor can there be given sufficient reason why the female sex should be excluded from studying. For also girls are images of God; they participate in his Grace and in the future kingdom of God, and they are equipped with the same industriousness and capacity for wisdom.

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Chapter 12. Schools can be Improved.
I promise a kind of school in which:

1. The whole youth is being educated (except those whom God has denied reason).
2. There should be taught all that can make men wise, honest, and pious.
3. Education, which is preparation for life, should be finished before adulthood.
4. Education should be carried out not with beating severity and any kind of coercion, but easily, pleasantly, and, so to speak, by its own momentum.
5. Not a semblance of education ought to be provided, but genuine education, not a superficial but thorough education; that means the rational animal man should be led by his own rather than a foreign reason. He should get accustomed to penetrating to the real roots of

things and to take into himself their true meaning and usage, rather than read, perceive, memorize, and relate other people's opinions. The same ought to be the case with respect to morality and piety.

6. Education ought not to be painful but as easy as possible, everyday only four hours ought to be spent for public instruction, and this in such a way that one teacher should suffice for the simultaneous instruction of a hundred pupils. And he should do that ten times more easily than is now done with one pupil.

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Chapter 14. The Exact Method of Teaching has to be Borrowed from Nature. . . .

. . . If the natural order of learning is completely discovered then there will not be any difference between the development of art and the growth of nature. For Cicero says very truly, "If we follow nature as our guide we will never go astray." . . . Therefore guided by nature we will explore the principles useful for, first, the prolongation of life in order to learn all that is necessary; second, the limitation of subject-matter in order to learn more quickly; third, grasping the right occasion in order to learn more effectively; fourth, the unfolding of the mind in order to learn more easily; fifth, the sharpening of the judgment in order to learn more thoroughly. Each of these points will be discussed in a special chapter, but with the limitation of subject-matter we will deal last.

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Chapter 16. General Postulates of Teaching and Learning. . . .

First postulate: Nature follows a well-ordered time plan. . . . Hence all material of learning must be so divided according to age levels that only that is assigned to the child which is within the compass of his capacity.

Second postulate: Nature prepares the material before it begins to form it. . . . Schools fail in this principle very often. . . . Hence in order to improve teaching the following have to be done. 1. One has to have books and other adequate tools ready. 2. Perception must come before language. 3. Language must be learned not from grammar but from fitting authors. 4. Observation has to precede analysis. And 5. Examples have to precede the rules.

Third postulate: Nature chooses fitting materials for its activity. . . . Therefore in the future: First, each child entrusted to a school ought to stay in it. Second, the minds of the pupils should be made susceptible to the subject chosen for treatment. Third, all obstacles ought to be removed from the pupil.

Fourth postulate: Nature does not get confused, but proceeds by carefully distinguishing the single objects. . . . Therefore pupils in schools ought to be occupied with only one subject at any one time.

Fifth postulate: Nature begins its activities from within. . . . Therefore in the future:

1. First one ought to train the knowledge of things, second the memory, and third the language and the hand.
2. The teacher should explore and apply all means and ways for making the acquisition of knowledge possible.

Sixth postulate: Nature beings all its formation with the most general and finishes with the single. . . . Hence the individual sciences are badly taught unless a simple and general survey of the total knowledge is given before. And one ought never to instruct anybody in such a way that he become perfect in one branch of knowledge to the exclusion of others. Furthermore, the arts, sciences, and languages are badly taught unless one beings with the elements.

Seventh postulate: Nature does not skip but proceeds evenly. . . . Therefore in the future:

1. The totality of the studies ought to be classified so that each step prepares for the next one.
2. There ought to be a carefully planned schedule so that each year, month, day, and hour may have its special task.
3. This schedule ought to be followed rigidly so that nothing is skipped or confused.

Eighth postulate: If nature begins it does not stop before it has finished . . . Hence:

1. The pupil ought to stay in his institution until he becomes an educated, moral, and pious person.
2. The school ought to be situated in a quiet place.
3. Assignments ought to be finished without interruption.
4. Truancy and loafing ought not to be permitted.

Ninth postulate: Nature avoids contrasts and dangers. . . . Hence, care ought to be taken:

1. That the pupils have only such books which are fitting for their grade.
2. That these books be of such a kind that they can be called tunnels of wisdom, virtue, and piety.
3. That disorderly behavior not be tolerated in schools and their surroundings.

If all this is carefully observed the schools can hardly miss their purpose.

Chapter 17. Requisites for easy teaching and learning.

After we have discussed the means by which the teacher can safely achieve his aim we are now going to see how these means have to be adjusted to the

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intellectual qualities of the student in order to make the process of learning and teaching easy and pleasant.

It will be evident that, here again, we will succeed if we follow in the steps of nature. This means that instruction:

1. Must begin early and before the mind is corrupted.
2. The minds must be made ready for it.
3. It must proceed from the general to the particular, and,
4. From the easier to the more difficult.
5. Progress must not be rushed.
6. The minds must not be forced to do anything but that to which they aspire according to their age and motivation.
7. Everything must be related through sense impression, if possible.
8. Everything must be applied immediately, and,
9. Everything must be taught consistently according to one and the same method.

The Way of Light (Via Lucis)

"For there is inborn in human nature a love of liberty – for liberty man's mind is convinced that it was made – and this love can by no means be driven out: so that, wherever and by whatever means it feels that it is being hemmed in and impeded, it cannot but seek a way out and declare its own liberty."

Note

Selections from Comenius' *Didactica Magna* are translated by the editor from the German edition by Wilhelm Altenmüller, Paderborn, Ferdinand Schöningh, 1905. The selection from *The Way of Light (Via Lucis)* is from the translation into English with an introduction by E. T. Campagnac, published by the University Press of Liverpool in 1939, page 18.

4

Of Education

John Milton

OF EDUCATION.
To Master *Samuel Hartlib*.
Written above twenty years since.

Master *Hartlib*,

I am long since persuaded that to say and do aught worth memory and imitation, no purpose or respect should sooner move us than simply the love of God and of mankind. Nevertheless, to write now the reforming of education, though it be one of the greatest and noblest designs that can be thought on, and for the want whereof this nation perishes, I had not yet at this time been induced but by your earnest entreaties and serious conjurements; as having my mind for the present half diverted in the pursuance of some other assertions, the knowledge and the use of which cannot but be a great furtherance both to the enlarge-ment of truth, and honest living with much more.

Nor should the laws of any private friendship have prevailed with me to divide thus or transpose my former thoughts; but that I see those aims, those actions which have won you with me the esteem of a person sent hither by some good providence from a far country to be the occasion and incitement of great good to this island. And (as I hear) you have obtained the same repute with men of most approved wisdom and some of the highest authority among us; not to mention the learned correspondence which you hold in foreign parts, and the extraordinary pains and diligence which you have used in this matter both here and beyond the seas, either by the definite will of God so ruling, or the peculiar sway of nature, which also is God's working.

Neither can I think that, so reputed and so valued as you are, you would, to the forfeit of your own discerning ability, impose upon me an unfit and over-ponderous argument; but that the satisfaction, which you profess to

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Source: *Tractate on Education*, Vol. III, Part 4, *The Harvard Classics*. (New York: P. F. Collier & Son, 1909–14).

have received from those incidental discourses which we have wandered into, hath pressed and almost constrained you into a persuasion, that what you require from me in this point I neither ought nor can in conscience defer beyond this time, both of so much need at once, and so much opportunity to try what God hath determined.

I will not resist, therefore, whatever it is either of divine or human obligement that you lay upon me; but will forthwith set down in writing, as you request me, that voluntary idea, which hath long in silence presented itself to me, of a better education, in extent and comprehension far more large, and yet of time far shorter and of attainment far more certain, than hath been yet in practice. Brief I shall endeavour to be; for that which I have to say assuredly this nation hath extreme need should be done sooner than spoken. To tell you, therefore, that I have benefited herein among old renowned authors I shall spare; and to search what many modern Januas and Didactics more than ever I shall read have projected, my inclination leads me not. But if you can accept of these few observations which have flowered off, and are, as it were, the burnishing of many studious and contemplative years altogether spent in the search of religious and civil knowledge, and such as pleased you so well in the relating, I here give you them to dispose of.

The end, then, of learning is to repair the ruins of our first parents by regaining to know God aright, and out of that knowledge to love him, to imitate him, to be like him, as we may the nearest, by possessing our souls of true virtue, which, being united to the heavenly grace of faith, makes up the highest perfection. But because our understanding cannot in this body found itself but on sensible things, nor arrive so clearly to the knowledge of God and things invisible as by orderly conning over the visible and inferior creature, the same method is necessarily to be followed in all discreet teaching.

And seeing every nation affords not experience and tradition enough for all kind of learning, therefore we are chiefly taught the languages of those people who have at any time been most industrious after wisdom; so that language is but the instrument conveying to us things useful to be known. And though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he have not studied the solid things in them as well as the words and lexicons, he were nothing so much to be esteemed a learned man as any yeoman or tradesman competently wise in his mother-dialect only.

Hence appear the many mistakes which have made learning generally so unpleasing and so unsuccessful. First, we do amiss to spend seven or eight years merely in scraping together so much miserable Latin and Greek as might be learned otherwise easily and delightfully in one year. And that which casts our proficiency therein so much behind is our time lost in too oft idle vacancies given both to schools and universities; partly in a preposterous exaction, forcing the empty wits of children to compose themes, verses, and orations, which are the acts of ripest judgment, and the final work of a head filled, by long reading and observing, with elegant maxims and copious invention.

These are not matters to be wrung from poor striplings, like blood out of the nose, or the plucking of untimely fruit; besides the ill habit which they get of wretched barbarizing against the Latin and Greek idiom with their untutored Anglicisms, odious to be read, yet not to be avoided without a well continued and judicious conversing among pure authors, digested, which they scarce taste. Whereas, if after some preparatory grounds of speech by their certain forms got into memory they were led to the praxis thereof in some chosen short book lessoned thoroughly to them, they might then forthwith proceed to learn the substance of good things and arts in due order, which would bring the whole language quickly into their power. This I take to be the most rational and most profitable way of learning languages, and whereby we may best hope to give account to God of our youth spent herein.

And for the usual method of teaching arts, I deem it to be an old error of universities, not yet well recovered from the scholastic grossness of barbarous ages, that, instead of beginning with arts most easy (and those be such as are most obvious to the sense), they present their young unmatriculated novices at first coming with the most intellective abstractions of logic and metaphysics; so that they, having but newly left those grammatic flats and shallows where they struck unreasonably to learn a few words with lamentable construction, and now on the sudden transported under another climate, to be tossed and turmoiled with their unballasted wits in fathomless and unquiet deeps of controversy, do, for the most part, grow into hatred and contempt of learning, mocked and deluded all this while with ragged notions and babblements, while they expected worthy and delightful knowledge; till poverty or youthful years call them importunately their several ways, and hasten them, with the sway of friends, either to an ambitious and mercenary, or ignorantly zealous divinity; some allured to the trade of law, grounding their purposes not on the prudent and heavenly contemplation of justice and equity, which was never taught them, but on the promising and pleasing thoughts of litigious terms, fat contentions, and flowing fees. Others betake them to state affairs with souls so unprincipled in virtue and true generous breeding, that flattery, and court-shifts, and tyrannous aphorisms appear to them the highest points of wisdom, instilling their barren hearts with a conscientious slavery, if, as I rather think, it be not feigned. Others, lastly, of a more delicious and airy spirit, retire themselves, knowing no better, to the enjoyments of ease and luxury, living out their days in feast and jollity; which, indeed, is the wisest and safest course of all these, unless they were with more integrity undertaken. And these are the errors, these are the fruits of mis-spending our prime youth at the schools and universities, as we do, either in learning mere words, or such things chiefly as were better unlearned.

I shall detain you no longer in the demonstration of what we should not do, but straight conduct you to a hillside, where I will point you out the right path of a virtuous and noble education; laborious indeed at the first ascent, but else so smooth, so green, so full of goodly prospect and melodious sounds on every side, that the harp of Orpheus was not more charming. I doubt not

but ye shall have more ado to drive our dullest and laziest youth, our stocks and stubs, from the infinite desire of such a happy nurture, than we have now to hale and drag our choicest and hopefullest wits to that asinine feast of sow-thistles and brambles which is commonly set before them as all the food and entertainment of their tenderest and most docible age. I call, therefore, a complete and generous education, that which fits a man to perform, justly, skilfully, and magnanimously all the offices, both private and public, of peace and war. And how all this may be done between twelve and one-and-twenty, less time than is now bestowed in pure trifling at grammar and sophistry, is to be thus ordered.

First, to find out a spacious house and ground about it fit for an Academy, and big enough to lodge a hundred and fifty persons, whereof twenty or thereabout may be attendants, all under the government of one who shall be thought of desert sufficient, and ability either to do all, or wisely to direct and oversee it done. This place should be at once both school and university, not needing a remove to any other house of scholarship, except it be some peculiar college of law or physic, where they mean to be practitioners; but as for those general studies which take up all our time from Lilly to the commencing, as they term it, master of art, it should be absolute. After this pattern, as many edifices may be converted to this use as shall be needful in every city throughout this land, which would tend much to the increase of learning and civility everywhere. This number, less or more, thus collected, to the convenience of a foot-company or interchangeably two troops of cavalry, should divide their day's work into three parts as it lies orderly – their studies, their exercise, and their diet.

For their studies first, they should begin with the chief and necessary rules of some good grammar, either that now used, or any better, and while this is doing, their speech is to be fashioned to a distinct and clear pronunciation, as near as may be to the Italian, especially in the vowels. For we Englishmen, being far northerly, do not open our mouths in the cold air wide enough to grace a southern tongue, but are observed by all other nations to speak exceeding close and inward; so that to smatter Latin with an English mouth is as ill a hearing as law French.

Next, to make them expert in the usefullest points of grammar, and withal to season them and win them early to the love of virtue and true labour, ere any flattering seducement or vain principle seize them wandering, some easy and delightful book of education would be read to them, whereof the Greeks have store, as Cebes, Plutarch, and other Socratic discourses; but in Latin we have none of classic authority extant, except the two or three first books of Quintilian and some select pieces elsewhere.

But here the main skill and groundwork will be to temper them such lectures and explanations upon every opportunity, as may lead and draw them in willing obedience, inflamed with the study of learning and the admiration of virtue, stirred up with high hopes of living to be brave men and worthy patriots, dear to God and famous to all ages: that they may despise and

scorn all their childish and ill-taught qualities, to delight in manly and liberal exercises; which he who hath the art and proper eloquence to catch them with, what with mild and effectual persuasions, and what with the intimation of some fear, if need be, but chiefly by his own example, might in a short space gain them to an incredible diligence and courage, infusing into their young breasts such an ingenuous and noble ardour as would not fail to make many of them renowned and matchless men.

At the same time, some other hour of the day might be taught them the rules of arithmetic, and, soon after, the elements of geometry, even playing, as the old manner was. After evening repast till bed-time their thoughts would be best taken up in the easy grounds of religion and the story of Scripture.

The next step would be to the authors of agriculture, Cato, Varro, and Columella, for the matter is most easy; and if the language be difficult, so much the better, it is not a difficulty above their years. And here will be an occasion of inciting and enabling them hereafter to improve the tillage of their country, to recover the bad soil, and to remedy the waste that is made of good; for this was one of Hercules' praises.

Ere half these authors be read (which will soon be with plying hard and daily) they cannot choose but be masters of any ordinary prose; so that it will be then seasonable for them to learn in any modern author the use of the globes and all the maps, first with the old names and then with the new; or they might then be capable to read any compendious method of natural philosophy. And, at the same time, might be entering into the Greek tongue, after the same manner as was before prescribed in the Latin; whereby the difficulties of grammar being soon overcome, all the historical physiology of Aristotle and Theophrastus are open before them and, as I may say, under contribution. The like access will be to Vitruvius, to Seneca's *Natural Questions*, to Mela, Celsus, Pliny, or Solinus. And having thus passed the principles of arithmetic, geometry, astronomy, and geography, with a general compact of physics, they may descend in mathematics to the instrumental science of trigonometry, and from thence to fortification, architecture, enginery, or navigation. And in natural philosophy they may proceed leisurely from the history of meteors, minerals, plants, and living creatures, as far as anatomy. Then also in course might be read to them out of some not tedious writer the institution of physic; that they may know the tempers, the humours, the seasons, and how to manage a cruditv; which he who can wisely and timely do is not only a great physician to himself and to his friends, but also may at some time or other save an army by this frugal and expenseless means only, and not let the healthy and stout bodies of young men rot away under him for want of this discipline, which is a great pity, and no less a shame to the commander.

To set forward all these proceedings in nature and mathematics, what hinders but that they may procure, as oft as shall be needful, the helpful experiences of hunters, fowlers, fishermen, shepherds, gardeners, apothecaries; and in the other sciences, architects, engineers, mariners, anatomists, who,

doubtless, would be ready, some for reward and some to favour such a hopeful seminary. And this would give them such a real tincture of natural knowledge as they shall never forget, but daily augment with delight. Then also those poets which are now counted most hard will be both facile and pleasant, Orpheus, Hesiod, Theocritus, Aratus, Nicander, Oppian, Dionysius; and, in Latin, Lucretius, Manilius, and the rural part of Virgil.

By this time years and good general precepts will have furnished them more distinctly with that act of reason which in ethics is called prosiresis, that they may with some judgment contemplate upon moral good and evil. Then will be required a special reinforcement of constant and sound indoctrinating to set them right and firm, instructing them more amply in the knowledge of virtue and the hatred of vice, while their young and pliant affections are led through all the moral works of Plato, Xenophon, Cicero, Plutarch, Laertius, and those Locrian remnants; but still to be reduced in their nightward studies, wherewith they close the day's work, under the determinate sentence of David or Solomon, or the evangels and apostolic scriptures.

Being perfect in the knowledge of personal duty, they may then begin the study of economics. And either now or before this they may have easily learned at any odd hour the Italian tongue. And soon after, but with wariness and good antidote, it would be wholesome enough to let them taste some choice comedies, Greek, Latin, or Italian; those tragedies also that treat of household matters, as *Trachiniae, Alcestis*, and the like.

The next remove must be to the study of politics; to know the beginning, end, and reasons of political societies, that they may not, in a dangerous fit of the commonwealth, be such poor shaken uncertain reeds, of such a tottering conscience as many of our great councillors have lately shown themselves, but steadfast pillars of the State. After this they are to dive into the grounds of law and legal justice, delivered first and with best warrant by Moses, and, as far as human prudence can be trusted, in those extolled remains of Grecian lawgivers, Lycurgus, Solon, Zaleucus, Charondas; and thence to all the Roman edicts and tables, with their Justinian; and so down to the Saxon and common laws of England and the statutes.

Sundays also and every evening may now be understandingly spent in the highest matters of theology and church history, ancient and modern: and ere this time the Hebrew tongue at a set hour might have been gained, that the Scriptures may be now read in their own original; whereto it would be no impossibility to add the Chaldee and the Syrian dialect.

When all these employments are well conquered, then will the choice histories, heroic poems, and Attic tragedies of stateliest and most regal argument, with all the famous political orations, offer themselves; which, if they were not only read, but some of them got by memory, and solemnly pronounced with right accent and grace, as might be taught, would endue them even with the spirit and vigour of Demosthenes or Cicero, Euripides or Sophocles. And now, lastly, will be the time to read with them those organic arts which enable men to discourse and write perspicuously, elegantly, and according

to the fitted style of lofty, mean or lowly. Logic, therefore, so much as is useful, is to be referred to this due place, with all her well-couched heads and topics, until it be time to open her contracted palm into a graceful and ornate rhetoric taught out of the rule of Plato, Aristotle, Phalereus, Cicero, Hermogenes, Longinus.

To which poetry would be made subsequent, or, indeed, rather precedent, as being less subtile and fine, but more simple, sensuous, and passionate. I mean not here the prosody of a verse, which they could not but have hit on before among the rudiments of grammar, but that sublime art which in Aristotle's *Poetics*, in Horace, and the Italian commentaries of Castelvetro, Tasso, Mazzoni, and others, teaches what the laws are of a true epic poem, what of a dramatic, what of a lyric, what decorum is, which is the grand masterpiece to observe. This would make them soon perceive what despicable creatures our common rhymers and play-writers be; and show them what religious, what glorious and magnificent use might be made of poetry, both in divine and human things.

From hence, and not till now, will be the right season of forming them to be able writers and composers in every excellent matter, when they shall be thus fraught with an universal insight into things. Or whether they be to speak in Parliament or council, honour and attention would be waiting on their lips. There would then also appear in pulpits other visages, other gestures, and stuff otherwise wrought, than what we now sit under, oft times to as great a trial of our patience as any other that they preach to us. These are the studies wherein our noble and our gentle youth ought to bestow their time in a disciplinary way from twelve to one-and-twenty, unless they rely more upon their ancestors dead than upon themselves living. In which methodical course it is so supposed they must proceed by the steady pace of learning onward, as at convenient times for memory's sake to retire back into the middle ward, and sometimes into the rear, of what they have been taught, until they have confirmed and solidly united the whole body of their perfected knowledge, like the last embattling of a Roman legion. Now will be worth the seeing what exercises and recreations may best agree and become these studies.

Their Exercise

The course of study hitherto briefly described is, what I can guess by reading, likest to those ancient and famous schools of Pythagoras, Plato, Isocrates, Aristotle, and such others, out of which were bred up such a number of renowned philosophers, orators, historians, poets, and princes all over Greece, Italy, and Asia, besides the flourishing studies of Cyrene and Alexandria. But herein it shall exceed them, and supply a defect as great as that which Plato noted in the commonwealth of Sparta. Whereas that city trained up their youth most for war, and these in their Academies and

Lycaeum all for the gown, this institution of breeding which I here delineate shall be equally good both for peace and war. Therefore, about an hour and a half ere they eat at noon should be allowed them for exercise, and due rest afterwards; but the time for this may be enlarged at pleasure, according as their rising in the morning shall be early. The exercise which I commend first is the exact use of their weapon, to guard, and to strike safely with edge or point. This will keep them healthy, nimble, strong, and well in breath; is also the likeliest means to make them grow large and tall, and to inspire them with a gallant and fearless courage; which, being tempered with seasonable lectures and precepts to make them of true fortitude and patience, will turn into a native and heroic valour, and make them hate the cowardice of doing wrong. They must be also practiced in all the locks and gripes of wrestling, wherein Englishmen are wont to excel, as need may often be in fight to tug, to grapple, and to close. And this, perhaps, will be enough wherein to prove and heat their single strength. The interim of unsweating themselves regularly, and convenient rest before meat, may both with profit and delight be taken up in recreating and composing their travailed spirits with the solemn and divine harmonies of music heard or learned either whilst the skilful organist plies his grave and fancied descant in lofty fugues, or the whole symphony with artful and unimaginable touches adorn and grace the well-studied chords of some choice composer; sometimes the lute or soft organ-stop, waiting on elegant voices either to religious, martial, or civil ditties, which, if wise men and prophets be not extremely out, have a great power over dispositions and manners to smooth and make them gentle from rustic harshness and distempered passions. The like also would not be unexpedient after meat, to assist and cherish nature in her first concoction, and send their minds back to study in good tune and satisfaction. Where having followed it under vigilant eyes till about two hours before supper, they are, by a sudden alarum or watchword, to be called out to their military motions, under sky or covert, according to the season, as was the Roman wont; first on foot, then, as their age permits, on horseback to all the art of cavalry; that having in sport, but with much exactness and daily muster, served out the rudiments of their soldiership in all the skill of embattling, marching, encamping, fortifying, besieging, and battering, with all the helps of ancient and modern stratagems, tactics, and warlike maxims, they may, as it were out of a long war, come forth renowned and perfect commanders in the service of their country.

They would not then, if they were trusted with fair and hopeful armies, suffer them for want of just and wise discipline to shed away from about them like sick feathers, though they be never so oft supplied; they would not suffer their empty and unrecruitable colonels of twenty men in a company to quaff out or convey into secret hoards the wages of a delusive list and a miserable remnant; yet in the meanwhile to be overmastered with a score or two of drunkards, the only soldiery left about them, or else to comply with all rapines and violences. No, certainly, if they knew aught of that knowledge which belongs to good men or good governors, they would not suffer these things.

But to return to our own institute. Besides these constant exercises at home, there is another opportunity of gaining experience to be won from pleasure itself abroad: in those vernal seasons of the year, when the air is calm and pleasant, it were an injury and sullenness against nature not to go out and see her riches and partake in her rejoicing with heaven and earth. I should not, therefore, be a persuader to them of studying much then, after two or three years that they have well laid their grounds, but to ride out in companies with prudent and staid guides to all the quarters of the land, learning and observing all places of strength, all commodities of building and of soil for towns and tillage, harbours, and ports for trade. Sometimes taking sea as far as to our navy, to learn there also what they can in the practical knowledge of sailing and of sea fight.

These ways would try all their peculiar gifts of nature, and if there were any secret excellence among them, would fetch it out and give it fair opportunities to advance itself by, which could not but mightily redound to the good of this nation, and bring into fashion again those old admired virtues and excellencies, with far more advantage now in this purity of Christian knowledge.

Nor shall we then need the monsieurs of Paris to take our hopeful youth into their slight and prodigal custodies, and send them over back again transformed into mimics, apes, and kickshaws. But if they desire to see other countries at three or four and twenty years of age, not to learn principles, but to enlarge experience and make wise observation, they will by that time be such as shall deserve the regard and honour of all men where they pass, and the society and friendship of those in all places who are best and most eminent. And perhaps then other nations will be glad to visit us for their breeding, or else to imitate us in their own country. Now, lastly, for their diet there cannot be much to say, save only that it would be best in the same house; for much time else would be lost abroad, and many ill habits got; and that it should be plain, healthful, and moderate, I suppose is out of controversy. Thus, Mr. Hartlib, you have a general view in writing, as your desire was, of that which at several times I had discoursed with you concerning the best and noblest way of education; not beginning, as some have done, from the cradle, which yet might be worth many considerations, if brevity had not been my scope. Many other circumstances also I could have mentioned; but this, to such as have the worth in them to make trial, for light and direction may be enough. Only I believe that this is not a bow for every man to shoot in that counts himself a teacher, but will require sinews almost equal to those which Homer gave Ulysses. Yet I am withal persuaded that it may prove much more easy in the assay than it now seems at distance, and much more illustrious: howbeit not more difficult than I imagine; and that imagination presents me with nothing but very happy and very possible according to best wishes, if God have so decreed, and this age have spirit and capacity enough to apprehend.

5

The Orbis Pictus

John Amos Comenius

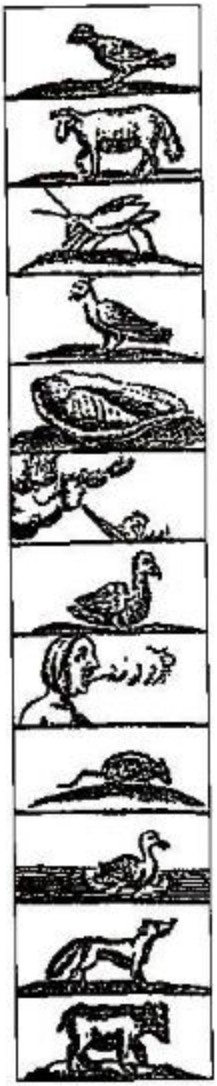
Orbis Sensualium Pictus

A World of Things Obvious to the Senses drawn in Pictures

Invitation. I. Invitatio.

The Master and the Boy.	*Magister & Puer.*
M. Come, Boy, learn to be wise.	M. Veni, Puer, disce sapere.
P. What doth this mean, *to be wise?*	P. Quid hoc est, *Sapere?*
M. To understand rightly.	M. Intelligere recte,

Source: John Amos Comenius, *Selections from the Orbis Pictus Sensualium* (London: John and Benjamin Sprint), pp. 1, 3, 4, 5, 118, 119, 126, 127. John Amos Comenius's *Visible World*, translated into English by Charles Hoole 1887. Reprint by C.W. Bardeen Publisher, London.



Cornix cornicatur, a a | A a
The *Crow* crieth.

Agnus balat, b è é è | B b
The *Lamb bleateth.*

Cicada stridet, ci ci | C c
The *Grasshopper* chirpeth.

Upupa dicit, du du | D d
The *Whooppoo* saith.

Infans ejulat, è è è | E e
The *Infant* crieth.

Ventus flat, fi fi | F f
The *Wind* bloweth.

Anser gingrit, ga ga | G g
The *Goose* gagleth.

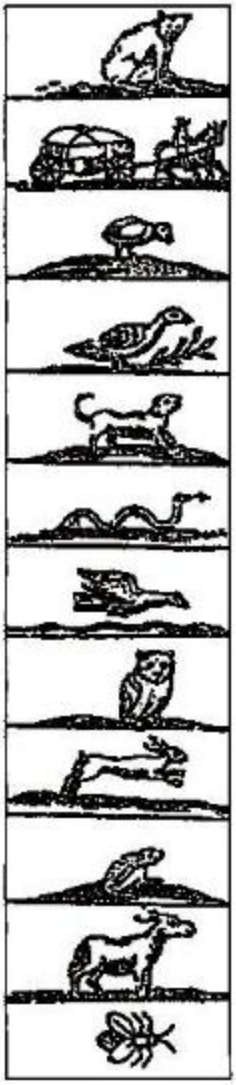
Os halat, hà'h hà'h | H h
The *Mouth* breatheth out.

Mus mintrit, i i i | I i
The *Mouse* chirpeth.

Anas tetrinnit, kha, kha | K k
The *Duck* quaketh.

Lupus ululat, lu ulu | L
The *Wolf* howleth.

Ursus murmurat, |mum mum- | M
The *Bear* grumbleth.



Felis clamat, The *Cat* crieth.	nau nau	N n
Auriga clamat, The *Carter* crieth.	ò ò ò	O o
Pullus pipit, The *Chicken* peepeth.	pi pi	P p
Cúculus cuculat, The *cuckow* singeth.	kuk ku	Q q
Canis ringitur, The *dog* grinneth.	err	R r
Serpens sibilat, The *Serpent* hisseth.	si	S s
Graculus clamat, The *Jay* crieth.	tac tac	T t
Bubo ululat, The *Owl* hooteth.	ù ù	U u
Lepus vagit, The *Hare* squeaketh.	va	W w
Rana coaxat, The *Frog* croaketh.	coax	X x
Asinus rudit, The *Asse* brayeth.	y y y	Y y
Tabanus dicit, The *Breese* or *Horse-flie* saith.	ds ds	Z z

God II. Deus.

God is of himself from everlasting to everlasting.

A most perfect and a most blessed *Being*.

In his *Essence* Spiritual, and One.

In his *Personality*, Three.

In his *Will*, Holy, Just, Merciful and True.

In his *Power* very great.

In his *Goodness*, very good.

In his *Wisdom*, unmeasurable.

A *Light* inaccessible; and yet all in all.

Every where, and no where.

Deus est ex seipso, ab æterno in æternum.

Perfectissimum & beatissimum *Ens*.

Essentiâ Spiritualis & unus.

Hypostasi Trinus.

Voluntate, Sanctus, Justus, Clemens, Verax.

Potentiâ maximus.

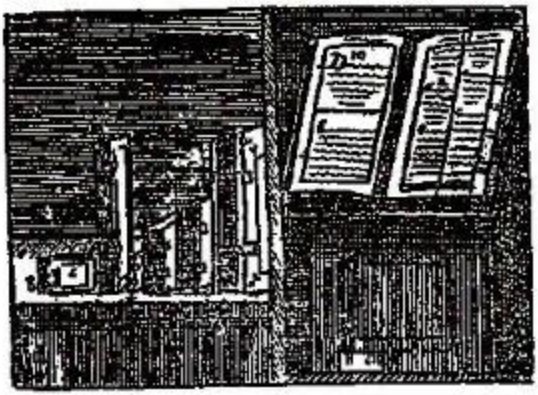
Bonitate Optimus.

Sapientiâ, immensus.

Lux inaccessa; & tamen omnia in omnibus.

Ubique & nullibi.

A Book. XCVII. Liber.



A Book
as to its outward shape,
is either in *Folio*, 1.
or in *Quarto*, 2.
in *Octavo*, 3.
in *Duodecimo*, 4. either
made to open Side-wise, 5.
or *Long-wise*, 6.
with *Brasen Clasps*, 7.
or *Strings*, 8.
and *Square-boſtes*, 9.

Within are *Leaves*, 10.
with two *Pages*,
sometimes divided with
Columns, 11.
and *Marginal Notes*, 12.

Liber.
quoad exteriorem formam
est vel in *Folia*, 1.
vel in *Quarto*, 2.
in *Octavo*, 3.
in *Duodecimo*, 4.
vel *Colmnatus*, 5.
vel *Linguatus*, 6.
cum *Æneis Clausuris*, 7.
vel *Ligulis*, 8.
& *angularibus Bullis*, 9.

Intùs sunt *Folia*, 10.
duabis *Paginis*,
aliquando *Columnis*, 11.
divisa cumq;
Notis Marginalibus, 12.

A School. XCVIII. Schola.

A School, 1.
is a Shop in which
Young Wits are fashion'd
to vertue, and it is
distinguish'd into *Forms*.

The *Master*, 2.
sitteth in a *Chair*, 3.
the *Scholars*, 4.
in *Forms*, 5.
he teacheth, they learn.

Some things
are writ down before them
with *Chalk* on a *Table*, 6.

Some sit
at a Table, and write, 7.
he mendeth their Faults, 8.

Some stand and rehearse
things committed to
memory, 9.

Some talk together, 10.
and behave themselves
wantonly and carelessly;

Schola, 1.
est Officina, in quâ
Novelli Animi formantur
ad virtutem, &
distinguitur in *Classes*.

Præceptor, 2.
sedet in *Cathedra*, 3.
Discipuli, 4.
in *Subsellbis*, 5.
ille docet, hi discunt.

Quædam
præscribuntur illis
Cretâ in Tabella, 6.

Quidam sedent
ad Mensam, & scribunt, 7.
ipse corrigit Mendas, 8.

Quidam stant, &
recitant mandata
memoriæ, 9.

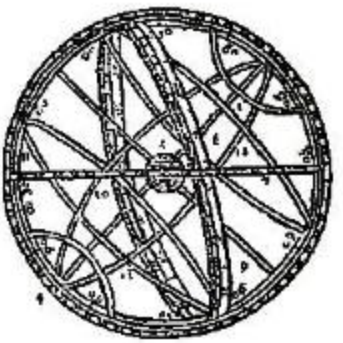
Quidam confabulantur,
10. ac gerunt se
petulantes, & negligentes;

Geometry. CIII. Geometria.

A *Geometrician*
measureth the *height* of
a *Tower*, 1 . . . . 2.
or the *distance*
of *places*, 3 . . . . 4.
either with a *Quadrant*, 5.
or a *Jacob's-staff*, 6.
He maketh out the
Figures of things,
with *Lines*, 7.
Angles, 8.
and *Circles*, 9.
by a *Rule*, 10.
a *Square*, 11.
and a *pair of Compasses*, 12.
Out of these arise
an *Oval*, 13.
a *Triangle*, 14.
a *Quadrangle*, 15.
and other figures.

Geometra
metitur *Altitudinem*
Turris, 1 . . . . 2.
aut *distantiam*
Locorum, 3 . . . . 4.
sive *Quadrante*, 5.
sive *Radio*, 6.
Designat
Figuras rerum
Lineis, 7.
Angulis, 8.
& *Circulis*, 9.
ad *Regulam*, 10.
Normam. 11.
& *Circinum*, 12.
Ex his oriuntur
Cylindrus, 13.
Trigonus 14.
Tetragonus, 15.
& aliæ figuræ.

The Celestial Sphere. CIV. Sphera cælestis.



Astronomy considereth the *motion of the Stars*, *Astrology* the Effects of them.

The *Globe of Heaven* is turned about upon an *Axle-tree*, 1. about the *Globe of the Earth*, 2. in the space of XXIV. hours.

The *Pole-stars*, or *Pole*, the *Arctick*, 3. the *Antarctick*, 4. conclude the *Axle-tree* at both ends.

The *Heaven* is full of stars every where. There are reckoned above *thousand fixed Stars*; but of *Constellations towards the North*, XXI. *towards the South* XVI.

Astronomia considerat *motus Astrorum*, *Astrologia* eorum Effectus.

Globus Cæli volvitur super Axem, 1. circa *globum terræ*, 2. spacio XXIV. horarum.

Stellæ polares. *Arcticus*, 3. *Antarcticus*, 4. finiunt *Axem* utrinque.

Cælum est Stellarum undique.

Stellarum fixarum numerantur plus *mille*; *Siderum verò Septentrionarium*, XXI. *Meridionalium*, XVI.

6

Selections from *Some Thoughts Concerning Education*

John Locke

Section I. A sound mind in a sound body, is a short, but full description of a happy state in this world. He that has these two, has little more to wish for; and he that wants either of them, will be but little the better for any thing else. Men's happiness or misery is most part of their own making. He, whose mind directs not wisely, will never take the right way; and he, whose body is crazy and feeble, will never be able to advance in it. I confess, there are some men's constitutions of body and mind so vigorous, and well fram'd by nature, that they need not much assistance from others; but by the strength of their natural genius, they are from their cradles carried towards what is excellent; and by the privilege of their happy constitutions, are able to do wonders. But examples of this kind are but few; and I think I may say, that of all the men we meet with, nine parts of ten are what they are, good or evil, useful or not, by their education. 'Tis that which makes the great difference in mankind. The little, or almost insensible impressions on our tender infancies, have very important and lasting consequences: and there 'tis, as in the fountains of some rivers, where a gentle application of the hand turns the flexible waters in channels, that make them take quite contrary courses; and by this direction given them at first in the source, they receive different tendencies, and arrive at last at very remote and distant places.

Section 2. I imagine the minds of children as easily turn'd this or that way, as water it self: and though this be the principal part, and our main care should be about the inside, yet the clay-cottage is not to be neglected. I shall therefore begin with the case, and consider first the health of the body, as that which perhaps you may rather expect from that study I have been thought more peculiarly to have apply'd my self to; and that also which will be soonest dispatch'd, as lying, if I guess not amiss, in a very little compass....

Source: *English Philosophers of the Seventeenth and Eighteenth Centuries, The Harvard Classics*, No. XXXVII (New York: P. F. Collier & Son, 1910).

Section 33. As the strength of the body lies chiefly in being able to endure hardships, so also does that of the mind. And the great principle and foundation of all virtue and worth is plac'd in this: that a man is able to deny himself his own desires, cross his own inclinations, and purely follow what reason directs as best, tho' the appetite lean the other way.

Section 34. The great mistake I have observ'd in people's breeding their children, has been, that this has not been taken care enough of in its due season: that the mind has not been made obedient to discipline, and pliant to reason, when at first it was most tender, most easy to be bow'd. Parents being wisely ordain'd by nature to love their children, are very apt, if reason watch not that natural affection very warily, are apt, I say, to let it run into fondness. They love their little ones and it is their duty: but they often, with them, cherish their faults too. They must not be cross'd, forsooth; they must be permitted to have their wills in all things; and they being in their infancies not capable of great vices, their parents think they may safe enough indulge their irregularities, and make themselves sport with that pretty perverseness which they think well enough becomes that innocent age. But to a fond parent, that would not have his child corrected for a perverse trick, but excus'd it, saying it was a small matter, Solon very well reply'd, aye, but custom is a great one....

Section 36. We are generally wise enough to begin with them when they are very young, and discipline betimes those other creatures we would make useful and good for somewhat. They are only our own offspring, that we neglect in this point; and having made them ill children, we foolishly expect they should be good men. For if the child must have grapes or sugar-plums when he has a mind to them, rather than make the poor baby cry or be out of humour; why, when he is grown up, must he not be satisfy'd too, if his desires carry him to wine or women? They are objects as suitable to the longing of one of more years, as what he cry'd for, when little, was to the inclinations of a child. The having desires accommodated to the apprehensions and relish of those several ages, is not the fault: but the not having them subject to the rules and restraints of reason: the difference lies not in having or not having appetites, but in the power to govern, and deny ourselves in them. He that is not us'd to submit his will to the reason of others when he is young, will scarce hearken to submit to his own reason when he is of an age to make use of it. And what kind of a man such an one is like to prove, is easy to foresee....

Section 47. The usual lazy and short way by chastisement and the rod, which is the only instrument of government that tutors generally know, or ever think of, is the most unfit of any to be us'd in education, because it tends to both those mischiefs which, as we have shewn, are the Scylla and Charybdis, which on the one hand or the other ruin all that miscarry.

Section 48. 1. This kind of punishment contributes not at all to the mastery of our natural propensity to indulge corporal and present pleasure, and to avoid pain at any rate, but rather encourages it, and thereby strengthens that in us, which is the root from whence spring all vicious actions, and the irregularities

of life. For what other motive, but of sensual pleasure and pain, does a child act by, who drudges at his book against his inclination, or abstains from eating unwholesome fruit, that he takes pleasure in, only out of fear of whipping? He in this only prefers the greater corporal pleasure, or avoids the greater corporal pain. And what is it, to govern his actions, and direct his conduct by such motives as these? What is it, I say, but to cherish that principle in him, which it is our business to root out and destroy? And therefore I cannot think any correction useful to a child, where the shame of suffering for having done amiss, does not work more upon him than the pain.

Section 49. 2. This sort of correction naturally breeds an aversion to that which 'tis the tutor's business to create a liking to. How obvious is it to observe, that children come to hate things which were at first acceptable to them, when they find themselves whipp'd, and chid, and teas'd about them? And it is not to be wonder'd at in them, when grown men would not be able to be reconcil'd to any thing by such ways. Who is there that would not be disgusted with any innocent recreation, in itself indifferent to him, if he should with blows or ill language be haled to it, when he had no mind? Or be constantly so treated, for some circumstances in his application to it? This is natural to be so. Offensive circumstances ordinarily infect innocent things which they are join'd with; and the very sight of a cup wherein any one uses to take nauseous physick, turns his stomach, so that nothing will relish well out of it, tho' the cup be never so clean and well-shap'd, and of the richest materials.

Section 50. 3. Such a sort of slavish discipline makes a slavish temper. The child submits, and dissembles obedience, whilst the fear of the rod hangs over him; but when that is remov'd, and by being out of sight, he can promise himself impunity, he gives the greater scope to his natural inclination; which by this way is not at all alter'd, but, on the contrary, heighten'd and increas'd in him; and after such restraint, breaks out usually with the more violence; or,

Section 52. Beating them, and all other sorts of slavish and corporal punishments, are not the discipline fit to be used in the education of those we would have wise, good, and ingenuous men; and therefore very rarely to be apply'd, and that only in great occasions, and cases of extremity. On the other side, to flatter children by rewards of things that are pleasant to them, is as carefully to be avoided. He that will give to his son apples or sugar-plumbs, or what else of this kind he is most delighted with, to make him learn his book, does but authorize his love of pleasure, and cocker up that dangerous propensity, which he ought by all means to subdue and stifle in him. You can never hope to teach him to master it, whilst you compound for the check you gave his inclination in one place, by the satisfaction you propose to it in another. To make a good, a wise, and a virtuous man, 'tis fit he should learn to cross his appetite, and deny his inclination to riches, finery, or pleasing his palate, &c. whenever his reason advises the contrary, and his duty requires it. But when you draw him to do any thing that is fit by the offer of money, or reward the pains of learning his book by the pleasure of a luscious morsel; when you promise him a lace-cravat or a fine new suit, upon performance of some of

his little tasks; what do you by proposing these as rewards, but allow them to be the good things he should aim at, and thereby encourage his longing for 'em, and accustom him to place his happiness in them? Thus people, to prevail with children to be industrious about their grammar, dancing, or some other such matter, of no great moment to the happiness or usefulness of their lives, by misapply'd rewards and punishments, sacrifice their virtue, invert the order of their education, and teach them luxury, pride, or covetousness, &c. For in this way, flattering those wrong inclinations which they should restrain and suppress, they lay the foundations of those future vices, which cannot be avoided but by curbing our desires and accustoming them early to submit to reason.

Section 53. I say not this, that I would have children kept from the conveniences or pleasures of life, that are not injurious to their health or virtue. On the contrary, I would have their lives made as pleasant and as agreeable to them as may be, in a plentiful enjoyment of whatsoever might innocently delight them; provided it be with this caution, that they have those enjoyments, only as the consequences of the state of esteem and acceptation they are in with their parents and governors; but they should never be offer'd or bestow'd on them, as the rewards of this or that particular performance, that they shew an aversion to, or to which they would not have apply'd themselves without that temptation.

Section 54. But if you take away the rod on one hand, and these little encouragements which they are taken with, on the other, how then (will you say) shall children be govern'd? Remove hope and fear, and there is an end of all discipline. I grant that good and evil, reward and punishment, are the only motives to a rational creature: these are the spur and reins whereby all mankind are set on work, and guided, and therefore they are to be made use of to children too. For I advise their parents and governors always to carry this in their minds, that children are to be treated as rational creatures.

Section 55. Rewards, I grant, and punishments must be proposed to children, if we intend to work upon them. The mistake I imagine is, that those that are generally made use of, are ill chosen. The pains and pleasures of the body are, I think, of ill consequence, when made the rewards and punishments whereby men would prevail on their children; for, as I said before, they serve but to increase and strengthen those inclinations, which 'tis our business to subdue and master. What principle of virtue do you lay in a child, if you will redeem his desires of one pleasure, by the proposal of another? This is but to enlarge his appetite, and instruct it to wander. If a child cries for an unwholesome and dangerous fruit, you purchase his quiet by giving him a less hurtful sweetmeat. This perhaps may preserve his health, but spoils his mind, and sets that further out of order. For here you only change the object, but flatter still his appetite, and allow that must be satisfy'd, wherein, as I have shew'd, lies the root of the mischief: and till you bring him to be able to bear a denial of that satisfaction, the child may at present be quiet and orderly, but the disease is not cured. By this way of proceeding, you foment and cherish in him that which is the spring from whence all the evil flows, which will be

sure on the next occasion to break out again with more violence, give him stronger longings, and you more trouble.

Section 56. The rewards and punishments then, whereby we should keep children in order, are quite of another kind, and of that force, that when we can get them once to work, the business, I think, is done, and the difficulty is over. Esteem and disgrace are, of all others, the most powerful incentives to the mind, when once it is brought to relish them. If you can once get into children a love of credit, and an apprehension of shame and disgrace, you have put into 'em the true principle, which will constantly work and incline them to the right. But it will be ask'd, How shall this be done?

I confess it does not at first appearance want some difficulty; but yet I think it worth our while to seek the ways (and practise them when found) to attain this, which I look on as the great secret of education....

Section 63. But if a right course be taken with children, there will not be so much need of the application of the common rewards and punishments as we imagine, and as the general practice has establish'd. For all their innocent folly, playing and childish actions, are to be left perfectly free and unrestrain'd, as far as they can consist with the respect due to those that are present; and that with the greatest allowance. If these faults of their age, rather than of the children themselves, were, as they should be, left only to time and imitation and riper years to cure, children would escape a great deal of misapply'd and useless correction, which either fails to overpower the natural disposition of their childhood, and so by an ineffectual familiarity, makes correction in other necessary cases of less use; or else if it be of force to restrain the natural gaiety of that age, it serves only to spoil the temper both of body and mind. If the noise and bustle of their play prove at any time inconvenient, or unsuitable to the place or company they are in, (which can only be where their parents are) a look or a word from the father or mother, if they have establish'd the authority they should, will be enough either to remove or quiet them for that time. But this gamesome humour, which is wisely adapted by nature to their age and temper, should rather be encourag'd to keep up their spirits, and improve their strength and health, than curb'd and restrain'd; and the chief art is to make all that they have to do, sport and play too.

Section 64. And here give me leave to take notice of one thing I think a fault in the ordinary method of education; and that is, the charging of children's memories, upon all occasions, with rules and precepts, which they often do not understand, and constantly as soon forget as given. If be some action you would have done, or done otherwise, whenever they forget, or do it awkwardly, make them do it over and over again, 'till they are perfect, whereby you will get these two advantages. First, to see whether it be an action they can do, or is fit to be expected of them: for sometimes children are bid to do things which upon trial they are found not able to do, and had need be taught and exercis'd in before they are requir'd to do them. But it is much easier for a tutor to command than to teach. Secondly, another thing got by it will be this, that by repeating the same action 'till it be grown habitual in them, the

performance will not depend on memory or reflection, the concomitant of prudence and age, and not of childhood, but will be natural in them. Thus bowing to a gentleman, when he salutes him, and looking in his face, when he speaks to him, is by constant use as natural to a well-bred man, as breathing; it requires no thought, no reflection. Having this way cured in your child any fault, it is cured for ever: and thus one by one you may weed them out all, and plant what habits you please....

Section 66. But pray remember, children are not to be taught by rules which will be always slipping out of their memories. What you think necessary for them to do, settle in them by an indispensable practice, as often as the occasion returns; and if it be possible, make occasions. This will beget habits in them which being once establish'd, operate of themselves easily and naturally, without the assistance of the memory. But here let me give two cautions. 1. The one is, that you keep them to the practice of what you would have grow into a habit in them, by kind words, and gentle admonitions, rather as minding them of what they forget, than by harsh rebukes and chiding, as if they were wilfully guilty. 2. Another thing you are to take care of, is, not to endeavour to settle too many habits at once, lest by variety you confound them, and so perfect none. When constant custom has made any one thing easy and natural to 'em, and they practise it without reflection, you may then go on to another.

This method of teaching children by a repeated practice, and the same action done over and over again, under the eye and direction of the tutor, 'till they have got the habit of doing it well, and not by relying on rules trusted to their memories, has so many advantages, which way soever we consider it, that I cannot but wonder (if ill customs could be wondered at in any thing) how it could possibly be so much neglected. I shall name one more that comes now in my way. By this method we shall see whether what is requir'd of him be adapted to his capacity, and any way suited to the child's natural genius and constitution; for that too much be consider'd in a right education. We must not hope wholly to change their original tempers, nor make the gay pensive and grave, nor the melancholy sportive, without spoiling them. God has stamp'd certain characters upon men's minds, which like their shapes, may perhaps be a little mended, but can hardly be totally alter'd and transform'd into the contrary....

Virtue is harder to be got than a knowledge of the world; and if lost in a young man, is seldom recover'd. Sheepishness and ignorance of the world, the faults imputed to a private education, are neither the necessary consequences of being bred at home, nor if they were, are they incurable evils. Vice is the more stubborn, as well as the more dangerous evil of the two; and therefore in the first place to be fenced against. If that sheepish softness which often enervates those who are bred like foundlings at home, be carefully to be avoided, it is principally so for virtue's sake; for fear lest such a yielding temper should be too susceptible of vicious impressions, and expose the novice too easily to be corrupted. A young man before he leaves the shelter of his father's

house, and the guard of a tutor, should be fortify'd with resolution, and made acquainted with men, to secure his virtues, lest he should be led into some ruinous course, or fatal precipice, before he is sufficiently acquainted with the dangers of conversation, and has steadiness enough not to yield to every temptation. Were it not for this, a young man's bashfulness and ignorance in the world, would not so much need an early care. Conversation would cure it in a great measure; or if that will not do it early enough, it is only a stronger reason for a good tutor at home. For if pains be to be taken to give him a manly air and assurance betimes, it is chiefly as a fence to his virtue when he goes into the world under his own conduct.

It is preposterous therefore to sacrifice his innocency to the attaining of confidence and some little skill of bustling for himself among others, by his conversation with ill-bred and vicious boys; when the chief use of that sturdiness, and standing upon his own legs, is only for the preservation of his virtue. For if confidence or cunning come once to mix with vice, and support his miscarriages, he is only the surer lost; and you must undo again, and strip him of that he has got from his companions, or give him up to ruin. Boys will unavoidably be taught assurance by conversation with men, when they are brought into it; and that is time enough. Modesty and submission, till then, better fits them for instruction; and therefore there needs not any great care to stock them with confidence beforehand. That which requires most time, pains, and assiduity, is, to work into them the principles and practice of virtue and good breeding. This is the seasoning they should be prepar'd with, so as not easily to be got out again. This they had need to be well provided with, for conversation, when they come into the world, will add to their knowledge and assurance, but be too apt to take from their virtue; which therefore they ought to be plentifully stor'd with, and have that tincture sunk deep into them.

How they should be fitted for conversation, and enter'd into the world, when they are ripe for it, we shall consider in another place. But how any one's being put into a mix'd herd of unruly boys, and there learning to wrangle at trap, or rook at span-farthing, fits him for civil conversation or business, I do not see. And what qualities are ordinarily to be got from such a troop of playfellows as schools usually assemble together from parents of all kinds, that a father should so much covet, is hard to divine. I am sure, he who is able to be at the charge of a tutor at home, may there give his son a more genteel carriage, more manly thoughts, and a sense of what is worthy and becoming, with a greater proficiency in learning into the bargain, and ripen him up sooner into a man, than any at school can do. Not that I blame the schoolmaster in this, or think it to be laid to his charge. The difference is great between two or three pupils in the same house, and three or four score boys lodg'd up and down: for let the master's industry and skill be never so great, it is impossible he should have fifty or an hundred scholars under his eye, any longer than they are in the school together: Nor can it be expected, that he should instruct them successfully in any thing but their books; the forming

of their minds and manners requiring a constant attention, and particular application to every single boy, which is impossible in a numerous flock, and would be wholly in vain (could he have time to study and correct every one's particular defects and wrong inclinations) when the lad was to be left to himself, or the prevailing infection of his fellows, the greatest part of the four and twenty hours....

Section 73. 1. None of the things they are to learn, should ever be made a burthen to them, or impos'd on them as a task. Whatever is so propos'd, presently becomes irksome; the mind takes an aversion to it, though before it were a thing of delight or indifferency. Let a child but be order'd to whip his top at a certain time every day, whether he has or has not a mind to it; let this be but requir'd of him as a duty, wherein he must spend so many hours morning and afternoon, and see whether he will not soon be weary of any play at this rate. Is it not so with grown men? What they do cheartully of themselves, do they not presently grow sick of, and can no more endure, as soon as they find it is expected of them as a duty? Children have as much a mind to shew that they are free, that their own good actions come from themselves, that they are absolute and independent, as any of the proudest of you grown men, think of them as you please.

Section 74. 2. As a consequence of this, they should seldom be put about doing even those things you have got an inclination in them to, but when they have a mind and disposition to it. He that loves reading, writing, musick, &c. finds yet in himself certain seasons wherein those things have no relish to him; and if at that time he forces himself to it, he only pothers and wearies himself to no purpose. So it is with children. This change of temper should be carefully observ'd in them, and the favourable seasons of aptitude and inclination be heedfully laid hold of: and if they are not often enough forward of themselves, a good disposition should be talk'd into them, before they be set upon any thing. This I think no hard matter for a discreet tutor to do, who has study'd his pupil's temper, and will be at a little pains to fill his head with suitable ideas, such as may make him in love with the present business. By this means a great deal of time and tiring would be sav'd: for a child will learn three times as much when he is in tune, as he will with double the time and pains when he goes awkwardly or is dragg'd unwillingly to it. If this were minded as it should, children might be permitted to weary themselves with play, and yet have time enough to learn what is suited to the capacity of each age. But no such thing is consider'd in the ordinary way of education, nor can it well be. That rough discipline of the rod is built upon other principles, has no attraction in it, regards not what humour children are in, nor looks after favourable seasons of inclination. And indeed it would be ridiculous, when compulsion and blows have rais'd an aversion in the child to his task, to expect he should freely of his own accord leave his play, and with pleasure court the occasions of learning; whereas, were matters order'd right, learning anything they should be taught might be made as much a recreation to their play, as their play is to their learning....

> The only fence against the world, is, a thorough knowledge of it, into which a young gentleman should be enter'd by degrees, as he can bear it; and the earlier the better, so he be in safe and skilful hands to guide him. The scene should be gently open'd, and his entrance made step by step, and the dangers pointed out that attend him from the several degrees, tempers, designs, and clubs of men. He should be prepar'd to be shock'd by some, and caress'd by others; warn'd who are like to oppose, who to mislead, who to undermine him, and who to serve him. He should be instructed how to know and distinguish them; where he should let them see, and when dissemble the knowledge of them and their aims and workings. And if he be too forward to venture upon his own strength and skill, the perplexity and trouble of a misadventure now and then, that reaches not his innocence, his health, or reputation, may not be an ill way to teach him more caution.

This, I confess, containing one great part of wisdom, is not the product of some superficial thoughts, or much reading; but the effect of experience and observation in a man who has liv'd in the world with his eyes open, and convers'd with men of all sorts. And therefore I think it of most value to be instill'd into a young man upon all occasions which offer themselves, that when he comes to launch into the deep himself, he may not be like one at sea without a line, compass or sea-chart; but may have some notice before-hand of the rocks and shoals, the currents and quick-sands, and know a little how to steer, that he sink not before he get experience. He that thinks not this of more moment to his son, and for which he more needs a governor, than the languages and learned sciences, forgets of how much more use it is to judge right of men, and manage his affairs wisely with them, than to speak Greek and Latin, or argue in mood and figure; or to have his head fill'd with the abstruse speculations of natural philosophy and metaphysicks; nay, than to be well vers'd in Greek and Roman writers, though that be much better for a gentleman than to be a good Peripatetick or Cartesian, because those antient authors observ'd and painted mankind well, and give the best light into that kind of knowledge. He that goes into the eastern parts of Asia, will find able and acceptable men without any of these; but without virtue, knowledge of the world, and civility, an accomplish'd and valuable man can be found no where.

A great part of the learning now in fashion in the schools of Europe, and that goes ordinarily into the round of education, a gentleman may in a good measure be unfurnish'd with, without any great disparagement to himself or prejudice to his affairs. But prudence and good breeding are in all the stations and occurrences of life necessary; and most young men suffer in the want of them, and come rawer and more awkward into the world than they should, for this very reason, because these qualities, which are of all other the most necessary to be taught, and stand most in need of the assistance and help of a teacher, are generally neglected and thought but a slight or no part of a tutor's business. Latin and learning make all the noise; and the main stress is laid upon his proficiency in things a great part whereof belong not to a gentleman's calling; which is to have the knowledge of a man of business, a carriage suitable

to his rank, and to be eminent and useful in his country, according to his station. Whenever either spare hours from that, or an inclination to perfect himself in some parts of knowledge, which his tutor did but just enter him in, set him upon any study, the first rudiments of it, which he learn'd before, will open the way enough for his own industry to carry him as far as his fancy will prompt, or his parts enable him to go. Or, if he thinks it may save his time and pains to be help'd over some difficulties by the hand of a master, he may then take a man that is perfectly well skilled in it, or chuse such an one as he thinks fittest for his purpose. But to initiate his pupil in any part of learning, as far as is necessary for a young man in the ordinary course of his studies, an ordinary skill in the governor is enough. Nor is it requisite that he should be a thorough scholar, or possess in perfection all those sciences which 'tis convenient a young gentleman should have a taste of in some general view, or short system. A gentleman that would penetrate deeper must do it by his own genius and industry afterwards: For no body ever went far in knowledge, or became eminent in any of the sciences, by the discipline and constraint of a master....

Section 147. You will wonder, perhaps, that I put learning last, especially if I tell you I think it the least part. This may seem strange in the mouth of a bookish man; and this making usually the chief, if not only bustle and stir about children, this being almost that alone which is thought on, when people talk of education, makes it the greater paradox. When I consider, what ado is made about a little Latin and Greek, how many years are spent in it, and what a noise and business it makes to no purpose, I can hardly forbear thinking that the parents of children still live in fear of the school-master's rod, which they look on as the only instrument of education; as a language or two to be its whole business. How else is it possible that a child should be chain'd to the oar seven, eight, or ten of the best years of his life, to get a language or two, which, I think, might be had at a great deal cheaper rate of pains and time, and be learn'd almost in playing?

Forgive me therefore if I say, I cannot with patience think, that a young gentleman should be put into the herd, and be driven with a whip and scourge, as if he were to run the gantlet through the several classes, ad capiendum ingenii cultum. What then? say you, would you not have him write and read? Shall he be more ignorant than the clerk of our parish, who takes Hopkins and Sternhold for the best poets in the world, whom yet he makes worse than they are by his ill reading? Not so, not so fast, I beseech you. Reading and writing, and learning I allow to be necessary, but yet not the chief business. I imagine you would think him a very foolish fellow, that should not value a virtuous or a wise man infinitely before a great scholar. Not but that I think learning a great help to both in well-dispos'd minds; but yet it must be confess'd also, that in others not so dispos'd, it helps them only to be the more foolish, or worse men. I say this, that when you consider the breeding of your son, and are looking out for a school-master or a tutor, you would not have (as is usual) Latin and Logick only in your thoughts. Learning must be had, but in the

second place, as subservient only to greater qualities. Seek out somebody that may know how discreetly to frame his manners: place him in hands where you may, as much as possible, secure his innocence, cherish and nurse up the good, and gently correct and weed out any bad inclinations, and settle in him good habits. This is the main point, and this being provided for, learning may be had into the bargain, and that, as I think, at a very easy rate, by methods that may be thought on.

Section 148. When he can talk, 'tis time he should begin to learn to read. But as to this, give me leave here to inculcate again, what is very apt to be forgotten, viz. That great care is to be taken, that it be never made as a business to him, nor he look on it as a task. We naturally, as I said, even from our cradles, love liberty, and have therefore an aversion to many things for no other reason but because they are enjoin'd us. I have always had a fancy that learning might be made a play and recreation to children: and that they might be brought to desire to be taught, if it were proposed to them as a thing of honour, credit, delight, and recreation, or as a reward for doing something else; and if they were never chid or corrected for the neglect of it. That which confirms me in this opinion is, that amongst the Portuguese, 'tis so much a fashion and emulation amongst their children, to learn to read and write, that they cannot hinder them from it: they will learn it one from another, and are as intent on it, as if it were forbidden them. I remember that being at a friend's house, whose younger son, a child in coats, was not easily brought to his book (being taught to read at home by his mother) I advised to try another way, than requiring it of him as his duty; we therefore, in a discourse on purpose amongst our selves, in his hearing, but without taking any notice of him, declared, that it was the privilege and advantage of heirs and elder brothers, to be scholars; that this made them fine gentlemen, and beloved by every body: and that for younger brothers, 'twas a favour to admit them to breeding; to be taught to read and write, was more than came to their share; they might be ignorant bumpkins and clowns, if they pleased. This so wrought upon the child, that afterwards he desired to be taught; would come himself to his mother to learn, and would not let his maid be quiet till she heard him his lesson. I doubt not but some way like this might be taken with other children; and when their tempers are found, some thoughts be instill'd into them, that might set them upon desiring of learning, themselves, and make them seek it as another sort of play or recreation. But then, as I said before, it must never be imposed as a task, nor made a trouble to them. There may be dice and play-things, with the letters on them to teach children the alphabet by playing; and twenty other ways may be found, suitable to their particular tempers, to make this kind of learning a sport to them.

Section 149. Thus children may be cozen'd into a knowledge of the letters; be taught to read, without perceiving it to be any thing but a sport, and play themselves into that which others are whipp'd for. Children should not have any thing like work, or serious, laid on them; neither their minds, nor bodies will bear it. It injures their healths; and their being forced and tied down to

their books in an age at enmity with all such restraint, has, I doubt not, been the reason, why a great many have hated books and learning all their lives after. 'Tis like a surfeit, that leaves an aversion behind not to be removed.

Section 150. I have therefore thought, that if play-things were fitted to this purpose, as they are usually to none, contrivances might be made to teach children to read, whilst they thought they were only playing. For example, what if an ivory-ball were made like that of the royal-oak lottery, with thirty two sides, or one rather of twenty four or twenty five sides: and upon several of those sides pasted on an A, upon several others B, on others C, and on others D? I would have you begin with but those four letters, or perhaps only two at first; and when he is perfect in them, then add another: and so on till each side having one letter, there be on it the whole alphabet....

Section 151. To keep up his eagerness to it, let him think it a game belonging to those above him: and when, by this means, he knows the letters, by changing them into syllables, he may learn to read, without knowing how he did so, and never have any chiding or trouble about it, nor fall out with books because of the hard usage and vexation they have caus'd him. Children, if you observe them, take abundance of pains to learn several games, which, if they should be enjoined them, they would abhor as a task and business. I know a person of great quality (more yet to be honoured for his learning and virtue than for his rank and high place) who by pasting on the six vowels (for in our language Y is one) on the six sides of a die, and the remaining eighteen consonants on the sides of three other dice, has made this a play for his children, that he shall win who, at one cast, throws most words on these four dice; whereby his eldest son, yet in coats, has play'd himself into spelling, with great eagerness, and without once having been chid for it or forced to it.

Section 152. I have seen little girls exercise whole hours together and take abundance of pains to be expert at dibstones as they call it. Whilst I have been looking on, I have thought it wanted only some good contrivance to make them employ all that industry about something that might be more useful to them; and methinks 'tis only the fault and negligence of elder people that it is not so. Children are much less apt to be idle than men; and men are to be blamed if some part of that busy humour be not turned to useful things; which might be made usually as delightful to them as those they are employed in, if men would be but half so forward to lead the way, as these little apes would be to follow. I imagine some wise Portuguese heretofore began this fashion amongst the children of his country, where I have been told, as I said, it is impossible to hinder the children from learning to read and write: and in some parts of France they teach one another to sing and dance from the cradle.

Section 153. The letters pasted upon the sides of the dice, or polygon, were best to be of the size of those of the folio Bible, to begin with, and none of them capital letters; when once he can read what is printed in such letters, he will not long be ignorant of the great ones: and in the beginning he should not be perplexed with variety. With this die also, you might have a play just like the royal oak, which would be another variety, and play for cherries or apples, &c.

Section 154. Besides these, twenty other plays might be invented depending on letters, which those who like this way, may easily contrive and get made to this use if they will. But the four dice above-mention'd I think so easy and useful, that it will be hard to find any better, and there will be scarce need of any other.

Section 155. Thus much for learning to read, which let him never be driven to, nor chid for; cheat him into it if you can, but make it not a business for him. 'Tis better it be a year later before he can read, than that he should this way get an aversion to learning. If you have any contest with him, let it be in matters of moment, of truth, and good nature; but lay no task on him about A B C. Use your skill to make his will supple and pliant to reason: teach him to love credit and commendation; to abhor being thought ill or meanly of, especially by you and his mother, and then the rest will come all easily. But I think if you will do that, you must not shackle and tie him up with rules about indifferent matters, nor rebuke him for every little fault, or perhaps some that to others would seem great ones; but of this I have said enough already.

Section 156. When by these gentle ways he begins to read, some easy pleasant book, suited to his capacity, should be put into his hands, wherein the entertainment that he finds might draw him on, and reward his pains in reading, and yet not such as should fill his head with perfectly useless trumpery, or lay the principles of vice and folly. To this purpose, I think Aesop's Fables the best, which being stories apt to delight and entertain a child, may yet afford useful reflections to a grown man; and if his memory retain them all his life after, he will not repent to find them there, amongst his manly thoughts and serious business. If his Aesop has pictures in it, it will entertain him much the better, and encourage him to read, when it carries the increase of knowledge with it: for such visible objects children hear talked of in vain and without any satisfaction whilst they have no ideas of them; those ideas being not to be had from sounds, but from the things themselves or their pictures. And therefore I think as soon as he begins to spell, as many pictures of animals should be got him as can be found, with the printed names to them, which at the same time will invite him to read, and afford him matter of enquiry and knowledge. Reynard the Fox is another book I think may be made use of to the same purpose. And if those about him will talk to him often about the stories he has read, and hear him tell them, it will, besides other advantages, add encouragement and delight to his reading, when he finds there is some use and pleasure in it. These baits seem wholly neglected in the ordinary method; and 'tis usually long before learners find any use or pleasure in reading, which may tempt them to it, and so take books only for fashionable amusements, or impertinent troubles, good for nothing.

Section 157. The Lord's Prayer, the Creeds, and Ten Commandments, 'tis necessary he should learn perfectly by heart; but, I think, not by reading them himself in his primer, but by somebody's repeating them to him, even before he can read. But learning by heart, and learning to read, should not I think be

mix'd, and so one made to clog the other. But his learning to read should be made as little trouble or business to him as might be.

What other books there are in English of the kind of those above-mentioned, fit to engage the liking of children, and tempt them to read, I do not know: but am apt to think, that children being generally delivered over to the method of schools, where the fear of the rod is to inforce, and not any pleasure of the employment to invite them to learn, this sort of useful books, amongst the number of silly ones that are of all sorts, have yet had the fate to be neglected; and nothing that I know has been considered of this kind out of the ordinary road of the horn-book, primer, psalter, Testament, and Bible.

Section 158. As for the Bible, which children are usually employ'd in to exercise and improve their talent in reading, I think the promiscuous reading of it through by chapters as they lie in order, is so far from being of any advantage to children, either for the perfecting their reading, or principling their religion, that perhaps a worse could not be found. For what pleasure or encouragement can it be to a child to exercise himself in reading those parts of a book where he understands nothing? And how little are the law of Moses, the song of Solomon, the prophecies in the Old, and the Epistles and Apocalypse in the New Testament, suited to a child's capacity? And though the history of the Evangelists and the Acts have something easier, yet, taken altogether, it is very disproportional to the understanding of childhood. I grant that the principles of religion are to be drawn from thence, and in the words of the scripture; yet none should be propos'd to a child, but such as are suited to a child's capacity and notions. But 'tis far from this to read through the whole Bible, and that for reading's sake. And what an odd jumble of thoughts must a child have in his head, if he have any at all, such as he should have concerning religion, who in his tender age reads all the parts of the Bible indifferently as the word of God without any other distinction? I am apt to think, that this in some men has been the very reason why they never had clear and distinct thoughts of it all their lifetime....

The great skill of a teacher is to get and keep the attention of his scholar; whilst he has that, he is sure to advance as fast as the learner's abilities will carry him; and without that, all his bustle and pother will be to little or no purpose. To attain this, he should make the child comprehend (as much as may be) the usefulness of what he teaches him, and let him see, by what he has learnt, that he can do something which he could not do before; something, which gives him some power and real advantage above others who are ignorant of it. To this he should add sweetness in all his instructions, and by a certain tenderness in his whole carriage, make the child sensible that he loves him and designs nothing but his good, the only way to beget love in the child, which will make him hearken to his lessons, and relish what he teaches him....

Section 217. Tho' I am now come to a conclusion of what obvious remarks have suggested to me concerning education, I would not have it thought that I look on it as a just treatise on this subject. There are a thousand other things that may need consideration; especially if one should take in the various

tempers, different inclinations, and particular defaults, that are to be found in children, and prescribe proper remedies. The variety is so great that it would require a volume; nor would that reach it. Each man's mind has some peculiarity, as well as his face, that distinguishes him from all others; and there are possibly scarce two children who can be conducted by exactly the same method. Besides that, I think a prince, a nobleman, and an ordinary gentleman's son, should have different ways of breeding. But having had here only some general views in reference to the main end and aims in education, and those designed for a gentleman's son, whom, being then very little, I considered only as white paper, or wax, to be moulded and fashioned as one pleases; I have touched little more than those heads which I judged necessary for the breeding of a young gentleman of his condition in general; and have now published these my occasional thoughts with this hope, that tho' this be far from being a complete treatise on this subject, or such as that every one may find what will just fit his child in it, yet it may give some small light to those, whose concern for their dear little ones makes them so irregularly bold, that they dare venture to consult their own reason in the education of their children, rather than wholly to rely upon old custom.

7

The Education of Women

Daniel Defoe

I have often thought of it as one of the most barbarous customs in the world, considering us as a civilized and a Christian country, that we deny the advantages of learning to women. We reproach the sex every day with folly and impertinence; while I am confident, had they the advantages of education equal to us, they would be guilty of less than ourselves.

One would wonder, indeed, how it should happen that women are conversible at all; since they are only beholden to natural parts, for all their knowledge. Their youth is spent to teach them to stitch and sew or make baubles. They are taught to read, indeed, and perhaps to write their names, or so; and that is the height of a woman's education. And I would but ask any who slight the sex for their understanding, what is a man (a gentleman, I mean) good for, that is taught no more? I need not give instances, or examine the character of a gentleman, with a good estate, or a good family, and with tolerable parts; and examine what figure he makes for want of education.

The soul is placed in the body like a rough diamond; and must be polished, or the lustre of it will never appear. And 'tis manifest, that as the rational soul distinguishes us from brutes; so education carries on the distinction, and makes some less brutish than others. This is too evident to need any demonstration. But why then should women be denied the benefit of instruction? If knowledge and understanding had been useless additions to the sex, God Almighty would never have given them capacities; for he made nothing needless. Besides, I would ask such, What they can see in ignorance, that they should think it a necessary ornament to a woman? or how much worse is a wise woman than a fool? or what has the woman done to forfeit the privilege of being taught? Does she plague us with her pride and impertinence? Why did we not let her learn, that she might have had more wit? Shall we upbraid women with folly, when 'tis only the error of this inhuman custom, that hindered them from being made wiser?

Source: *English Essays: Sidney to Macaulay, The Harvard Classics*, Vol. XXVII (New York: P.F. Collier & Son, 1909-14).

The capacities of women are supposed to be greater, and their senses quicker than those of the men; and what they might be capable of being bred to, is plain from some instances of female wit, which this age is not without. Which upbraids us with injustice, and looks as if we denied women the advantages of education, for fear they should vie with the men in their improvements. . . .

[They] should be taught all sorts of breeding suitable both to their genius and quality. And in particular, Music and Dancing; which it would be cruelty to bar the sex of, because they are their darlings. But besides this, they should be taught languages, as particularly French and Italian: and I would venture the injury of giving a woman more tongues than one. They should, as a particular study, be taught all the graces of speech, and all the necessary air of conversation; which our common education is so defective in, that I need not expose it. They should be brought to read books, and especially history; and so to read as to make them understand the world, and be able to know and judge of things when they hear of them.

To such whose genius would lead them to it, I would deny no sort of learning; but the chief thing, in general, is to cultivate the understandings of the sex, that they may be capable of all sorts of conversation; that their parts and judgements being improved, they may be as profitable in their conversation as they are pleasant.

Women, in my observation, have little or no difference in them, but as they are or are not distinguished by education. Tempers, indeed, may in some degree influence them, but the main distinguishing part is their Breeding.

The whole sex are generally quick and sharp. I believe, I may be allowed to say, generally so: for you rarely see them lumpish and heavy, when they are children; as boys will often be. If a woman be well bred, and taught the proper management of her natural wit, she proves generally very sensible and retentive.

And, without partiality, a woman of sense and manners is the finest and most delicate part of God's Creation, the glory of Her Maker, and the great instance of His singular regard to man, His darling creature: to whom He gave the best gift either God could bestow or man receive. And 'tis the sordidest piece of folly and ingratitude in the world, to withhold from the sex the due lustre which the advantages of education gives to the natural beauty of their minds.

A woman well bred and well taught, furnished with the additional accomplishments of knowledge and behaviour, is a creature without comparison. Her society is the emblem of sublimer enjoyments, her person is angelic, and her conversation heavenly. She is all softness and sweetness, peace, love, wit, and delight. She is every way suitable to the sublimest wish, and the man that has such a one to his portion, has nothing to do but to rejoice in her, and be thankful.

On the other hand, Suppose her to be the very same woman, and rob her of the benefit of education, and it follows If her temper be good, want of education makes her soft and easy.

Her wit, for want of teaching, makes her impertinent and talkative.

Her knowledge, for want of judgement and experience, makes her fanciful and whimsical.

If her temper be bad, want of breeding makes her worse; and she grows haughty, insolent, and loud.

If she be passionate, want of manners makes her a termagant and a scold, which is much at one with Lunatic.

If she be proud, want of discretion (which still is breeding) makes her conceited, fantastic, and ridiculous.

And from these she degenerates to be turbulent, clamorous, noisy, nasty, the devil! . . .

The great distinguishing difference, which is seen in the world between men and women, is in their education; and this is manifested by comparing it with the difference between one man or woman, and another.

And herein it is that I take upon me to make such a bold assertion, That all the world are mistaken in their practice about women. For I cannot think that God Almighty ever made them so delicate, so glorious creatures; and furnished them with such charms, so agreeable and so delightful to mankind; with souls capable of the same accomplishments with men: and all, to be only Stewards of our Houses, Cooks, and Slaves.

Not that I am for exalting the female government in the least: but, in short, I would have men take women for companions, and educate them to be fit for it. A woman of sense and breeding will scorn as much to encroach upon the prerogative of man, as a man of sense will scorn to oppress the weakness of the woman. But if the women's souls were refined and improved by teaching, that word would be lost. To say, the weakness of the sex, as to judgment, would be nonsense; for ignorance and folly would be no more to be found among women than men.

I remember a passage, which I heard from a very fine woman. She had wit and capacity enough, an extraordinary shape and face, and a great fortune: but had been cloistered up all her time; and for fear of being stolen, had not had the liberty of being taught the common necessary knowledge of women's affairs. And when she came to converse in the world, her natural wit made her so sensible of the want of education, that she gave this short reflection on herself: "I am ashamed to talk with my very maids," says she, "for I don't know when they do right or wrong. I had more need go to school, than be married."

I need not enlarge on the loss the defect of education is to the sex: nor argue the benefit of the contrary practice. 'Tis a thing will be more easily granted than remedied. This chapter is but an Essay at the thing: and I refer the Practice to those Happy Days (if ever they shall be) when men shall be wise enough to mend it.

8

The Laws of Education (Selection from *The Spirit of Laws*)

Charles Montesquieu

That the Laws of Education Ought to be in Relation to the Principles of Government

1. *Of the Laws of Education.* The laws of education are the first impressions we receive; and as they prepare us for civil life, every private family ought to be governed by the plan of that great household which comprehends them all.

If the people in general have a principle, their constituent parts, that is, the several families, will have one also. The laws of education will be therefore different in each species of government: in monarchies they will have honour for their object; in republics, virtue; in despotic governments, fear.

2. *Of Education in Monarchies.* In monarchies the principal branch of education is not taught in colleges or academies. It commences, in some measure, at our setting out in the world; for this is the school of what we call honour, that universal preceptor which ought everywhere to be our guide.

Here it is that we constantly hear three rules or maxims, viz., that we should have a certain nobleness in our virtues, a kind of frankness in our morals, and a particular politeness in our behaviour.

The virtues we are here taught are less what we owe to others than to ourselves; they are not so much what draws us towards society, as what distinguishes us from our fellow-citizens. Here the actions of men are judged, not as virtuous, but as shining; not as just, but as great; not as reasonable, but as extraordinary. When honour here meets with anything noble in our actions, it is either a judge that approves them, or sophist by whom they are excused.

It allows of gallantry when united with the idea of sensible affection, or with that of conquest; this is the reason why we never meet with so strict a purity of morals in monarchies as in republican governments.

Source: Charles de Secondat, Baron de Montesquieu, *The Spirit of Laws*. Translated by Thomas Nugent, revised by J. V. Prichard (London: G. Bell & Sons, Limited, 1914).

It allows of cunning and craft, when joined with the notion of greatness of soul or importance of affairs; as, for instance, in politics, with finesses of which it is far from being offended.

It does not forbid adulation, save when separated from the idea of a large fortune, and connected only with the sense of our mean condition.

With regard to morals, I have observed that the education of monarchies ought to admit of a certain frankness and open carriage. Truth, therefore, in conversation is here a necessary point. But is it for the sake of truth? By no means. Truth is requisite only because a person habituated to veracity has an air of boldness and freedom. And indeed a man of this stamp seems to lay a stress only on the things themselves, not on the manner in which they are received.

Hence it is that in proportion as this kind of frankness is commended, that of the common people is despised, which has nothing but truth and simplicity for its object.

In fine, the education of monarchies requires a certain politeness of behaviour. Man, a sociable animal, is formed to please in society; and a person that would break through the rules of decency, so as to shock those he conversed with, would lose the public esteem, and become incapable of doing any good.

But politeness, generally speaking, does not derive its origin from so pure a source. It arises from a desire of distinguishing ourselves. It is pride that renders us polite: we are flattered with being taken notice of for behaviour that shows we are not of a mean condition, and that we have not been bred with those who in all ages are considered the scum of the people.

Politeness, in monarchies, is naturalised at court. One man excessively great renders everybody else little. Hence that regard which is paid to our fellow-subjects: hence that politeness, equally pleasing to those by whom, as to those towards whom, it is practised, because it gives people to understand that a person actually belongs, or at least deserves to belong, to the court.

A courtly air consists in quitting a real for a borrowed greatness. The latter pleases the courtier more than the former. It inspires him with a certain disdainful modesty, which shows itself externally, but whose pride insensibly diminishes in proportion to its distance from the source of this greatness.

At court we find a delicacy of taste in everything – a delicacy arising from the constant use of the superfluities of life, from the variety, and especially the satiety, of pleasures, from the multiplicity and even confusion of fancies, which, if they are but agreeable, are sure of being well received.

These are the things which properly fall within the province of education, in order to form what we call a man of honour, a man possessed of all the qualities and virtues requisite in this kind of government.

Here it is that honour interferes with everything, mixing even with people's manner of thinking, and directing their very principles.

To this whimsical honour it is owing that the virtues are only just what it pleases: it adds rules of its own invention to everything prescribed to us: it extends or limits our duties according to its own fancy, whether they proceed from religion, politics, or morality.

There is nothing so strongly inculcated in monarchies, by the laws, by religion and honour, as submission to the prince's will; but this very honour tells us that the prince never ought to command a dishonourable action, because this would render us incapable of serving him.

Crillon refused to assassinate the Duke of Guise, but offered to fight him. After the massacre of St. Bartholomew, Charles IX, having sent orders to the governors in the several provinces for the Huguenots to be murdered, Viscount Dorte, who commanded at Bayonne, wrote thus to the king:[1] "Sire, among the inhabitants of this town, and your majesty's troops, I could not find so much as one executioner; they are honest citizens and brave soldiers. We jointly, therefore, beseech your majesty to command our arms and lives in things that are practicable." This great and generous soul looked upon a base action as a thing impossible.

There is nothing that honour more strongly recommends to the nobility than to serve their prince in a military capacity. And, indeed, this is their favourite profession, because its dangers, its success, and even its miscarriages are the road to grandeur. Yet this very law of its own making honour chooses to explain: and in case of any affront, it requires or permits us to retire.

It insists also that we should be at liberty either to seek or to reject employments, a liberty which it prefers even to an ample fortune.

Honour therefore has its supreme laws, to which education is obliged to conform.[2] The chief of these are that we are permitted to set a value upon our fortune, but are absolutely forbidden to set any upon our lives.

The second is that, when we are raised to a post or preferment, we should never do or permit anything which may seem to imply that we look upon ourselves as inferior to the rank we hold.

The third is that those things which honour forbids are more rigorously forbidden, when the laws do not concur in the prohibition; and those it commands are more strongly insisted upon, when they happen not to be commanded by law.

3. *Of Education in a Despotic Government.* As education in monarchies tends to raise and ennoble the mind, in despotic governments its only aim is to debase it. Here it must necessarily be servile; even in power such an education will be an advantage, because every tyrant is at the same time a slave.

Excessive obedience supposes ignorance in the person that obeys: the same it supposes in him that commands, for he has no occasion to deliberate, to doubt, to reason; he has only to will.

In despotic states, each house is a separate government. As education, therefore, consists chiefly in social converse, it must be here very much limited; all it does is to strike the heart with fear, and to imprint on the understanding a very simple notion of a few principles of religion. Learning here proves dangerous, emulation fatal; and as to virtue, Aristotle[3] cannot think that there

is any one virtue belonging to slaves; if so, education in despotic countries is confined within a very narrow compass.

Here, therefore, education is in some measure needless: to give something, one must take away everything, and begin with making a bad subject in order to make a good slave.

For why should education take pains in forming a good citizen, only to make him share in the public misery? If he loves his country, he will strive to relax the springs of government; if he miscarries he will be undone; if he succeeds, he must expose himself, the prince, and his country to ruin.

4. *Difference between the Effects of Ancient and Modern Education.* Most of the ancients lived under governments that had virtue for their principle; and when this was in full vigour they performed actions unusual in our times, and at which our narrow minds are astonished.

Another advantage their education possessed over ours was that it never could be effaced by contrary impressions. Epaminondas, the last year of his life, said, heard, beheld, and performed the very same things as at the age in which he received the first principles of his education.

In our days we receive three different or contrary educations, namely, of our parents, of our masters, and of the world. What we learn in the latter effaces all the ideas of the former. This, in some measure, arises from the contrast we experience between our religious and worldly engagements, a thing unknown to the ancients.

5. *Of Education in a Republican Government.* It is in a republican government that the whole power of education is required. The fear of despotic governments naturally arises of itself amidst threats and punishments; the honour of monarchies is favoured by the passions, and favours them in its turn; but virtue is a self-renunciation, which is ever arduous and painful.

This virtue may be defined as the love of the laws and of our country. As such love requires a constant preference of public to private interest, it is the source of all private virtues; for they are nothing more than this very preference itself.

This love is peculiar to democracies. In these alone the government is entrusted to private citizens. Now a government is like everything else: to preserve it we must love it.

Has it ever been known that kings were not fond of monarchy, or that despotic princes hated arbitrary power?

Everything therefore depends on establishing this love in a republic; and to inspire it ought to be the principal business of education: but the surest way of instilling it into children is for parents to set them an example.

People have it generally in their power to communicate their ideas to their children; but they are still better able to transfuse their passions.

If it happens otherwise, it is because the impressions made at home are effaced by those they have received abroad.

It is not the young people that degenerate; they are not spoiled till those of maturer age are already sunk into corruption.

Notes

1. See d'Aubigny's *History*.
2. We mention here what actually is, and not what ought to be; honour is a prejudice, which religion sometimes endeavours to remove, and at other times to regulate.
3. Politics, i. 13.

9

Selection from *The Autobiography of Benjamin Franklin*

Benjamin Franklin

It was about this time I conceived the bold and arduous project of arriving at moral perfection. I wished to live without committing any fault at any time; I would conquer all that either natural inclination, custom, or company might lead me into. As I knew, or thought I knew, what was right and wrong, I did not see why I might not always do the one and avoid the other. But I soon found I had undertaken a task of more difficulty than I had imagined. While my care was employed in guarding against one fault, I was often surprised by another; habit took the advantage of inattention; inclination was sometimes too strong for reason. I concluded, at length, that the mere speculative conviction that it was our interest to be completely virtuous, was not sufficient to prevent our slipping; and that the contrary habits must be broken, and good ones acquired and established, before we can have any dependence on a steady, uniform rectitude of conduct. For this purpose I therefore contrived the following method.

In the various enumerations of the moral virtues I had met with in my reading, I found the catalogue more or less numerous, as different writers included more or fewer ideas under the same name. Temperance, for example, was by some confined to eating and drinking, while by others it was extended to mean the moderating every other pleasure, appetite, inclination, or passion, bodily or mental, even to our avarice and ambition. I proposed to myself, for the sake of clearness, to use rather more names, with fewer ideas annexed to each, than a few names with more ideas; and I included under thirteen names of virtues all that at that time occurred to me as necessary or desirable, and annexed to each a short precept, which fully expressed the extent I gave to its meaning.

Source: Benjamin Franklin, *The Autobiography of Benjamin Franklin, The Harvard Classics* (New York: P.F. Collier & Son, 1909–14).

These names of virtues, with their precepts, were:

Temperance. Eat not to dullness; drink not to elevation.
Silence. Speak not but what may benefit others or yourself; avoid trifling conversation.
Order. Let all your things have their places; let each part of your business have its time.
Resolution. Resolve to perform what you ought; perform without fail what you resolve.
Frugality. Make no expense but to do good to others or yourself; i.e., waste nothing.
Industry. Lose no time; be always employed in something useful; cut off all unnecessary actions.
Sincerity. Use no hurtful deceit; think innocently and justly, and, if you speak, speak accordingly.
Justice. Wrong none by doing injuries, or omitting the benefits that are your duty.
Moderation. Avoid extremes; forbear resenting injuries so much as you think they deserve.
Cleanliness. Tolerate no uncleanliness in body, clothes, or habitation.
Tranquility. Be not disturbed at trifles, or at accidents common or unavoidable.
Chastity. Rarely use venery but for health or offspring, never to dullness, weakness, or the injury of your own or another's peace or reputation.
Humility. Imitate Jesus and Socrates.

My intention being to acquire the habitude of all these virtues, I judged it would be well not to distract my attention by attempting the whole at once, but to fix it on one of them at a time; and, when I should be master of that, then to proceed to another, and so on, till I should have gone thro' the thirteen; and, as the previous acquisition of some might facilitate the acquisition of certain others, I arranged them with that view, as they stand above. Temperance first, as it tends to procure that coolness and clearness of head, which is so necessary where constant vigilance was to be kept up, and guard maintained against the unremitting attraction of ancient habits, and the force of perpetual temptations. This being acquired and established, Silence would be more easy; and my desire being to gain knowledge at the same time that I improved in virtue, and considering that in conversation it was obtained rather by the use of the ears than of the tongue, and therefore wishing to break a habit I was getting into of prattling, punning, and joking, which only made me acceptable to trifling company, I gave Silence the second place. This and the next, Order, I expected would allow me more time for attending to my project and my studies. Resolution, once become habitual, would keep me firm in my endeavors to obtain all the subsequent virtues; Frugality and Industry freeing me from my remaining debt, and producing affluence and independence, would make more easy the practice of Sincerity and Justice, etc., etc. Conceiving then, that, agreeably to the advice of Pythagoras in his Golden Verses, daily examination would be necessary, I contrived the following method for conducting that examination.

I made a little book, in which I allotted a page for each of the virtues. I ruled each page with red ink, so as to have seven columns, one for each day of the week, marking each column with a letter for the day. I crossed these columns with thirteen red lines, marking the beginning of each line with the first letter of one of the virtues, on which line, and in its proper column, I might mark, by a little black spot, every fault I found upon examination to have been committed respecting that virtue upon that day.

Form of the pages:

	Temperance						
	Eat not to Dullness; Drink not to Elevation.						
	Su	*M*	*T*	*W*	*Th*	*F*	*Sa*
T.							
S.	*	*		*		*	
O.	**	*	*		*	*	
R.			*			*	
F.	*				*		
I.			*				
S.							
J.							
M.							
C.							
T.							
C.							
H.							

I determined to give a week's strict attention to each of the virtues successively. Thus, in the first week, my great guard was to avoid every the least offence against Temperance, leaving the other virtues to their ordinary chance, only marking every evening the faults of the day. Thus, if in the first week I could keep my first line, marked T, clear of spots, I supposed the habit of that virtue so much strengthened and its opposite weakened, that I might venture extending my attention to include the next, and for the following week keep both lines clear of spots. Proceeding thus to the last, I could go through a course compfete in thirteen weeks, and four courses in a year. And like him who, having a garden to weed, does not attempt to eradicate all the bad herbs at once, which would exceed his reach and his strength, but works on one of the beds at a time, and, having accomplished the first, proceeds to a second, so I should have, I hoped, the encouraging pleasure of seeing on my pages the progress I made in virtue, by clearing successively my lines of their spots, till in the end, by a number of courses, I should he happy in viewing a clean book, after a thirteen weeks' daily examination.

This my little book had for its motto these lines from Addison's Cato: "Here will I hold. If there's a power above us (And that there is all nature cries aloud Thro' all her works), He must delight in virtue; And that which he delights in must be happy." Another from Cicero, "O vitae Philosophia dux! O virtutum indagatrix expultrixque vitiorum! Unus dies, bene et ex praeceptis tuis actus, peccanti immortalitati est anteponendus." Another

from the Proverbs of Solomon, speaking of wisdom or virtue: "Length of days is in her right hand, and in her left hand riches and honor. Her ways are ways of pleasantness, and all her paths are peace." iii. 16, 17.

And conceiving God to be the fountain of wisdom, I thought it right and necessary to solicit his assistance for obtaining it; to this end I formed the following little prayer, which was prefixed to my tables of examination, for daily use.

"*O powerful Goodness! bountiful Father! merciful Guide! increase in me that wisdom which discovers my truest interest. strengthen my resolutions to perform what that wisdom dictates. Accept my kind offices to thy other children as the only return in my power for thy continual favors to me.*"

I used also sometimes a little prayer which I took from Thomson's Poems, viz.: "Father of light and life, thou Good Supreme! O teach me what is good; teach me Thyself! Save me from folly, vanity, and vice, From every low pursuit; and fill my soul With knowledge, conscious peace, and virtue pure; Sacred, substantial, never-fading bliss!"

The precept of Order requiring that every part of my business should have its allotted time, one page in my little book contained the following scheme of employment for the twenty-four hours of a natural day:

THE MORNING.	{5}	Rise, wash, and address
	{ }	Powerful Goodness! Contrive
Question. What good shall	{6}	day's business, and take the
I do this day?	[ ]	resolution of the day; prose-
	{7}	cute the present study, and
	[ ]	breakfast.
	8]	
	9]	Work.
	10]	
	11]	
NOON.	[12]	Read, or overlook my ac-
	[1]	counts, and dine.
	2]	
	3]	Work.
	4]	
	5]	
EVENING.	[6]	Put things in their places.
	[7]	Supper. Music or diversion,
Question. What good have	[8]	or conversation. Examination
I done to-day?	[9]	of the day.
	[10]	
	[11]	
	[12]	

NIGHT.	[1]	Sleep.
	[2]	
	[3]	
	[4]	

I entered upon the execution of this plan for self-examination, and continued it with occasional intermissions for some time. I was surprised to find myself so much fuller of faults than I had imagined; but I had the satisfaction of seeing them diminish. To avoid the trouble of renewing now and then my little book, which, by scraping out the marks on the paper of old faults to make room for new ones in a new course, became full of holes, I transferred my tables and precepts to the ivory leaves of a memorandum book, on which the lines were drawn with red ink, that made a durable stain, and on those lines I marked my faults with a black lead pencil, which marks I could easily wipe out with a wet sponge. After a while I went thro' one course only in a year, and afterward only one in several years, till at length I omitted them entirely, being employed in voyages and business abroad, with a multiplicity of affairs that interfered; but I always carried my little book with me.

My scheme of Order gave me the most trouble; and I found that, tho' it might be practicable where a man's business was such as to leave him the disposition of his time, that of a journeyman printer, for instance, it was not possible to be exactly observed by a master, who must mix with the world, and often receive people of business at their own hours. Order, too, with regard to places for things, papers, etc., I found extremely difficult to acquire. I had not been early accustomed to it, and, having an exceeding good memory, I was not so sensible of the inconvenience attending want of method. This article, therefore, cost me so much painful attention, and my faults in it vexed me so much, and I made so little progress in amendment, and had such frequent relapses, that I was almost ready to give up the attempt, and content myself with a faulty character in that respect, like the man who, in buying an ax of a smith, my neighbor, desired to have the whole of its surface as bright as the edge. The smith consented to grind it bright for him if he would turn the wheel; he turned, while the smith pressed the broad face of the ax hard and heavily on the stone, which made the turning of it very fatiguing. The man came every now and then from the wheel to see how the work went on, and at length would take his ax as it was, without farther grinding. "No," said the smith, "turn on, turn on; we shall have it bright by-and-by; as yet, it is only speckled." "Yes," said the man, "but I think I like a speckled ax best." And I believe this may have been the case with many, who, having, for want of some such means as I employed, found the difficulty of obtaining good and breaking bad habits in other points of vice and virtue, have given up the struggle, and concluded that "a speckled ax was best"; for something, that pretended to be reason, was every now and then suggesting to me that such extreme nicety as I exacted of myself might be a kind of foppery in morals,

which, if it were known, would make me ridiculous; that a perfect character might be attended with the inconvenience of being envied and hated; and that a benevolent man should allow a few faults in himself, to keep his friends in countenance.

In truth, I found myself incorrigible with respect to Order; and now I am grown old, and my memory bad, I feel very sensibly the want of it. But, on the whole, tho' I never arrived at the perfection I had been so ambitious of obtaining, but fell far short of it, yet I was, by the endeavor, a better and a happier man than I otherwise should have been if I had not attempted it; as those who aim at perfect writing by imitating the engraved copies, though they never reach the wished-for excellence of those copies, their hand is mended by the endeavor, and is tolerable while it continues fair and legible.

It may be well my posterity should be informed that to this little artifice, with the blessing of God, their ancestor owed the constant felicity of his life, down to his 79th year, in which this is written. What reverses may attend the remainder is in the hand of Providence; but, if they arrive, the reflection on past happiness enjoyed ought to help his bearing them with more resignation. To Temperance he ascribes his long-continued health, and what is still left to him of a good constitution; to Industry and Frugality, the early easiness of his circumstances and acquisition of his fortune, with all that knowledge that enabled him to be a useful citizen, and obtained for him some degree of reputation among the learned; to Sincerity and Justice, the confidence of his country, and the honorable employs it conferred upon him; and to the joint influence of the whole mass of the virtues, even in the imperfect state he was able to acquire them, all that evenness of temper, and that cheerfulness in conversation, which makes his company still sought for, and agreeable even to his younger acquaintance. I hope, therefore, that some of my descendants may follow the example and reap the benefit.

It will be remarked that, though my scheme was not wholly without religion, there was in it no mark of any of the distinguishing tenets of any particular sect. I had purposely avoided them; for, being fully persuaded of the utility and excellency of my method, and that it might be serviceable to people in all religions, and intending some time or other to publish it, I would not have any thing in it that should prejudice any one, of any sect, against it. I purposed writing a little comment on each virtue, in which I would have shown the advantages of possessing it, and the mischiefs attending its opposite vice; and I should have called my book The Art Of Virtue, because it would have shown the means and manner of obtaining virtue, which would have distinguished it from the mere exhortation to be good, that does not instruct and indicate the means, but is like the apostle's man of verbal charity, who only without showing to the naked and hungry how or where they might get clothes or victuals, exhorted them to be fed and clothed. – James ii. 15, 16.

But it so happened that my intention of writing and publishing this comment was never fulfilled. I did, indeed, from time to time, put down short hints of the sentiments, reasonings, etc., to be made use of in it, some of which I have

still by me; but the necessary close attention to private business in the earlier part of thy life, and public business since, have occasioned my postponing it; for, it being connected in my mind with a great and extensive project, that required the whole man to execute, and which an unforeseen succession of employs prevented my attending to, it has hitherto remained unfinished.

In this piece it was my design to explain and enforce this doctrine, that vicious actions are not hurtful because they are forbidden, but forbidden because they are hurtful, the nature of man alone considered; that it was, therefore, every one's interest to be virtuous who wished to be happy even in this world; and I should, from this circumstance (there being always in the world a number of rich merchants, nobility, states, and princes, who have need of honest instruments for the management of their affairs, and such being so rare), have endeavored to convince young persons that no qualities were so likely to make a poor man's fortune as those of probity and integrity.

My list of virtues contained at first but twelve; but a Quaker friend having kindly informed me that I was generally thought proud; that my pride showed itself frequently in conversation; that I was not content with being in the right when discussing any point, but was overbearing, and rather insolent, of which he convinced me by mentioning several instances; I determined endeavoring to cure myself, if I could, of this vice or folly among the rest, and I added Humility to my list, giving an extensive meaning to the word.

I cannot boast of much success in acquiring the reality of this virtue, but I had a good deal with regard to the appearance of it. I made it a rule to forbear all direct contradiction to the sentiments of others, and all positive assertion of my own. I even forbid myself, agreeably to the old laws of our Junto, the use of every word or expression in the language that imported a fixed opinion, such as certainly, undoubtedly, etc., and I adopted, instead of them, I conceive, I apprehend, or I imagine a thing to be so or so; or it so appears to me at present. When another asserted something that I thought an error, I denied myself the pleasure of contradicting him abruptly, and of showing immediately some absurdity in his proposition; and in answering I began by observing that in certain cases or circumstances his opinion would be right, but in the present case there appear'd or seemed to me some difference, etc. I soon found the advantage of this change in my manner; the conversations I engaged in went on more pleasantly. The modest way in which I proposed my opinions procured them a readier reception and less contradiction; I had less mortification when I was found to be in the wrong, and I more easily prevailed with others to give up their mistakes and join with me when I happened to be in the right.

And this mode, which I at first put on with some violence to natural inclination, became at length so easy, and so habitual to me, that perhaps for these fifty years past no one has ever heard a dogmatical expression escape me. And to this habit (after my character of integrity) I think it principally owing that I had early so much weight with my fellow-citizens when I proposed new institutions, or alterations in the old, and so much influence in public councils when I became a member; for I was but a bad speaker, never eloquent, subject

to much hesitation in my choice of words, hardly correct in language, and yet I generally carried my points.

In reality, there is, perhaps, no one of our natural passions so hard to subdue as pride. Disguise it, struggle with it, beat it down, stifle it, mortify it as much as one pleases, it is still alive, and will every now and then peep out and show itself; you will see it, perhaps, often in this history; for, even if I could conceive that I had completely overcome it, I should probably be proud of my humility.

10

Selection from *Émile*

Jean-Jacques Rousseau

God makes all things good; man meddles with them and they become evil. He forces one soil to yield the products of another, one tree to bear another's fruit. He confuses and confounds time, place, and natural conditions. He mutilates his dog, his horse, and his slave. He destroys and defaces all things; he loves all that is deformed and monstrous; he will have nothing as nature made it, not even man himself, who must learn his paces like a saddle-horse, and be shaped to his master's taste like the trees in his garden. Yet things would be worse without this education, and mankind cannot be made by halves. Under existing conditions a man left to himself from birth would be more of a monster than the rest. Prejudice, authority, necessity, example, all the social conditions into which we are plunged, would stifle nature in him and put nothing in her place. She would be like a sapling chance sown in the midst of the highway, bent hither and thither and soon crushed by the passers-by.

Tender, anxious mother,[1] I appeal to you. You can remove this young tree from the highway and shield it from the crushing force of social conventions. Tend and water it ere it dies. One day its fruit will reward your care.

From the outset raise a wall round your child's soul; another may sketch the plan, you alone should carry it into execution. Plants are fashioned by cultivation, man by education. If a man were born tall and strong, his size and strength would be of no good to him till he had learnt to use them; they would even harm him by preventing others from coming to his aid;[2] left to himself he would die of want before he knew his needs. We lament the helplessness of infancy; we fail to perceive that the race would have perished had not man begun by being a child.

We are born weak, we need strength; helpless, we need aid; foolish, we need reason. All that we lack at birth, all that we need when we come to man's estate, is the gift of education. This education comes to us from nature, from

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Source: Jean-Jacques Rousseau, *Emile or On Education*. Translated by Barbara Foxley (London: J.M. Dent and Sons Ltd, 1911).

men, or from things. The inner growth of our organs and faculties is the education of nature, the use we learn to make of this growth is the education of men, what we gain by our experience of our surroundings is the education of things.

Thus we are each taught by three masters. If their teaching conflicts, the scholar is ill-educated ad will never be at peace with himself; if their teaching agrees, he goes straight to his goal, he lives at peace with himself, he is well-educated. Now of these three factors in education nature is wholly beyond our control, things are only partly in our power; the education of men is the only one controlled by us; and even here our power is largely illusory, for who can hope to direct every word and deed of all with whom the child has to do.

Viewed as an art, the success of education is almost impossible, since the essential conditions of success are beyond our control. Our efforts may bring us within sight of the goal, but fortune must favour us if we are to reach it.

What is this goal? As we have just shown, it is the goal of nature. Since all three modes of education must work together, the two that we can control must follow the lead of that which is beyond our control. Perhaps this word Nature has too vague a meaning. Let us try to define it.

Nature, we are told, is merely habit. What does that mean? Are there not habits formed under compulsion, habits which never stifle nature? Such, for example, are the habits of plants trained horizontally. The plant keeps its artificial shape, but the sap has not changed its course, and any new growth the plant may make will be vertical. It is the same with a man's disposition; while the conditions remain the same, habits, even the least natural of them, hold good; but change the conditions, habits vanish, nature reasserts herself. Education itself is but habit, for are there not people who forget or lose their education and others who keep it? Whence comes this difference? If the term nature is to be restricted to habits conformable to nature we need say no more.

We are born sensitive and from our birth onwards we are affected in various ways by our environment. As soon as we become conscious of our sensations we tend to seek or shun the things that cause them, at first because they are pleasant or unpleasant, then because they suit us or not, and at last because of judgments formed by means of the ideas of happiness and goodness which reason gives us. These tendencies gain strength and permanence with the growth of reason, but hindered by our habits they are more or less warped by our prejudices. Before this change they are what I call Nature within us.

Everything should therefore be brought into harmony with these natural tendencies, and that might well be if our three modes of education merely differed from one another; but what can be done when they conflict, when instead of training man for himself you try to train him for others? Harmony becomes impossible. Forced to combat either nature or society, you must make your choice between the man and the citizen, you cannot train both.

The smaller social group, firmly united in itself and dwelling apart from others, tends to withdraw itself from the larger society. Every patriot hates

foreigners; they are only men, and nothing to him.' This defect is inevitable, but of little importance. The great thing is to be kind to our neighbours. Among strangers the Spartan was selfish, grasping, and unjust, but unselfishness, justice, and harmony ruled his home life. Distrust those cosmopolitans who search out remote duties in their books and neglect those that lie nearest. Such philosophers will love the Tartars to avoid loving their neighbour.

The natural man lives for himself; he is the unit, the whole, dependent only on himself and on his like. The citizen is but the numerator of a fraction, whose value depends on its denominator; his value depends upon the whole, that is, on the community....

Notes

1. The earliest education is most important and it undoubtedly is woman's work. If the author of nature had meant to assign it to men he would have given them milk to feed the child. Address your exercises on education to the women, for not only are they able to watch over it more closely than men, but only is their influence always predominant in education, its success concerns them more nearly, for most widows are at the mercy of their children, who show them very plainly whether their education was good or bad. The laws, always more concerned about property than about people, since their object is not virtue but peace, the laws give too little authority to the mother. Yet her position is more certain than that of the father, her duties are more trying; the right ordering of the family depends more upon her, and she is usually fonder of her children. There are occasions when a son may be excused for lack of respect for his father, but if a child could be so unnatural as to fail in respect for the mother who bore him and nursed him at her breast, who for so many years devoted herself to his care, such a monstrous wretch should be smothered at once as unworthy to live. You say mothers spoil their children, and no doubt that is wrong, but it is worse to deprive them as you do. The mother wants her child to be happy now. She is right, and if her method is wrong, she must be taught a better. Ambition, avarice, tyranny, the mistaken foresight of fathers, their neglect, their harshness, are a hundredfold more harmful to the child than the blind affection of the mother. Moreover, I must explain what I mean by a mother and that explanation follows.
2. Like them in externals, but without speech and without the ideas which are expressed by speech, he would be unable to make his wants known, while there would be nothing in his appearance to suggest that he needed their help.
3. Thus the wars of republics are more cruel than those of monarchies. But if the wars of kings are less cruel, their peace is terrible; better be their foe than their subject.

11

Selection from *Notes on the State of Virginia*

Thomas Jefferson

Another object of the revisal is, to diffuse knowledge more generally through the mass of the people. This bill proposes to lay off every county into small districts of five or six miles square, called hundreds, and in each of them to establish a school for teaching reading, writing, and arithmetic. The tutor to be supported by the hundred, and every person in it entitled to send their children three years gratis, and as much longer as they please, paying for it. These schools to be under a visitor, who is annually to chuse the boy, of best genius in the school, of those whose parents are too poor to give them further education, and to send him forward to one of the grammar schools, of which twenty are proposed to be erected in different parts of the country, for teaching Greek, Latin, geography, and the higher branches of numerical arithmetic. Of the boys thus sent in any one year, trial is to be made at the grammar schools one or two years, and the best genius of the whole selected, and continued six years, and the residue dismissed. By this means twenty of the best geniusses will be raked from the rubbish annually, and be instructed, at the public expence, so far as the grammer schools go. At the end of six years instruction, one half are to be discontinued (from among whom the grammar schools will probably be supplied with future masters); and the other half, who are to be chosen for the superiority of their parts and disposition, are to be sent and continued three years in the study of such sciences as they shall chuse, at William and Mary college, the plan of which is proposed to be enlarged, as will be hereafter explained, and extended to all the useful sciences. The ultimate result of the whole scheme of education would be the teaching all the children of the state reading, writing, and common arithmetic: turning out ten annually of superior genius, well taught in Greek, Latin, geography, and the higher branches of arithmetic: turning out ten others annually, of still superior parts, who, to those branches

Source: Thomas Jefferson, *Notes on the State of Virginia* (Philadelphia: Prichard and Hall, 1788).

of learning, shall have added such of the sciences as their genius shall have led them to: the furnishing to the wealthier part of the people convenient schools, at which their children may be educated, at their own expence. The general objects of this law are to provide an education adapted to the years, to the capacity, and the condition of every one, and directed to their freedom and happiness. Specific details were not proper for the law. These must be the business of the visitors entrusted with its execution. The first stage of this education being the schools of the hundreds, wherein the great mass of the people will receive their instruction, the principal foundations of future order will be laid here. Instead therefore of putting the Bible and Testament into the hands of the children, at an age when their judgments are not sufficiently matured for religious enquiries, their memories may here be stored with the most useful facts from Grecian, Roman, European and American history. The first elements of morality too may be instilled into their minds; such as, when further developed as their judgments advance in strength, may teach them how to work out their own greatest happiness, by shewing them that it does not depend on the condition of life in which chance has placed them, but is always the result of a good conscience, good health, occupation, and freedom in all just pursuits. Those whom either the wealth of their parents or the adoption of the state shall destine to higher degrees of learning, will go on to the grammar schools, which constitute the next stage, there to be instructed in the languages. The learning Greek and Latin, I am told, is going into disuse in Europe. I know not what their manners and occupations may call for: but it would be very ill-judged in us to follow their example in this instance. There is a certain period of life, say from eight to fifteen or sixteen years of age, when the mind, like the body, is not yet firm enough for laborious and close operations. If applied to such, it falls an early victim to premature exertion; exhibiting indeed at first, in these young and tender subjects, the flattering appearance of their being men while they are yet children, but ending in reducing them to be children when they should be men. The memory is then most susceptible and tenacious of impressions; and the learning of languages being chiefly a work of memory, it seems precisely fitted to the powers of this period, which is long enough too for acquiring the most useful languages antient and modern. I do not pretend that language is science. It is only an instrument for the attainment of science. But that time is not lost which is employed in providing tools for future operation: more especially as in this case the books put into the hands of the youth for this purpose may be such as will at the same time impress their minds with useful facts and good principles. If this period be suffered to pass in idleness, the mind becomes lethargic and impotent, as would the body it inhabits if unexercised during the same time. The sympathy between body and mind during their rise, progress and decline, is too strict and obvious to endanger our being misled while we reason from the one to the other. As soon as they are of sufficient age, it is supposed they will be sent on from the grammar schools to the university, which constitutes our third and last stage, there to

study those sciences which may be adapted to their views. By that part of our plan which prescribes the selection of the youths of genius from among the classes of the poor, we hope to avail the state of those talents which nature has sown as liberally among the poor as the rich, but which perish without use, if not sought for and cultivated. But of all the views of this law none is more important, none more legitimate, than that of rendering the people the safe, as they are the ultimate, guardians of their own liberty. For this purpose the reading in the first stage, where *they* will receive their whole education, is proposed, as has been said, to be chiefly historical. History by apprising them of the past will enable them to judge of the future; it will avail them of the experience of other times and other nations; it will qualify them as judges of the actions and designs of men; it will enable them to know ambition under every disguise it may assume; and knowing it, to defeat its views. In every government on earth is some trace of human weakness, some germ of corruption and degeneracy, which cunning will discover, and wickedness insensibly open, cultivate, and improve. Every government degenerates when trusted to the rulers of the people alone. The people themselves therefore are its only safe depositories. And to render even them safe their minds must be improved to a certain degree. This indeed is not all that is necessary, though it be essentially necessary. An amendment of our constitution must here come in aid of the public education. The influence over government must be shared among all the people. If every individual which composes their mass participates of the ultimate authority, the government will be safe; because the corrupting the whole mass will exceed any private resources of wealth: and public ones cannot be provided but by levies on the people. In this case every man would have to pay his own price. The government of Great-Britain has been corrupted, because but one man in ten has a right to vote for members of parliament. The sellers of the government therefore get nine-tenths of their price clear. It has been thought that corruption is restrained by confining the right of suffrage to a few of the wealthier of the people: but it would be more effectually restrained by an extension of that right to such numbers as would bid defiance to the means of corruption.

Lastly, it is proposed, by a bill in this revisal, to begin a public library and gallery, by laying out a certain sum annually in books, paintings, and statues.

12

Of the Mode of Education Proper in a Republic

Benjamin Rush

The business of education has acquired a new complexion by the independence of our country. The form of government we have assumed, has created a new class of duties to every American. It becomes us, therefore, to examine our former habits upon this subject, and in laying thefoundations for nurseries of wise and good men, to adapt our modes of teaching to the peculiar form of our government.

The first remark that I shall make upon this subject is, that an education in our own, is to be preferred to an education in a foreign country. The principle of patriotism stands in need of the reinforcement of prejudice. And it is well known that our strongest prejudices in favour of our country are formed in the first one and twenty years of our lives. The policy of the Lacedemonians is well worthy of our imitation. When Antipater demanded fifty of their children as hostages for the fulfillment of a distant engagement, those wise republicans refused to comply with his demand, but readily offered him double the number of their adult citizens, whose habits and prejudices could not be shaken by residing in a foreign country. Passing by, in this place, the advantages to the community from the early attachment of youth to the laws and constitution of their country, I shall only remark, that young men who have trodden the paths of science together, or have joined in the same sports, whether of swimming, skating, fishing, or hunting, generally feel, thro' life, such ties to each other, as add greatly to the obligations of mutual benevolence.

I conceive the education of our youth in this country to be peculiarly necessary in Pennsylvania, while our citizens are composed of the natives of so many different kingdoms in Europe. Our schools of learning, by producing one general, and uniform system of education, will render the mass of the people more homogeneous, and thereby fit them more easily for uniform and peaceable government.

Source: Benjamin Rush, *Essays, Literary, Moral & Philosophical* (Philadelphia: Thomas & Samuel F. Bradford, No. 8, South Front Street, 1798).

I proceed in the next place, to enquire, what mode of education we shall adopt so as to secure to the state all the advantages that are to be derived from the proper instruction of youth; and here I beg leave to remark, that the only foundation for a useful education in a republic is to be laid in Religion. Without this there can be no virtue, and without virtue there can be no liberty, and liberty is the object and life of all republican governments.

Such is my veneration for every religion that reveals the attributes of the Deity, or a future state of rewards and punishments, that I had rather see the opinions of Confucius of Mahomed inculcated upon our youth, than see them grow up wholly devoid of a system of religious principles. But the religion I mean to recommend in this place, is that of the New Testament.

It is foreign to my purpose to hint at the arguments which establish the truth of the Christian revelation. My only business is to declare, that all its doctrines and precepts are calculated to promote the happiness of society, and the safety and well being of civil government. A Christian cannot fail of being a republican. The history of the creation of man, and of the relation our species to each other by birth, which is recorded in the Old Testament, is the best refutation that can be given to the divine right of kings, and the strongest argument that can be used in favor of the original and natural equality of all mankind. A Christian, I say again, cannot fail of being a republican, for every precept of the Gospel inculcates those degrees of humility, self-denial, and brotherly kindness, which are directly opposed to the pride of monarchy and the pageantry of a court. A Christian cannot fail of being useful to the republic, for his religion teacheth him, that no man "liveth to himself." And lastly, a Christian cannot fail of being wholly inoffensive, for his religion teacheth him, in all things to do others what he would wish, in like circumstances, they should do to him.

I am aware that I dissent from one of those paradoxical opinions with which modern times abound; and that it is improper to fill the minds of youth with religious prejudices of any kind, and that they should be left to choose their own principles, after they have arrived at an age in which they are capable of judging for themselves. Could we preserve the mind in childhood and youth a perfect blank, this plan of education would have more to recommend it; but this we know to be impossible. The human mind runs as naturally into principles as it does after facts. It submits with difficulty to those restraints or partial discoveries which are imposed upon it in the infancy of reason. Hence the impatience of children to be informed upon all subjects that relate to the invisible world. But I beg leave to ask, why should we pursue a different plan of education with respect to religion, from that which we pursue in teaching the arts and sciences? Do we leave our youth to acquire systems of geography, philosophy, or politics, till they have arrived at an age in which they are capable of judging for themselves? We do not. I claim no more then for religion, than for the other sciences, and I add further, that if our youth are disposed after they are of age to think for themselves, a knowledge of one system, will be the best means of conducting them in a free enquiry into other

systems of religion, just as an acquaintance with one system of philosophy is the best introduction to the study of all other systems in the world.

Next to the duty which young men owe to their Creator, I wish to see a regard to their country, inculcated upon them. When the Duke of Sully became prime minister to Henry the IVth of France, the first thing he did, he tells us, "Was to subdue and forget his own heart." The same duty is incumbent upon every citizen of a republic. Our country includes family, friends and property, and should be preferred to them all. Let our pupil be taught that he does not belong to himself, but that he is public property. Let him be taught to love his family, but let him be taught, at the same time, that he must forsake, and even forget them, when the welfare of his country requires it. He must watch for the state, as if its liberties depended upon his vigilance alone, but he must do this in such a manner as not to defraud his creditors, or neglect his family. He must love private life, but he must decline no station, however public or responsible it may be, when called to it by the suffrages of his fellow citizens. He must love popularity, but he must despise it when set in competition with the dictates of his judgement, or the real interest of his country. He must love character, and have a due sense of injuries, but he must be taught to appeal only to the laws of the state, to defend the one, and punish the other. He must love family honour, but must be taught that neither the rank nor antiquity of his ancestors, can command respect, without personal merit. He must avoid neutrality in all questions that divide the state, but he must shun the rage, and acrimony of party spirit. He must be taught to love his fellow creatures in every part of the world, but he must cherish with a more intense and peculiar affection, the citizens of Pennsylvania and of the United States. I do not wish to see our youth educated with a single prejudice against any nation our country; but we impose a task upon human nature, repugnant alike to reason, revelation and the ordinary dimensions of the human heart, when we require him to embrace, with equal affection, the whole family of mankind. He must be taught to amass wealth, but it must be only to encrease his power of contributing to the wants and demands of the state. He must be indulged occasionally in amusements, but he must be taught that study and business should be his principal pursuits in life. Above all he must love life, and endeavour to acquire as many of its conveniences as possible by industry and economy, but he must be taught that this life "is not his own," when the safety of his country requires it. These are practicable lessons, and the history of the commonwealths of Greece and Rome show, that human nature, without the aids of Christianity, has attained these degrees of perfection.

While we inculcate these republican duties upon our pupil, we must not neglect, at the same time, to inspire him with republican principles. He must be taught that there can be no durable liberty but in a republic, and that government, like all other sciences, is of a progressive nature. The chains which have bound this science in Europe are happily unloosed in America. Here it is open to investigation and improvement. While philosophy has

protected us by its discoveries from a thousand natural evils, government has unhappily followed with an unequal pace. It would be to dishonour human genius, only to name the many defects which still exist in the best systems of legislation. We daily see matter of a perishable nature rendered durable by certain chemical operations. In like manner, I conceive, that it is possible to combine power in such a way as not only to encrease the happiness, but to promote the duration of republican forms of government far beyond the terms limited for them by history, or the common opinions of mankind.

To assist in rendering religious, moral and political instructions more effectual upon the minds of our youth, it will be necessary to subject their bodies to physical discipline. To obviate the inconveniences of their studious and sedentary mode of life, they should live upon a temperate diet, consisting chiefly of broths, milk and vegetables. The black broth of Sparta, and the barley broth of Scotland, have been alike celebrated for their beneficial effects upon the minds of young people. They should avoid tasting Spirituous liquors. They should also be accustomed occasionally to work with their hands, in the intervals of Study, and in the busy seasons of the year in the country. Moderate sleep, silence, occasional solitude and cleanliness, should be inculcated upon them, and the utmost advantage should be taken of a proper direction of those great principles in human conduct, – sensibility, habit, imitations, and association.

The influence of these physical causes will be powerful upon the intellects, as well as upon the principles and morals of young people.

To those who have studied human nature, it will not appear paradoxical to recommend, in this essay, a particular attention to vocal music. Its mechanical effects in civilizing the mind, and thereby preparing it for the influence of religion and government, have been so often felt and recorded, that it will be unnecessary to mention facts in favour of its usefulness, in order to excite a proper attention to it.

I cannot help bearing a testimony, in this place, against the custom, which prevails in some parts of America, (but which is daily falling into disuse in Europe) of crowding boys together under one roof for the purpose of education. The practice is the gloomy remains of monkish ignorance, and is as unfavorable to the improvements of the mind in useful learning, as monasteries are to the spirit of religion. I grant this mode of secluding boys from the intercourse of private families, has a tendency to make them scholars, but our business is to make them men, citizens, and christians. The vices of young people are generally learned from each other. The vices of adults seldom infect them. By separating them from each other, therefore, in their hours of relaxation from study, we secure their morals from a principal source of corruption, while we improve their manners, by subjecting them to those restraints which the difference of age and sex, naturally produce in private families.

From the observations that have been made it is plain, that I consider it is possible to convert men into republican machines. This must be done, if we expect them to perform their parts properly, in the great machine of the

government of the state. That republic is sophisticated with monarchy or aristocracy that does not revolve upon the wills of the people, and these must be fitted to each other by means of education before they can be made to produce regularity and unison in government.

Having pointed out those general principles, which should be inculcated alike in all the schools of the state, I proceed now to make a few remarks upon the method of conducting, what is commonly called, a liberal or learned education in a republic.

I shall begin this part of my subject, by bearing a testimony against the common practice of attempting to teach boys the learned languages, and the arts and sciences too early in life. The first twelve years of life are barely sufficient to instruct a boy in reading, writing and arithmetic. With these, he may be taught those modern languages which are necessary for him to speak. The state of memory, in early life, is favorable to the acquisition of languages, especially when they are conveyed to the mind, through the ear. It is, moreover, in early life only, that the organs of speech yield in such a manner as to favour the just pronunciation of foreign languages.

Too much pains cannot be taken to teach our youth to read and write our American language with propriety and elegance. The study of the Greek language constituted a material part of the literature of the Athenians, hence the sublimity, purity and immortality of so many of their writings. The advantages of a perfect knowledge of our language to young men intended for the professions of law, physic, or divinity are too obvious to be mentioned, but in a state which boasts of the first commercial city in America, I wish to see it cultivated by young men, who are intended for the compting house, for many such, I hope, will be educated in our colleges. The time is past when an academical education was thought to be unnecessary to qualify a young man for merchandize. I conceive no profession is capable of receiving more embellishments from it. The French and German languages should likewise be carefully taught in all our Colleges. They abound with useful books upon all subjects. So important and necessary are those languages, that a degree should never be conferred upon a young man who cannot speak or translate them.

Connected with the study of language is the study of Eloquence. It is well known how great a part it constituted of the Roman education. It is the first accomplishment in a republic, and often sets the whole machine of government in motion. Let our youth, therefore, be instructed in this art. We do not extol it too highly when we attribute as much to the power of eloquence as to the sword, in bringing about American revolution.

With the usual arts and sciences that are taught in our American colleges, I wish to see a regular course of lectures given upon History and Chronology. The science of government, whether it related to constitutions or laws, can only be advanced by a careful selection of facts, and these are to be found chiefly in history. Above all, let our youth be instructed in the history of the ancient republics, and the progress of liberty and tyranny in the different states of Europe. I wish likewise to see the numerous facts that relate to the

origin and present state of commerce, together with the nature and principles of Money, reduced to such a system, as to be intelligible and agreeable to a young man. If we consider the commerce of our metropolis only as the avenue of the wealth of the state, the study of it merits a place in a young man's education; but, I consider commerce in a much higher light when I recommend the study of it in republican seminaries. I view it as the best security against the influence of hereditary monopolies of land, and, therefore, the surest protection against aristocracy. I consider its effects as next to those of religion in humanizing mankind, and lastly, I view it as the means of uniting the different nations of the world together by the ties of mutual wants and obligations.

Chemistry by unfolding to us the effects of heat and mixture, enlarges our acquaintance with the wonders of nature and the mysteries of art; hence it has become, in most of the universities of Europe, a necessary branch of a gentleman's education. In a young country, where improvements in agriculture and manufactures are so much to be desired, the cultivation of this science, which explains the principles of both of them, should be considered as an object of the utmost importance.

Again, let your youth be instructed in all the means of promoting national prosperity and independence, whether they relate to improvements in agriculture, manufactures, or inland navigation. Let him be instructed further in the general principles of legislation, whether they relate to revenue, or to the preservation of life, liberty or property. Let him be directed frequently to attend the courts of justice, where he will have the best opportunities of acquiring habits of comparing, and arranging his ideas by observing the discovery of truth, in the examination of witnesses, and where he will hear the laws of the state explained, with all the advantages of that species of eloquence which belongs to the bar. Of so much importance do I conceive it to be, to a young man, to attend occasionally to the decisions of our courts of law, that I wish to see our colleges established, only in county towns.

But further, considering the nature of our connection with the United States, it will be necessary to make our pupil acquainted with all the prerogatives of the national government. He must be instructed in the nature and variety of treaties. He must know the difference in the powers and duties of the several species of ambassadors. He must be taught wherein the obligations of individuals and of states are the same, and wherein they differ. In short, he must acquire a general knowledge of all those laws and forms, which unite the sovereigns of the earth, or separate them from each other.

I beg pardon for having delayed so long to say any thing of the separate and peculiar mode of education proper for women in a republic. I am sensible that they must concur in all our plans of education for young men, or no laws will ever render them effectual. To qualify our women for this purpose, they should not only be instructed in the usual branches of female education, but they should be taught the principles of liberty and government; and the obligations of patriotism should be inculcated upon them. The opinions

and conduct of men are often regulated by the women in the most arduous enterprises of life, and their approbation is frequently the principal reward of the hero's dangers, and the patriot's toils. Besides, the first impressions upon the minds of children are generally derived from the women. Of how much consequence, therefore, is it in a republic, that they should think justly upon the great subjects of liberty and government!

The complaints that have been made against religion, liberty and learning, have been, against each of them in a separate state. Perhaps like certain liquors, they should only be used in a state of mixture. They mutually assist in correcting the abuses, and in improving the good effects of each other. From the combined and reciprocal influence of religion, liberty and learning upon the morals, manners and knowledge of individuals, of these, upon government, and of government, upon individuals, it is impossible to measure the degrees of happiness and perfection to which mankind may be raised. For my part, I can form no ideas of the golden age, so much celebrated by the poets, more delightful, than the contemplation of that happiness which it is now in the power of the legislature of Pennsylvania to confer upon the citizens, by establishing proper modes and places of education in every part of the state.

13

Selection from *Leonard and Gertrude*

Johann Heinrich Pestalozzi

The Guiding Principles in a Good School

"The squire, since his return from his visit to the farmer, has passed every minute which he could steal from his other duties with the lieutenant, in order to talk over arrangements which they wished to make in connection with their new school. They both thought that the best education on earth which a child could receive was one which would teach him to look after and manage methodically those things which would most likely be his when he was grown up. It would teach him how to use these things for his own good and for the welfare of those dear to him. This excellent aim of all education seemed to them, without more ado, the very first thing to be considered in establishing a school on common-sense principles.

"In this connection they saw clearly that the lieutenant, and everyone who wished to establish a suitable school for farmers and cotton-spinners, must themselves know and understand what farmers and cotton-spinners ought to know and ought to be able to do – *i.e.*, if they are to be satisfactory farmers and cotton-spinners. If the would-be schoolmasters do not possess this knowledge themselves, they must be ready to go and ask for instruction from those people who do know and are able to help them. They naturally thought first of all of the farmer spinner, and went to see him immediately after the meal at which this conversation had taken place. 'This is the man I have talked to you so much about,' said the squire to the lieutenant; then, turning to the farmer, he said: 'And this is a gentleman who, I hope, will be able to comfort you concerning your school.' The cotton-spinner did not understand the meaning of this speech, but the squire explained matters to him, and said that the gentleman was going to be their schoolmaster. The cotton-spinner could not find words to express his astonishment at this, but said that, if the gentleman was really willing to take so much trouble,

Source: J. A. Green (ed.), *Pestalozzi's Educational Writings* (New York: Longmans, Green & Co., 1912), pp. 46–63.

they would never be able to thank him sufficiently; but it would need time before he would be able to get a thorough understanding of the manners and customs of their village life. 'I can quite believe that,' said the lieutenant; 'but one must begin some time, and I will spare no trouble in trying to find out what, is really necessary for your children, and what they ought to learn, in order to fulfil their duties as farmers or cotton-spinners in a thoroughly satisfactory way.'

"*The Farmer.* – 'That is a fine thing for you to do, to wish to begin in that way.'

"*The Lieutenant.* – 'I had no notion of beginning in any other way. Moreover, whenever I have an occasion, I shall try to get some idea of every sort of domestic and outdoor work, in order that I may really understand on what sort of pattern your children should be turned out, if they are to be properly educated for their work and position in life.'

"Marelli was quite at home with him; he pointed out to him everywhere in the house, in the cowsheds, and all round about, what the children must be taught, and what they must do, if they were to learn to manage everything properly; he got them to hoe the garden, dig up the ground, climb on to the platform, make food for the animals. The more the lieutenant saw, the more questions he asked. He even wanted to know how they computed the tithes, how they estimated the wages for the cotton-spinning, what difference there was between the returns made by cotton and by wool, and a hundred other similar matters. They explained everything as well as they could. Finally he wished to have the children taught spinning, too, but Marelli said to him: 'We only take in some few hundredweights of yarn during the year, and I have never succeeded in getting the children to spin really well: in truth, I cannot altogether complain; they have a great deal to do in the fields and attending to the cattle, and there is never any good yarn to be had. But if you want to see a well-arranged spinnery you should go and visit the wife of the stonemason; there you will find something really worth seeing as regards cotton-spinning, but here there is nothing.'

"'Is the mason's wife of whom you speak called Gertrude?' asked the lieutenant. 'Ah! it seems that you know her already,' replied Marelli. 'No, but the squire has persuaded me to go straight from your house to see her,' said the lieutenant. 'Ah, you see, then, that I have given you good advice,' said Marelli.

"The foundation of a good school is the same as the foundation of all human happiness, and it is nothing less than the true wisdom of life.

"Her room was so full when they entered that they could scarcely make their way in for spinning. Gertrude, who was not by any means expecting strangers when she opened the door, bade the children stand up and make room; but the squire would not allow any of them to move from their places, and offered his hand to the pastor and to the lieutenant in turn, in order to guide them along the wall behind the children's backs, to their seats at the table. You can have no idea how delighted these gentlemen were with this room. What they had seen at the farmer's seemed to them nothing at

all in comparison. This was natural enough. When a rich man's estate is well ordered and in a prosperous condition, we are not much impressed; we simply think that other people could not do the same for lack of money. On the other hand, when we find prosperity and well-being in a poor cottage, it proves incontestably that it would be well with everybody, if their affairs were well ordered and methodical, and if everybody had been well brought up. The sight makes a great, even an astounding impression on the mind. Now these gentlemen had a whole room full of such poor children before their eyes, in all the enjoyment of domestic bliss.

"For a few moments it seemed to the squire as if he actually saw, in a vision before him, a living picture of the first-born of those future generations for whom he was planning an improved education. The lieutenant's falcon eyes flashed like lightning round the room, passing from child to child, from hand to hand, from work to work, from eye to eye; and the more he saw, the more his heart swelled with the thought that here, in Gertrude's room, was the school they had been looking for, and that she had already performed and accomplished what they were aspiring to do. For some time there was a deathlike stillness in the room, for the visitors could do nothing but gaze and gaze in speechless silence. During this silent period the lieutenant showed various signs of respect for Gertrude, which seemed to border almost on reverence, and these, combined with the stillness in the room, made her heart beat fast. But the children continued to spin away happily, and shot merry glances at each other, for they saw that the gentlemen were there on their account, and were regarding their work.

"The first question which the lieutenant asked was: 'Are these all your children, Frau Gertrude?' 'No, they are not all mine,' said Gertrude, and, pointing from one wheel to another, she indicated which were Rudi's and which were hers. 'Just think, lieutenant,' said the pastor, 'only four weeks ago none of Rudi's children could spin a thread.' The lieutenant gazed at the pastor and at Frau Gertrude. 'Is it possible?' he said. 'It is quite true,' answered Gertrude. 'A child ought to be able to learn to spin well in a few weeks; I have known some who have learnt in a few days.' 'It is not that, but something quite different, which surprises me most in this room,' said the squire. 'These children look so different now from what they did three or four weeks ago when Frau Gertrude first took them in, that in good truth I should not have recognized them as the same. At that time their countenances expressed the most utter misery and all the horrors of a living death, but now all that has been wiped out, and no traces of their former wretchedness are to be seen.' 'But what does she do to the children, then?' asked the lieutenant in French. 'God only knows,' said the squire. Then the pastor went on: 'When you spend the whole day with her, you hear no sound and see no sign of anything extraordinary; you feel sure that any other woman could do exactly the same, and, truly, it would never occur to the most ordinary woman in the village that Frau Gertrude was doing or could do anything that she could not do.' 'You could say nothing which would exalt her more in my eyes,' said

the lieutenant. 'Art is most perfect when its presence is entirely unsuspected, and the highest and most sublime things are so simple that children and young people always imagine they can do something much better.'

"While the gentlemen were talking French with one another, the children began to laugh and to exchange glances, and Heirli and the child who sat opposite to him started to screw their mouths up, and mumble 'French! French!' to one another. But Gertrude had only to give a sign, and everything was immediately quiet again. As the lieutenant noticed books lying beside all the spinning-wheels, he asked Gertrude what they did with them. She looked at him, and said: 'Why, they learn out of them!' 'But surely not while they are spinning?' 'Yes, certainly,' said Gertrude. 'I should like to see that,' said the lieutenant, and the squire also put in a word. 'Yes, you must show us that, Gertrude.' 'Children, take your books in your hands and learn your lessons,' she said. 'Aloud, as usual?' asked the children. 'Yes, aloud as usual, but correctly too,' said Gertrude. Then the children opened their books, and each one turned to the page marked, and began to learn the lesson which he had been given to learn that day, but the wheels went on as before though the children's eyes were all glued to their books.

"The lieutenant was never tired of seeing all these things, and he begged Gertrude to show them all that the children did and all that she taught them. She tried to excuse herself, saying that it was nothing at all, and that the gentlemen must know a thousand times better, than she did what to do; but when the squire also begged her to do as she was requested, she at once told the children to close their books, and began to go over a passage with them which was to be learnt by heart. This time it was a portion of the song which begins:

"'Of the warm sun, so soft and mild,
How fair, how lovely, are the rays!
They cheer our eyes, refresh our hearts,
And bring us comfort all our days.'"

"The third verse, which they were to learn now, ran as follows:

"'Gone is the Sun, as all the pride
And splendour of this world must go:
The Lord of Heaven just speaks one word,
And straight the mighty are brought low.'"

"Slowly and clearly she repeated one line of the verse after another, and the children said it just as clearly and slowly after her. She continued to repeat it until at last one said: 'I can say it now.' Then she made him say the verse alone, and, as it was perfectly correct, she told him to recite it to the others, while they repeated it after him until they all knew it. Then she also sang with them the first three verses of this song, for they had already learnt the first two. After all this she showed the gentlemen how she taught the children

arithmetic, and that was also the simplest and most practical way that one can imagine; but I will say more about this another time.

School Organization

"On the following morning, then, the school began. I should not, however, like to advise any other schoolmaster to do what this one did, first to make an announcement on the Sunday which everyone considered presumptuous, and then to allow his school on the Monday to be organized by a peasant woman. Nevertheless, if one is a Glüphi one may do so, and no harm will come of it – but I mean a real Glüphi and not one in imagination. He made Gertrude arrange the children in the same order as if she had had them in her own home. When they crowded together she separated them, according to their ages or their work, and placed her own children and those of Rudi, who were already accustomed to her methods, all in different parts of the room amongst the others. She put the little ones who did not yet know their alphabet in front and nearest to the table. Behind these she put those who were learning to spell, then those who could nearly read, and in the back row those who could read quite well. For the first row she put, this morning, only three letters on the blackboard, and made one of these children say them over. When he could say it quite correctly, the others had to repeat it after him; then she changed the order of the letters, and wrote them now as capitals, now as small letters, on the board, and left them there the whole morning before their eyes. She used this method of transposing the letters also with those who were learning to spell, and those who could nearly read had to spell with them. But the latter and all those who could read properly had to keep their books open on their spinning-wheels in front of them, and had to repeat, in a low tone, whatever was read aloud to them by one of their number. And not one of them could be certain that she would not suddenly call upon him to go on.

"She had taken a woman called Margaret with her to manage the hand-work, and it was arranged that she should come to school every day to look after this, for it was impossible for Gertrude to do so. Margaret was a woman whose equal it would be hard to find. As soon as any child's hand or wheel stopped working she was at his side, and she did not leave him till hand and wheel were again in motion. Most of the children took home with them that evening some of the work they had done, and their mothers could hardly believe that they had really done it alone and unaided. Several of the children, however, answered their remarks by saying: 'Yes, but there is a difference in the way Margaret shows us how to do things. You could not do it as well.' They were just as ready to sing the praises of the lieutenant, for he conducted the school in the afternoon, and Gertrude sat and looked on, just as he did in the morning while she was teaching. Things went on so well that she said to him: 'If I had known that it would not take me more than two hours a day

to help you in managing your school, I should not have been so unwilling when you asked me to do so last Thursday.' He also was very glad to find that things went so well. That evening he gave all the children over seven years of age a sheet of paper and a few pens to take home with them, and each child found his name beautifully written in printed characters on his sheet of paper. They were never tired of gazing at them, and one after the other came to ask him how they were made. He then showed them, and for quite a quarter of an hour he wrote out big capital letters resembling printed ones. They thought it all so beautiful that they would have been quite willing for him to have gone on writing till the next day, and they asked wonderingly if they were to learn to write like that. His reply was: 'The more you try to learn to write beautifully, the more pleased I shall be.' Just as they were leaving he called out to them to take care of their paper, and to stick the points of their pens into rotten apples, for that was the best way of preserving them. Several children answered: 'Yes, if we only had some rotten apples left, but winter is over now!' He laughed at this, and said to them: 'If you have none, perhaps I shall be able to get some for you. I think the pastor's wife has more rotten apples than she cares about.' But others said: 'No, no, no! We will bring some; we still have some left.'"

14

On National Education

Mary Wollstonecraft

The good effects resulting from attention to private education will ever be very confined, and the parent who really puts his own hand to the plow, will always, in some degree, be disappointed, till education becomes a grand national concern. A man cannot retire into a desert with his child, and if he did he could not bring himself back to childhood, and become the proper friend and play-fellow of an infant or youth. And when children are confined to the society of men and women, they very soon acquire that kind of premature manhood which stops the growth of every vigorous power of mind or body. In order to open their faculties they should be excited to think for themselves; and this can only be done by mixing a number of children together, and making them jointly pursue the same objects.

A child very soon contracts a benumbing indolence of mind, which he has seldom sufficient vigour afterwards to shake off, when he only asks a question instead of seeking for information, and then relies implicitly on the answer he receives. With his equals in age this could never be the case, and the subjects of inquiry, though they might be influenced, would not be entirely under the direction of men, who frequently damp, if not destroy, abilities, by bringing them forward too hastily: and too hastily they will infallibly be brought forward, if the child be confined to the society of a man, however sagacious that man may be.

Besides, in youth the seeds of every affection should be sown, and the respectful regard, which is felt for a parent, is very different from the social affections that are to constitute the happiness of life as it advances. Of these equality is the basis, and an intercourse of sentiments unclogged by that observant seriousness which prevents disputation, though it may not enforce submission. Let a child have ever such an affection for his parent, he will always languish to play and chat with children; and the very respect which he entertains, for filial esteem always has a dash of fear mixed with it, will, if it do not teach him cunning, at least prevent him from pouring out the little

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Source: Mary Wollstonecraft, *A Vindication of the Rights of Woman* (London, 1891), pp. 237–253.

secrets which first open the heart to friendship and confidence, gradually leading to more expansive benevolence. Added to this, he will never acquire that frank ingenuousness of behaviour, which young people can only attain by being frequently in society where they dare to speak what they think; neither afraid of being reproved for their presumption, nor laughed at for their folly.

Forcibly impressed by the reflections which the sight of schools, as they are at present conducted, naturally suggested, I have formerly delivered my opinion rather warmly in favour of a private education; but further experience has led me to view the subject in a different light. I still, however, think schools, as they are now regulated, the hotbeds of vice and folly, and the knowledge of human nature, supposed to be attained there, merely cunning selfishness.

At school boys become gluttons and slovens, and, instead of cultivating domestic affections, very early rush into the libertinism which destroys the constitution before it is formed; hardening the heart as it weakens the understanding.

I should, in fact, be averse to boarding-schools, if it were for no other reason than the unsettled state of mind which the expectation of the vacations produce. On these the children's thoughts are fixed with eager anticipating hopes, for, at least, to speak with moderation, half of the time, and when they arrive they are spent in total dissipation and beastly indulgence.

But, on the contrary, when they are brought up at home, though they may pursue a plan of study in a more orderly manner than can be adopted when near a fourth part of the year is actually spent in idleness, and as much more in regret and anticipation; yet they there acquire too high an opinion of their own importance, from being allowed to tyrannize over servants, and from the anxiety expressed by most mothers, on the score of manners, who, eager to teach the accomplishments of a gentleman, stifle, in their birth, the virtues of a man. Thus brought into company when they ought to be seriously employed, and treated like men when they are still boys, they become vain and effeminate.

The only way to avoid two extremes equally injurious to morality, would be to contrive some way of combining a public and private education. Thus to make men citizens two natural steps might be taken, which seem directly to lead to the desired point; for the domestic affections, that first open the heart to the various modifications of humanity, would be cultivated, whilst the children were nevertheless allowed to spend great part of their time, on terms of equality, with other children.

I still recollect, with pleasure, the country day school; where a boy trudged in the morning, wet or dry, carrying his books, and his dinner, if it were at a considerable distance; a servant did not then lead master by the hand, for, when he had once put on coat and breeches, he was allowed to shift for himself, and return alone in the evening to recount the feats of the day close at the parental knee. His father's house was his home, and was ever after fondly remembered; nay, I appeal to many superiour men, who were educated in this manner, whether the recollection of some shady lane where

they conned their lesson; or, of some stile, where they sat making a kite, or mending a bat, has not endeared their country to them?

But, what boy ever recollected with pleasure the years he spent in close confinement, at an academy near London? unless, indeed, he should, by chance, remember the poor scarecrow of an usher, whom he tormented; or, the tartman, from whom he caught a cake, to devour it with a cattish appetite of selfishness. At boarding-schools of every description, the relaxation of the junior boys is mischief; and of the senior, vice. Besides, in great schools, what can be more prejudicial to the moral character than the system of tyranny and abject slavery which is established amongst the boys, to say nothing of the slavery to forms, which makes religion worse than a farce? For what good can be expected from the youth who receives the sacrament of the Lord's supper, to avoid forfeiting half a guinea, which he probably afterwards spends in some sensual manner? Half the employment of the youths is to elude the necessity of attending public worship; and well they may, for such a constant repetition of the same thing must be a very irksome restraint on their natural vivacity. As these ceremonies have the most fatal effect on their morals, and as a ritual performed by the lips, when the heart and mind are far away, is not now stored up by our church as a bank to draw on for the fees of the poor souls in purgatory, why should they not be abolished?

But the fear of innovation, in this country, extends to every thing. – This is only a covert fear, the apprehensive timidity of indolent slugs, who guard, by sliming it over, the snug place, which they consider in the light of an hereditary estate; and eat, drink, and enjoy themselves, instead of fulfilling the duties, excepting a few empty forms, for which it was endowed. These are the people who most strenuously insist on the will of the founder being observed, crying out against all reformation, as if it were a violation of justice. I am now alluding particularly to the relics of popery retained in our colleges, when the protestant members seem to be such sticklers for the established church; but their zeal never makes them lose sight of the spoil of ignorance, which rapacious priests of superstitious memory have scraped together. No, wise in their generation, they venerate the prescriptive right of possession, as a strong hold, and still let the sluggish bell tinkle to prayers, as during the days when the elevation of the host was supposed to atone for the sins of the people, lest one reformation should lead to another, and the spirit kill the letter. These Romish customs have the most baneful effect on the morals of our clergy; for the idle vermin who two or three times a day perform in the most slovenly manner a service which they think useless, but call their duty, soon lose a sense of duty. At college, forced to attend or evade public worship, they acquire an habitual contempt for the very service, the performance of which is to enable them to live in idleness. It is mumbled over as an affair of business, as a stupid boy repeats his talk, and frequently the college cant escapes from the preacher the moment after he has left the pulpit, and even whilst he is eating the dinner which he earned in such a dishonest manner.

Nothing, indeed, can be more irreverent than the cathedral service as it is now performed in this country, nor does it contain a set of weaker men than those who are the slaves of this childish routine. A disgusting skeleton of the former state is still exhibited; but all the solemnity that interested the imagination, if it did not purify the heart, is stripped off. The performance of high mass on the continent must impress every mind, where a spark of fancy glows, with that awful melancholy, that sublime tenderness, so near akin to devotion. I do not say that these devotional feelings are of more use, in a moral sense, than any other emotion of taste; but I contend that the theatrical pomp which gratifies our senses, is to be preferred to the cold parade that insults the understanding without reaching the heart.

Amongst remarks on national education, such observations cannot be misplaced, especially as the supporters of these establishments, degenerated into puerilities, affect to be the champions of religion. – Religion, pure source of comfort in this vale of tears! how has thy clear stream been muddied by the dabblers, who have presumptuously endeavoured to confine in one narrow channel, the living waters that ever flow towards God – the sublime ocean of existence! What would life be without that peace which the love of God, when built on humanity, alone can impart? Every earthly affection turns back, at intervals, to prey upon the heart that feeds it; and the purest effusions of benevolence, often rudely damped by man, must mount as a free-will offering to Him who gave them birth, whose bright image they faintly reflect.

In public schools, however, religion, confounded with irksome ceremonies and unreasonable restraints, assumes the most ungracious aspect: not the sober austere one that commands respect whilst it inspires fear; but a ludicrous cast, that serves to point a pun. For, in fact, most of the good stories and smart things will enliven the spirits that have been concentrated at whist, are manufactured out of the incidents to which the very men labour to give a droll turn who countenance the abuse to live on the spoil.

There is not, perhaps, in the kingdom, a more dogmatical, or luxurious set of men, than the pedantic tyrants who reside in colleges and preside at public schools. The vacations are equally injurious to the morals of the masters and pupils, and the intercourse, which the former keep up with the nobility, introduces the same vanity and extravagance into their families, which banish domestic duties and comforts from the lordly mansion, whose state is awkwardly aped on a smaller scale. The boys, who live at a great expense with the masters and assistants, are never domesticated, though placed there for that purpose; for, after a silent dinner, they swallow a hasty glass of wine, and retire to plan some mischievous trick, or to ridicule the person or manners of the very people they have just been cringing to, and whom they ought to consider as the representatives of their parents.

Can it then be a matter of surprise that boys become selfish and vicious who are thus shut out from social converse? or that a mitre often graces the brow of one of these diligent pastors?

The desire of living in the same style, as the rank just above them, infects each individual and every class of people, and meanness is the concomitant of this ignoble ambition; but those professions are most debasing whose ladder is patronage: yet, out of one of these professions the tutors of youth are, in general, chosen. But, can they be expected to inspire independent sentiments, whose conduct must be regulated by the cautious prudence that is ever on the watch for preferment?

So far, however, from thinking of the morals of boys, I have heard several masters of schools argue, that they only undertook to teach Latin and Greek; and that they had fulfilled their duty, by sending some good scholars to college.

A few good scholars, I grant, may have been formed by emulation and discipline; but to bring forward these clever boys, the health and morals of a number have been sacrificed. The sons of our gentry and wealthy commoners are mostly educated at these seminaries, and will any one pretend to assert that the majority, making every allowance, come under the description of tolerable scholars?

It is not for the benefit of society that a few brilliant men should be brought forward at the expense of the multitude. It is true, that great men seem to start up, as great revolutions occur, at proper intervals, to restore order, and to blow aside the clouds that thicken over the face of truth; but let more reason and virtue prevail in society, and these strong winds would not be necessary. Public education, of every denomination, should be directed to form citizens; but if you wish to make good citizens, you must first exercise the affections of a son and a brother. This is the only way to expand the heart; for public affections, as well as public virtues, must ever grow out of the private character, or they are merely meteors that shoot athwart a dark sky and disappear as they are gazed at and admired.

Few, I believe, have had much affection for mankind, who did not first love their parents, their brothers, sisters, and even the domestic brutes, whom they first played with. The exercise of youthful sympathies forms the moral temperature; and it is the recollection of these first affections and pursuits that gives life to those that are afterwards more under the direction of reason. In youth, the fondest friendships are formed, the genial juices mounting at the same time, kindly mix; or, rather the heart, tempered for the reception of friendship, is accustomed to seek for pleasure in something more noble than the churlish gratification of appetite.

In order then to inspire a love of home and domestic pleasures, children ought to be educated at home, for riotous holidays only make them fond of home for their own sakes. Yet, the vacations, which do not foster domestic affections, continually disturb the course of study, and render any plan of improvement abortive which includes temperance; still, were they abolished, children would be entirely separated from their parents, and I question whether they would become better citizens by sacrificing the preparatory affections, by destroying the force of relationships that render the marriage stateas necessary as respectable. But, if a private education produces self-importance, or insulates a man in his family, the evil is only shifted, not remedied.

This train of reasoning brings me back to a subject, on which I mean to dwell, the necessity of establishing proper day schools.

But, these should be national establishments, for whilst school-masters are dependent on the caprice of parents, little exertion can be expected from them, more than is necessary to please ignorant people. Indeed, the necessity of a master's giving the parents some sample of the boys abilities, which during the vacation is shewn to every visitor,[1] is productive of more mischief than would at first be supposed. For they are seldom done entirely, to speak with moderation, by the child itself; thus the master countenances falsehood, or winds the poor machine up to some extraordinary exertion, that injures the wheels, and stops the progress of gradual improvement. The memory is loaded with unintelligible words, to make a shew of, without the understanding's acquiring any distinct ideas: but only that education deserves emphatically to be termed cultivation of mind, which teaches young people how to begin to think. The imagination should not be allowed to debauch the understanding before it gained strength, or vanity will become the forerunner of vice: for every way of exhibiting the acquirements of a child is injurious to its moral character.

How much time is lost in teaching them to recite what they do not understand? whilst seated on benches, all in their best array, the mammas listen with astonishment to the parrot like prattle, uttered in solemn cadences, with all the pomp of ignorance and folly. Such exhibitions only serve to strike the spreading fibres of vanity through the whole mind; for they neither teach children to speak fluently, nor behave gracefully. So far from it, that these frivolous pursuits might comprehensively be termed the study of affectation; for we now rarely see a simple, bashful boy, though few people of taste were ever disgusted by that awkward sheepishness so natural to the age, which schools and an early introduction into society, have changed into impudence and apish grimace.

Yet, how can these things be remedied whilst school masters depend entirely on parents for a subsistence; and when so many rival schools hang out their lures, to catch the attention of vain fathers and mothers, whose parental affection only leads them to wish that their children should outshine those of their neighbours?

Without great good luck, a sensible, conscientious man, would starve before he could raise a school, if he disdained to bubble weak parents by practising the secret tricks of the craft.

In the best regulated schools, however, where swarms are not crammed together, many bad habits must be acquired; but, at common schools, the body, heart, and understanding, are equally stunted, for parents are often only in quest of the cheapest school, and the master could not live, if he did not take a much greater number than he could manage himself; nor will the scanty pittance, allowed for each child, permit him to hire ushers sufficient to assist in the discharge of the mechanical part of the business. Besides, whatever appearance the house and garden may make, the children do not enjoy the

comfort of either, for they are continually reminded by irksome restrictions that they are not at home, and the state-rooms, garden, &c. must be kept in order for the recreation of the parents; who, of a Sunday, visit the school, and are impressed by the very parade that renders the situation of their children uncomfortable.

With what disgust have I heard sensible women, for girls are more restrained and cowed than boys, speak of the wearisome confinement, which they endured at school. Not allowed, perhaps, to step out of one broad walk in a superb garden, and obliged to pace with steady deportment stupidly backwards and forwards, holding up their heads and turning out their toes, with shoulders braced back, instead of bounding, as nature directs to complete her own design, in the various attitudes so conducive to health.[2] The pure animal spirits, which make both mind and body shoot out, and unfold the tender blossoms of hope, are turned sour, and vented in vain wishes, or pert repinings, that contract the faculties and spoil the temper; else they mount to the brain, and sharpening the understanding before it gains proportionable strength, produce that pitiful cunning which disgracefully characterizes the female mind – and I fear will ever characterize it whilst women remain the slaves of power!

The little respect which the male world pay to chastity is, I am persuaded, the grand source of many of the physical and moral evils that torment mankind, as well as of the vices and follies that degrade and destroy women; yet at school, boys infallibly lose that decent bashfulness, which might have ripened into modesty, at home.

And what nasty indecent tricks do they also learn from each other, when a number of them pig together in the same bedchamber, not to speak of the vices, which render the body weak whilst they effectually prevent the acquisition of any delicacy of mind. The little attention paid to the cultivation of modesty, amongst men, produces great depravity in all the relationships of society; for, not only love – love that ought to purify the heart, and first call forth all the youthful powers, to prepare the man to discharge the benevolent duties of life, is sacrificed to premature lust; but, all the social affections are deadened by the selfish gratifications, which very early pollute the mind, and dry up the generous juices of the heart. In what an unnatural manner is innocence often violated; and what serious consequences ensue to render private vices a public pest. Besides, an habit of personal order, which has more effect on the moral character, than is, in general, supposed, can only be acquired at home, where that respectable reserve is kept up which checks the familiarity, that sinking into beastliness, undermines the affection it insults.

I have already animadverted on the bad habits which females acquire when they are shut up together; and, I think, that the observation may fairly be extended to the other sex, till the natural inference is drawn which I have had in view throughout – that to improve both sexes they ought, not only in private families, but in public schools, to be educated together. If marriage be the cement of society, mankind should all be educated after the same model,

or the intercourse of the sexes will never deserve the name of fellowship, nor will women ever fulfil the peculiar duties of their sex, till they become enlightened citizens, till they become free by being enabled to earn their own subsistence, independent of men; in the same manner, I mean, to prevent misconstruction, as one man is independent of another. Nay, marriage will never be held sacred till women, by being brought up with men, are prepared to be their companions rather than their mistresses; for the mean doublings of cunning will ever render them contemptible, whilst oppression renders them timid. So convinced am I of this truth, that I will venture to predict that virtue will never prevail in society till the virtues of both sexes are founded on reason; and, till the affections common to both are allowed to gain their due strength by the discharge of mutual duties.

Were boys and girls permitted to pursue the same studies together, those graceful decencies might early be inculcated which produce modesty without those sexual distinctions that taint the mind. Lessons of politeness, and that formulary of decorum, which treads on the heels of falsehood, would be rendered useless by habitual propriety of behaviour. Not indeed, put on for visitors like the courtly robe of politeness, but the sober effect of cleanliness of mind. Would not this simple elegance of sincerity be a chaste homage paid to domestic affections, far surpassing the meretricious compliments that shine with false lustre in the heartless intercourse of fashionable life? But, till more understanding preponderate in society, there will ever be a want of heart and taste, and the harlot's rouge will supply the place of that celestial suffusion which only virtuous affections can give to the face. Gallantry, and what is called love, may subsist without simplicity of character; but the main pillars of friendship, are respect and confidence – esteem is never founded on it cannot tell what!

A taste for the fine arts requires great cultivation; but not more than a taste for the virtuous affections; and both suppose that enlargement of mind which opens so many sources of mental pleasure. Why do people hurry to noisy scenes, and crowded circles? I should answer, because they want activity of mind, because they have not cherished the virtues of the heart. They only, therefore, see and feel in the gross, and continually pine after variety, finding every thing that is simple insipid.

This argument may be carried further than philosophers are aware of, for if nature destined woman, in particular, for the discharge of domestic duties, she made her susceptible of the attached affections in a great degree. Now women are notoriously fond of pleasure; and, naturally must be so according to my definition, because they cannot enter into the minutiæ of domestic taste; lacking judgment, the foundation of all taste. For the understanding, in spite of sensual cavillers, reserves to itself the privilege of conveying pure joy to the heart.

With what a languid yawn have I seen an admirable poem thrown down, that a man of true taste returns to, again and again with rapture; and, whilst melody has almost suspended respiration, a lady has asked me where I bought

my gown. I have seen also an eye glanced coldly over a most exquisite picture, rest, sparkling with pleasure, on a caricature rudely sketched; and whilst some terrific feature in nature has spread a sublime stillness through my soul, I have been desired to observe the pretty tricks of a lap-dog, that my perverse fate forced me to travel with. Is it surprising that such a tasteless being should rather caress this dog than her children? Or, that she should prefer the rant of flattery to the simple accents of sincerity?

To illustrate this remark I must be allowed to observe, that men of the first genius and most cultivated minds, have appeared to have the highest relish for the simple beauties of nature; and they must have forcibly felt, what they have so well described, the charm, which natural affections, and unsophisticated feelings spread round the human character. It is this power of looking into the heart, and responsively vibrating with each emotion, that enables the poet to personify each passion, and the painter to sketch with a pencil of fire.

True taste is ever the work of the understanding employed in observing natural effects; and till women have more understanding, it is vain to expect them to possess domestic taste. Their lively senses will ever be at work to harden their hearts, and the emotions struck out of them will continue to be vivid and transitory, unless a proper education store their mind with knowledge.

It is the want of domestic taste, and not the acquirement of knowledge, that takes women out of their families, and tears the smiling babe from the breast that ought to afford it nourishment. Women have been allowed to remain in ignorance, and slavish dependence, many, very many years, and still we hear of nothing but their fondness of pleasure and sway, their preference of rakes and soldiers, their childish attachment to toys, and the vanity that makes them value accomplishments more than virtues.

History brings forward a fearful catalogue of the crimes which their cunning has produced, when the weak slaves have had sufficient address to overreach their masters. In France, and in how many other countries, have men been the luxurious despots, and women the crafty ministers? – Does this prove that ignorance and dependence domesticate them? Is not their folly the by-word of the libertines, who relax in their society; and do not men of sense continually lament that an immoderate fondness for dress and dissipation carries the mother of a family for ever from home. Their hearts have not been debauched by knowledge, nor their minds led away by scientific pursuits; yet, they do not fulfil the peculiar duties which as women they are called upon by nature to fulfil. On the contrary, the state of warfare which subsists between the sexes, makes them employ those wiles, that frustrate the more open designs of force.

When, therefore, I call women slaves, I mean in a political and civil sense; for indirectly they obtain too much power, and are debased by their exertions to obtain illicit sway.

Let an enlightened nation[1] then try what effect reason would have to bring them back to nature, and their duty; and allowing them to share the advantages of education and government with man, see whether they will

become better, as they grow wiser and become free. They cannot be injured by the experiment; for it is not in the power of man to render them more insignificant than they are at present.

To render this practicable, day schools, for particular ages, should be established by government, in which boys and girls might be educated together. The school for the younger children, from five to nine years of age, ought to be absolutely free and open to all classes.[1] A sufficient number of masters should also be chosen by a select committee, in each parish, to whom any complaint of negligence, &c. might be made, if signed by six of the children's parents.

Ushers would then be unnecessary; for I believe experience will ever prove that this kind of subordinate authority is particularly injurious to the morals of youth. What, indeed, can tend to deprave the character more than outward submission and inward contempt? Yet how can boys be expected to treat an usher with respect, when the master seems to consider him in the light of a servant, and almost to countenance the ridicule which becomes the chief amusement of the boys during the play hours.

But nothing of this kind could occur in an elementary day school, where boys and girls, the rich and poor, should meet together. And to prevent any of the distinctions of vanity, they should be dressed alike, and all obliged to submit to the same discipline, or leave the school. The school-room ought to be surrounded by a large piece of ground, in which the children might be usefully exercised, for at this age they should not be confined to any sedentary employment for more than an hour at a time. But these relaxations might all be rendered a part of elementary education, for many things improve and amuse the senses, when introduced as a kind of show, to the principles of which, dryly laid down, children would turn a deaf ear. For instance, botany, mechanics, and astronomy. Reading, writing, arithmetic, natural history, and some simple experiments in natural philosophy, might fill up the day; but these pursuits should never encroach on gymnastic plays in the open air. The elements of religion, history, the history of man, and politics, might also be taught, by conversations, in the socratic form.

After the age of nine, girls and boys, intended for domestic employments, or mechanical trades, ought to be removed to other schools, and receive instruction, in some measure appropriated to the destination of each individual, the two sexes being still together in the morning; but in the afternoon, the girls should attend a school, where plain-work, mantua-making, millinery, &c. would be their employment.

The young people of superiour abilities, or fortune, might now be taught, in another school, the dead and living languages, the elements of science, and continue the study of history and politics, on a more extensive scale, which would not exclude polite literature.

Girls and boys still together? I hear some readers ask: yes. And I should not fear any other consequence than that some early attachment might take place; which, whilst it had the best effect on the moral character of the young people, might not perfectly agree with the views of the parents, for it will be

a long time, I fear, before the world is so far enlightened that parents, only anxious to render their children virtuous, will let them choose companions for life themselves.

Besides, this would be a sure way to promote early marriages, and from early marriages the most salutary physical and moral effects naturally flow. What a different character does a married citizen assume from the selfish coxcomb, who lives, but for himself, and who is often afraid to marry lest he should not be able to live in a certain style. Great emergencies excepted, which would rarely occur in a society of which equality was the basis, a man could only be prepared to discharge the duties of public life, by the habitual practice of those inferiour ones which form the man.

In this plan of education the constitution of boys would not be ruined by the early debaucheries, which now makes men so selfish, nor girls rendered weak and vain, by indolence, and frivolous pursuits. But, I presuppose, that such a degree of equality should be established between the sexes as would shut out gallantry and coquetry, yet allow friendship and love to temper the heart for the discharge of higher duties.

These would be schools of morality – and the happiness of man, allowed to flow from the pure springs of duty and affection, what advances might not the human mind make? Society can only be happy and free in proportion as it is virtuous; but the present distinctions, established in society, corrode all private, and blast all public virtue.

I have already inveighed against the custom of confining girls to their needle, and shutting them out from all political and civil employments; for by thus narrowing their minds they are rendered unfit to fulfil the peculiar duties which nature has assigned them.

Only employed about the little incidents of the day, they necessarily grow up cunning. My very soul has often sickened at observing the sly tricks practised by women to gain some foolish thing on which their silly hearts were set. Not allowed to dispose of money, or call any thing their own, they learn to turn the market penny; or, should a husband offend, by staying from home, or give rise to some emotions of jealousy – a new gown, or any pretty bauble, smooths Juno's angry brow.

But these *littlenesses* would not degrade their character, if women were led to respect themselves, if political and moral subjects were opened to them; and, I will venture to affirm, that this is the only way to make them properly attentive to their domestic duties. – An active mind embraces the whole circle of its duties, and finds time enough for all. It is not, I assert, a bold attempt to emulate masculine virtues; it is not the enchantment of literary pursuits, or the steady investigation of scientific subjects, that lead women astray from duty. No, it is indolence and vanity – the love of pleasure and the love of sway, that will rain paramount in an empty mind. I say empty emphatically, because the education which women now receive scarcely deserves the name. For the little knowledge that they are led to acquire, during the important years of youth, is merely relative to accomplishments; and accomplishments

without a bottom, for unless the understanding be cultivated, superficial and monotonous is every grace. Like the charms of a made up face, they only strike the senses in a crowd; but at home, wanting mind, they want variety. The consequence is obvious; in gay scenes of dissipation we meet the artificial mind and face, for those who fly from solitude dread, next to solitude, the domestic circle; not having it in their power to amuse or interest, they feel their own insignificance, or find nothing to amuse or interest themselves.

Besides, what can be more indelicate than a girl's *coming out* in the fashionable world? Which, in other words, is to bring to market a marriageable miss, whose person is taken from one public place to another, richly caparisoned. Yet, mixing in the giddy circle under restraint, these butterflies long to flutter at large, for the first affection of their souls is their own persons, to which their attention has been called with the most sedulous care whilst they were preparing for the period that decides their fate for life. Instead of pursuing this idle routine, fighting for tasteless shew, and heartless state, with what dignity would the youths of both sexes form attachments in the schools that I have cursorily pointed out; in which, as life advanced, dancing, music, and drawing, might be admitted as relaxations, for at these schools young people of fortune ought to remain, more or less, till they were of age. Those, who were designed for particular professions, might attend, three or four mornings in the week, the schools appropriated for their immediate instruction.

I only drop these observations at present, as hints; rather, indeed, as an outline of the plan I mean, than a digested one; but I must add, that I highly approve of one regulation mentioned in the pamphlet[4] already alluded to, that of making the children and youths independent of the masters respecting punishments. They should be tried by their peers, which would be an admirable method of fixing sound principles of justice in the mind, and might have the happiest effect on the temper, which is very early soured or irritated by tyranny, till it becomes peevishly cunning, or ferociously overbearing.

My imagination darts forward with benevolent fervour to greet these amiable and respectable groups, in spite of the sneering of cold hearts, who are at liberty to utter, with frigid self-importance, the damning epithet – romantic; the force of which I shall endeavour to blunt by repeating the words of an eloquent moralist. – 'I know not whether the allusions of a truly humane heart, whose zeal renders every thing easy, be not preferable to that rough and repulsing reason, which always finds an indifference for the public good, the first obstacle to whatever would promote it.'

I know that libertines will also exclaim, that woman would be unsexed by acquiring strength of body and mind, and that beauty, soft bewitching beauty! would no longer adorn the daughters of men! I am of a very different opinion, for I think that, on the contrary, we should then see dignified beauty, and true grace; to produce which, many powerful physical and moral causes would concur. – Not relaxed beauty, it is true, or the graces of helplessness; but such as appears to make us respect the human body as a majestic pile fit to receive a noble inhabitant, in the relics of antiquity.

I do not forget the popular opinion that the Grecian statues were not modelled after nature. I mean, not according to the proportions of a particular man; but that beautiful limbs and features were selected from various bodies to form an harmonious whole. This might, in some degree, be true. The fine ideal picture of an exalted imagination might be superiour to the materials which the painter found in nature, and thus it might with propriety be termed rather the model of mankind than of a man. It was not, however, the mechanical selection of limbs and features; but the ebullition of an heated fancy that burst forth, and the fine senses and enlarged understanding of the artist selected the solid matter, which he drew into this glowing focus.

I observed that it was not mechanical, because a whole was produced – a model of that grand simplicity, of those concurring energies, which arrest our attention and command our reverence. For only insipid lifeless beauty is produced by a servile copy of even beautiful nature. Yet, independent of these observations, I believe that the human form must have been far more beautiful than it is at present, because extreme indolence, barbarous ligatures, and many causes, which forcibly act on it, in our luxurious state of society, did not retard its expansion, or render it deformed. Exercise and cleanliness appear to be not only the surest means of preserving health, but of promoting beauty, the physical causes only considered; yet, this is not sufficient, moral ones must concur, or beauty will be merely of that rustic kind which blooms on the innocent, wholesome, countenances of some country people, whose minds have not been exercised. To render the person perfect, physical and moral beauty ought to be attained at the same time; each lending and receiving force by the combination. Judgment must reside on the brow, affection and fancy beam in the eye, and humanity curve the cheek, or vain is the sparkling of the finest eye or the elegantly turned finish of the fairest features: whilst in every motion that displays the active limbs and well-knit joints, grace and modesty should appear. But this fair assemblage is not to be brought together by chance; it is the reward of exertions met to support each other; for judgment can only be acquired by reflection, affection by the discharge of duties, and humanity by the exercise of compassion to every living creature.

Humanity to animals should be particularly inculcated as a part of national education, for it is not at present one of our national virtues. Tenderness for their humble dumb domestics, amongst the lower class, is oftener to be found in a savage than a civilized state. For civilization prevents that intercourse which creates affection in the rude hut, or mud cabin, and leads uncultivated minds who are only depraved by the refinements which prevail in the society, where they are trodden under foot by the rich, to domineer over them to revenge the insults that they are obliged to bear from their superiours.

This habitual cruelty is first caught at school, where it is one of the rare sports of the boys to torment the miserable brutes that fall in their way. The transition, as they grow up, from barbarity to brutes to domestic tyranny over wives, children, and servants, is very easy. Justice, or even benevolence,

will not be a powerful spring of action unless it be extended to the whole creation; nay, I believe that it may be delivered as an axiom, that those who can see pain, unmoved, will soon learn to inflict it.

The vulgar are swayed by present feelings, and the habits which they have accidentally acquired; but on partial feelings much dependence cannot be placed, though they be just; for, when they are not invigorated by reflection, custom weakens them, till they are scarcely felt. The sympathies of our nature are strengthened by pondering cogitations, and deadened by thoughtless use. Macbeth's heart smote him more for one murder, the first, than for a hundred subsequent ones, which were necessary to back it. But, when I used the epithet vulgar, I did not mean to confine my remark to the poor; for partial humanity, founded on present sensations, or whim, is quite as conspicuous, if not more so, amongst the rich.

The lady who sheds tears for the bird starved in a snare, and execrates the devils in the shape of men, who goad to madness the poor ox, or whip the patient ass, tottering under a burden above its strength, will, nevertheless, keep her coachman and horses whole hours waiting for her, when the sharp frost bites, or the rain beats against the well-closed windows which do not admit a breath of air to tell her how roughly the wind blows without. And she who takes her dogs to bed, and nurses them, with a parade of sensibility, when sick, will suffer her babes to grow up crooked in a nursery. This illustration of my argument is drawn from a matter of fact. The woman whom I allude to was handsome, reckoned very handsome, by those who do not miss the mind when the face is plump and fair; but her understanding had not been led from female duties by literature, nor her innocence debauched by knowledge. No, she was quite feminine, according to the masculine acceptation of the word; and, so far from loving these spoiled brutes that filled the place which her children ought to have occupied, she only lisped out a pretty mixture of French and English nonsense, to please the men who flocked round her. The wife, mother, and human creature, were all swallowed up by the factitious character which an improper education and the selfish vanity of beauty had produced.

I do not like to make a distinction without a difference, and I own that I have been as much disgusted by the fine lady who took her lap-dog to her bosom instead of her child; as by the ferocity of a man, who, beating his horse, declared, that he knew as well when he did wrong, as a Christian.

This brood of folly shews how mistaken they are who, if they allow women to leave their harams, do not cultivate their understandings, in order to plant virtues in their hearts. For had they sense, they might acquire that domestic taste which would lead them to love with reasonable subordination their whole family, from their husband to the house-dog; nor would they ever insult humanity in the person of the most menial servant by paying more attention to the comfort of a brute, than to that of a fellow-creature.

My observations on national education are obviously hints; but I principally wish to enforce the necessity of educating the sexes together to

perfect both, and of making children sleep at home that they may learn to love home; yet to make private support, instead of smothering, public affections, they should be sent to school to mix with a number of equals, for only by the jostlings of equality can we form a just opinion of ourselves.

To render mankind more virtuous, and happier of course, both sexes must act from the same principle; but how can that be expected when only one is allowed to see the reasonableness of it? To render also the social compact truly equitable, and in order to spread those enlightening principles, which alone can meliorate the fate of man, women must be allowed to found their virtue on knowledge, which is scarcely possible unless they be educated by the same pursuits as men. For they are now made so inferiour by ignorance and low desires, as not to deserve to be ranked with them; or, by the serpentine wrigglings of cunning they mount the tree of knowledge, and only acquire sufficient to lead men astray.

It is plain from the history of all nations, that women cannot be confined to merely domestic pursuits, for they will not fulfil family duties, unless their minds take a wider range, and whilst they are kept in ignorance they become in the same proportion the slaves of pleasure as they are the slaves of man. Nor can they be shut out of great enterprises, though the narrowness of their minds often make them *mar*, what they are unable to comprehend.

The libertinism, and even the virtues of superiour men, will always give women, of some description, great power over them; and these weak women, under the influence of childish passions and selfish vanity, will throw a false light over the objects which the very men view with their eyes, who ought to enlighten their judgment. Men of fancy, and those sanguine characters who mostly hold the helm of human affairs, in general, relax in the society of women; and surely I need not cite to the most superficial reader of history the numerous examples of vice and oppression which the private intrigues of female favourites have produced; not to dwell on the mischief that naturally arises from the blundering interposition of well-meaning folly. For in the transactions of business it is much better to have to deal with a knave than a fool, because a knave adheres to some plan; and any plan of reason may be seen through much sooner than a sudden flight of folly. The power which vile and foolish women have had over wise men, who possessed sensibility, is notorious; I shall only mention one instance.

Who ever drew a more exalted female character than Rousseau? though in the lump he constantly endeavoured to degrade the sex. And why was he thus anxious? Truly to justify to himself the affection which weakness and virtue had made him cherish for that fool Theresa. He could not raise her to the common level of her sex; and therefore he laboured to bring woman down to her's. He found her a convenient humble companion, and pride made him determine to find some superiour virtues in the being whom he chose to live with; but did not her conduct during his life, and after his death, clearly shew how grossly he was mistaken who called her a celestial innocent. Nay, in the bitterness of his heart, he himself laments, that when his bodily

infirmities made him no longer treat her like a woman, she ceased to have an affection for him. And it was very natural that she should, for having so few sentiments in common, when the sexual tie was broken, what was to hold her? To hold her affection whose sensibility was confined to one sex, nay, to one man, it requires sense to turn sensibility into the broad channel of humanity; many women have not mind enough to have an affection for a woman, or a friendship for a man. But the sexual weakness that makes woman depend on a man for a subsistence, produces a kind of catfish affection, which leads a wife to purr about her husband as she would about any man who fed and caressed her.

Men are, however, often gratified by this kind of fondness, which is confined in a beastly manner to themselves; but should they ever become more virtuous, they will wish to converse at their fire-side with a friend, after they cease to play with a mistress.

Besides, understanding is necessary to give variety and interest to sensual enjoyments, for low, indeed, in the intellectual scale, is the mind that can continue to love when neither virtue nor sense give a human appearance to an animal appetite. But sense will always preponderate; and if women are not, in general, brought more on a level with men, some superiour women, like the Greek courtezans, will assemble the men of abilities around them, and draw from their families many citizens, who would have stayed at home had their wives had more sense, or the graces which result from the exercise of the understanding and fancy, the legitimate parents of taste. A woman of talents, if she be not absolutely ugly, will always obtain great power, raised by the weakness of her sex; and in proportion as men acquire virtue and delicacy, by the exertion of reason, they will look for both in women, but they can only acquire them in the same way that men do.

In France or Italy, have the women confined themselves to domestic life? though they have not hitherto had a political existence, yet, have they not illicitly had great sway? corrupting themselves and the men with whose passions they played. In short, in whatever light I view the subject, reason and experience convince me that the only method of leading women to fulfil their peculiar duties, is to free them from all restraint by allowing them to participate the inherent rights of mankind.

Make them free, and they will quickly become wise and virtuous, as men become more so; for the improvement must be mutual, or the injustice which one half of the human race are obliged to submit to, retorting on their oppressors, the virtue of man will be worm-eaten by the insect whom he keeps under his feet.

Let men take their choice, man and woman were made for each other, though not to become one being; and if they will not improve women, they will deprave them!

I speak of the improvement and emancipation of the whole sex, for I know that the behaviour of a few women, who, by accident, or following a strong bent of nature, have acquired a portion of knowledge superiour to

that of the rest of their sex, has often been overbearing; but there have been instances of women who, attaining knowledge, have not discarded modesty, nor have they always pedantically appeared to despise the ignorance which they laboured to disperse in their own minds. The exclamations then which any advice respecting female learning, commonly produces, especially from pretty women, often arise from envy. When they chance to see that even the lustre of their eyes, and the flippant sportiveness of refined coquetry will not always secure them attention, during a whole evening, should a woman of a more cultivated understanding endeavour to give a rational turn to the conversation, the common source of consolation is, that such women seldom get husbands. What arts have I not seen silly women use to interrupt by *flirtation*, a very significant word to describe such a manoeuvre, a rational conversation, which made the men forget that they were pretty women.

But, allowing what is very natural to man, that the possession of rare abilities is really calculated to excite over-weening pride, disgusting in both men and women – in what a state of inferiority must the female faculties have rusted when such a small portion of knowledge as those women attained, who have sneeringly been termed learned women, could be singular? – Sufficiently so to puff up the possessor, and excite envy in her contemporaries, and some of the other sex. Nay, has not a little rationality exposed many women to the severest censure? I advert to well known facts, for I have frequently heard women ridiculed, and every little weakness exposed, only because they adopted the advice of some medical men, and deviated from the beaten track in their mode of treating their infants. I have actually heard this barbarous aversion to innovation carried still further, and a sensible woman stigmatized as an unnatural mother, who has thus been wisely solicitous to preserve the health of her children, when in the midst of her care she has lost one by some of the casualties of infancy, which no prudence can ward off. Her acquaintance have observed, that this was the consequence of new-fangled notions – the new-fangled notions of ease and cleanliness. And those who pretending to experience, though they have long adhered to prejudices that have, according to the opinion of the most sagacious physicians, thinned the human race, almost rejoiced at the disaster that gave a kind of sanction to prescription.

Indeed, if it were only on this account, the national education of women is of the utmost consequence, for what a number of human sacrifices are made to that moloch prejudice! And in how many ways are children destroyed by the lasciviousness of man? The want of natural affection, in many women, who are drawn from their duty by the admiration of men, and the ignorance of others, render the infancy of man a much more perilous state than that of brutes; yet men are unwilling to place women in situations proper to enable them to acquire sufficient understanding to know how even to nurse their babes.

So forcibly does this truth strike me, that I would rest the whole tendency of my reasoning upon it, for whatever tends to incapacitate the maternal character, takes woman out of her sphere.

But it is vain to expect the present race of weak mothers either to take that reasonable care of a child's body, which is necessary to lay the foundation of a good constitution, supposing that it do not suffer for the sins of its fathers; or, to manage its temper so judiciously that the child will not have, as it grows up, to throw off all that its mother, its first instructor, directly or indirectly taught; and unless the mind have uncommon vigour, womanish follies will stick to the character throughout life. The weakness of the mother will be visited on the children! And whilst women are educated to rely on their husbands for judgment, this must ever be the consequence, for there is no improving an understanding by halves, nor can any being act wisely from imitation, because in every circumstance of life there is a kind of individuality, which requires an exertion of judgment to modify general rules. The being who can think justly in one track, will soon extend its intellectual empire; and she who has sufficient judgment to manage her children, will not submit, right or wrong, to her husband, or patiently to the social laws which make a nonentity of a wife.

In public schools women, to guard against the errors of ignorance, should be taught the elements of anatomy and medicine, not only to enable them to take proper care of their own health, but to make them rational nurses of their infants, parents, and husbands; for the bills of mortality are swelled by the blunders of self-willed old women, who give nostrums of their own without knowing any thing of the human frame. It is likewise proper, only in a domestic view, to make women acquainted with the anatomy of the mind, by allowing the sexes to associate together in every pursuit; and by leading them to observe the progress of the human understanding in the improvement of the sciences and arts; never forgetting the science of morality, nor the study of the political history of mankind.

A man has been termed a microcosm, and every family might also be called a state. States, it is true, have mostly been governed by arts that disgrace the character of man; and the want of a just constitution, and equal laws, have so perplexed the notions of the worldly wise, that they more than question the reasonableness of contending for the rights of humanity. Thus morality, polluted in the national reservoir, sends off streams of vice to corrupt the constituent parts of the body politic; but should more noble, or rather, more just principles regulate the laws, which ought to be the government of society, and not those who execute them, duty might become the rule of private conduct.

Besides, by the exercise of their bodies and minds women would acquire that mental activity so necessary in the maternal character, united with the fortitude that distinguishes steadiness of conduct from the obstinate perverseness of weakness. For it is dangerous to advise the indolent to be steady, because they instantly become rigorous, and to save themselves trouble, punish with severity faults that the patient fortitude of reason might have prevented.

But fortitude presupposes strength of mind; and is strength of mind to be acquired by indolent acquiescence? by asking advice instead of exerting the

judgment? by obeying through fear, instead of practising the forbearance, which we all stand in need of ourselves? – The conclusion which I wish to draw, is obvious; make women rational creatures, and free citizens, and they will quickly become good wives, and mothers; that is – if men do not neglect the duties of husbands and fathers.

Discussing the advantages which a public and private education combined, as I have sketched, might rationally be expected to produce, I have dwelt most on such as are particularly relative to the female world, because I think the female world oppressed; yet the gangrene, which the vices engendered by oppression have produced, is not confined to the morbid part, but pervades society at large: so that when I wish to see my sex become more like moral agents, my heart bounds with the anticipation of the general diffusion of that sublime contentment which only morality can diffuse.

Notes

1. I now particularly allude to the numerous academies in, and about London, and to the behaviour of the trading part of this great city.
2. I remember a circumstance that once came under my own observation, and raised my indignation. I went to visit a little boy at a school where young children were prepared for a larger one. The master took me into the school-room, &c. but whilst I walked down a broad gravel walk, I could not help observing that the grass grew very luxuriantly on each side of me. I immediately asked the child some questions, and found that the poor boys were not allowed to stir off the walk, and that the master sometimes permitted sheep to be turned in to crop the untrodden grass. The tyrant of this domain used to sit by a window that overlooked the prison yard, and one nook turning from it, where the unfortunate babes could sport freely, he enclosed, and planted it with potatoes. The wife likewise was equally anxious to keep the children in order, lest they should dirty or tear their clothes.
3. France.
4. Treating this part of the subject, I have borrowed some hints from a very sensible pamphlet, written by the late bishop of Autun on Public Education.
5. The Bishop of Autun's.

15

Brief Encyclopaedia of Practical Philosophy

Johann Friedrich Herbart

Chapter XII. – On Education. *103.* . . . Even for an adult it is not always easy to acquire and maintain a desirable attitude toward the problems of life. All the more one has to refrain from demanding indiscriminatingly that the teacher impart to his pupil the right attitude for the rest of his life. . . .

The simple duty of the teacher at any moment of his work is to preserve his pupil's natural vigor. To create or transform the personality is beyond the teacher's power; but what he can do and what we may demand from him is to ward off dangers from his pupil and to abstain from ill-handling him.

104. To this vigor belongs particularly the natural cheerfulness of youth; but man from his youth onward must voluntarily accept restrictions, particularly as he has to live a communal life. Hence, first: Children must learn to obey. Their natural exuberance must meet enough resistance to avert offense.

Immediately we meet a new difficulty. The easy means for a child not to offend his parents or teachers is concealment and lying!

To cut the knot some teachers assume at once that children always lie if they can. Hence they have to be so closely supervised and watched, and kept so busy from morning to evening that they have no time for trickery. There is some truth in this, but if it is carried out with too much harshness and exactness one may fail in the first fundamental postulate we have set up, that children's vigor must be preserved! For this they need freedom! Those teachers who restrict freedom to such a degree that all the children's actions are calculated to please the observer, educate babies. Such creatures will have to learn how to use their powers when they are grown up, – and in spite of all their endeavors they will remain timid, helpless, and inferior to free personalities, until eventually they will try to compensate in whatever way they can.

Source: Johann Friedrich Herbart, *Three Thousand Years of Educational Wisdom* (Cambridge: Harvard University Press, 1947), pp. 508–517.

Consequently, as such a restricting form of education is dangerous something better must be combined with supervision and occupation.

One says rightly that well bred children have not the heart to deceive their father and mother. Why not? They are used to rely on truth and confidence. This, then becomes the key-note of their lives. Thus we have the third pedagogical postulate. Children must be accustomed to satisfy the need for confidential communication not only among themselves but also in relation to their teacher. Otherwise they will never learn to detest lying. If this attitude is deeply rooted then they will betray occasional lies immediately by showing shame. Only if such conditions prevail the teacher may Remand complete sincerity, otherwise this demand only enhances the child's disposition to lie.

105. All this can be summarized in the following words: in spite of a certain severity in your guidance, lead the children into a situation which they like and which invites them to be free and confident.

This is the supreme demand in education; all the rest, whatever one may call it, is only of secondary and tertiary importance; all instruction from the elements of learning to the highest level of scholarship should tend to this. Hence those schools, whose main function is merely teaching and learning cannot be considered as serving education in the deepest sense of the word. They are only of assisting value, and this only for such families as have already fulfilled the educational postulates mentioned above. . . .

. . . . .

It follows that education in order to have a permanent effect must try to use instruction not only for mere information but also for the formation of character.

. . . . .

But the hope which some educators base on instruction has not much more chance to be realized than the hope based on government. It requires a great deal to raise knowledge to the level of erudition: it is a still more difficult task to combine the imparting of knowledge with the formation of character. To achieve this purpose knowledge must be deeply felt and experienced; in other words the mere quantity of knowledge and the logical and practical training in notions, maxims and principles must affect the whole emotional attitude of a person. One may show how instruction has to proceed to produce such an effect. (I have shown this in my *Science of Education.*) The degree of success, however, depends largely on the pupil's individuality.

Only teachers of much experience can imagine how rapidly even carefully implanted and cultivated knowledge vanishes under new conditions. They only can believe how easily new opinions and ambitions emerge and how irresistibly a person is attracted by temptations which appeal to his nature – in spite of all previous precautions. Even superficial experience teaches us that the results of an examination are valid only for the day when it is held. . . . Such facts, however, are easily explained through reference to the continual flow of ideas (apperceptive masses) in our mind. Those, who consider

the human soul as a fixed and concrete object, will never understand the mutability of the human character; they will easily resort to false remedies which only aggravate the evil.

106. These facts would reduce to naught the educational value of instruction . . . if we had not to consider an additional factor. Most people are not independent enough to set their own standards; living among their friends and their occupation they need and meet natural leaders whose standards they accept. Thus there emerge in society certain dominant opinions and codes of honor and each individual tries to live up to them, according to his abilities.

Now it is exactly schooling which decides to what level of society an individual belongs. . . . Thus the character of social more than the character of individual life explains the decisive influence and role of knowledge, and the evil or good, confusing or unifying effects of schools and authors.

107. Those, however, who have no true psychological insight, rarely understand anything of education. They may cherish the obsolete opinion that there reside in the human soul certain powers or faculties which have to be trained in one way or another. These people seemingly have in mind gymnastic exercises which strengthen the muscles, for man has only one kind of muscles. Indeed in each single apperceptive mass (mass or group of ideas) are contained so-called fantasy, memory and intelligence, but they are not equally distributed. Rather in one and the same person a certain mass of apperceptions may be of more intellectual, imaginative or of reproductive character; one mass may be penetrated with profound feeling, another with an atmosphere of coolness etc. Therefore what educators call formal discipline (Formelle Bildung) would be an absurdity if it meant the training of isolated mental faculties which exist only in some people's imagination.[1] But often one mass of ideas supports another one according to the general laws of reproduction.

. . . . .

[After Latin has been taught] the general rule in our schools is to teach French or Greek. This sequence is supposed to be the easiest, since Latin – so one boasts – has already provided the necessary formal discipline. But what would have happened if first French and Greek had been taught and Latin afterwards? Then, so it is said, the formal discipline would have started with French or Greek and then carried over to Latin. And this way, one asserts would have been neither better nor worse than beginning with Latin, since the main purpose is to arouse the mental power. Why then quarrel about the way toward that end? The customary way is the best, simply by virtue of tradition; in a new way one could go astray without need or profit.

This may be true in that the philologist, if forced to begin with another language than Latin, would first have to make some effort to familiarize himself thoroughly with the method of teaching the new language, whereas the method of teaching Latin is already nicely prescribed for every level. But the opinion that it does not matter whether the faculties of the mind are awakened by Greek, French or Latin is a barrier to careful observation.

For what is at stake and what must be trained are not abstract powers or faculties but masses of ideas and their gradual formation. . . . The masses of ideas which enter the pupil's mind with French, Latin or Greek are not at all the same. Consequently the sequence with which they are acquired is not unimportant. Rather it is exactly this sequence on which depends the structure and efficacy of the acquired ideas, and that so-called mental power, which is to be aroused, becomes something essentially different if the sequence in the connection of ideas is altered.

A French, a German and an English scholar are three different individuals, who may endeavor a lifetime to become as much alike as is their learning. But they will have to go different ways and will never succeed completely because their mother-tongues and their characteristic modes of thinking were different. . . .

A German, French or English scholar may debate which one of them may most easily attain that degree of scholarship, which is above all national differences. An impartial judge would tell them that each is in possession of what they are looking for, while he remains in his native country. . . . Certainly such a statement would not deviate from the truth.

. . . . .

108. Another instance of erroneous ideas about formal discipline is the frequent recommendation of mathematics as a special instrument for intellectual training. No wonder that most educators try to attain this end by a shorter method. Why all these figures and formulas if the ancient languages which have to be learned anyway, serve the same purpose? Just study grammar; this will sharpen the intellect even more than mathematics, because as some people believe, they have discovered that even poor intellects can acquire skill in figuring.

But it is better not to ask whether the grammarians surpass the mathematicians and excel as great statesmen or generals or in other arenas.

Grammatical thinking remains within grammar; and mathematical thinking remains within mathematics; the reasoning within each discipline of thought forms itself in accordance with the discipline. But if grammatical or mathematical notions enter by any chance and even through distant channels into the sphere of activity of a general or a statesman, he will reproduce what he once learnt and it will assist him in his actions.

Hence grammar and mathematics cannot be substituted for one another, but each holds its value in its own sphere. Nor can grammar be used as a pattern for learning logic, though there exists some relationship, consequently also some educational interaction. The same holds true for logic and mathematics. But alas, if somebody who needs logic to master the higher spheres of philosophy relied on his previous studies in grammar and mathematics! Neither grammar, nor mathematics, nor logic makes the metaphysician, although he cannot make any progress without logic and mathematics.

One might better use geography as the example of a science for which training in other branches of learning is useful, for in geography, mathematics, the natural sciences, and history are combined. Unfortunately, geography

enjoys least of all the reputation of requiring particular intellectual training, probably because this science, as it is usually taught in our schools, has never effectively combined mathematical, physical and social sciences.

109. If then the teacher cannot put his trust in formal discipline and if the mere bulk of memorized knowledge does not provide individual character and culture, on what can he rely?

First, in regard to subject-matter: synthesis and analysis.

Second, in regard to the pupil: on interest, in so far as it expands and deepens.

1. Synthesis and analysis refer immediately to the sequence of ideas inherent in specific subject-matter.[2] Whatever is possible must be done to build verbal instruction on a basis of experience, be it natural or artificial. Children who have not seen or observed anything cannot be taught. But after experience is provided it has to be analyzed and conceptualized in order to be fitted for scientific understanding. Thus analysis prepares a great number of associations for all the new notions which afterwards arise from synthesis. The teacher is, from the psychologist's point of view, always on the right track if he considers the texture and the growth of the apperceptive masses occurring during instruction from both the analytical and synthetical point of view, provided his pupils can follow him without exhaustion and without confusion of their ideas from too much pressure.

2. As to interest, it is difficult to make general statements with respect to degrees of deepening. We probably do best to refer to the example of great poets who show the most astounding skill in capturing and increasing the interest of their readers.

On the other hand the expansion of interest can be described and subdivided into [6] different classes, as I have done above.[3]

110. The division of interest into six main classes can be useful to the teacher in the following respects. It can serve him as a criterion as to what and how much he can combine in his instruction in order to keep up the necessary equilibrium of interest. It can serve as a criterion for avoiding the useless and distracting variety of subjects; often the concentration on one subject can better serve one purpose of stimulating and maintaining manifold interests. Finally this division may be particularly useful for judging with some probability whether a pupil can profit from intellectual instruction. Often all classes of interest occurring in expanding instruction are feeble and transitory; in this case they are incapable of producing the necessary intellectual energy. Often just one or the other kind of interest emerges, but in a degree of isolation which characterizes more the onesided artist than a person of well rounded education. But in all cases in which neither curiosity, nor taste, nor patriotism, nor piety can be appealed to and in which neither careful, instruction nor impressive presentation nor deliberate discipline know any effect – in such cases the teacher is unable to arouse in the pupil that degree of intellectual energy which could give promise to this future conduct. Then of course, the question arises how much there is reason for serious anxiety, and what further resources the teacher has.

In this context, besides man's well known sensuality and its dangers, one has to consider the motives of human conduct as mentioned in the beginning of this book (paragraph 7).[4] If a person in his youth has failed to develop spontaneous manifold, and culturally rich interests it will show its effect on his later life in that he will be unable to enjoy enriching forms of recreation. But the other motives and modes of life which we have mentioned will still be valid. Industriousness, or a desire for work, is possible as a result of habituation, even without a developed empirical, speculative or aesthetic interest. Relaxation can alternate with work in a blameless, though not particularly commendable way, even if a person shows no outspoken sympathy for individuals, or society, or for religious life. In every-day social routine many a man succeeds who does not set an example but who understands how to keep the middle of the road. Respect for people with superior character, love for their fellows, attachment to their families and finally the severity of service carry many tolerably through their lives, without obvious absence of a good education. Hence, if the teacher has no opportunity for devoting himself to higher tasks, if he is hampered by the feeble disposition of his pupil, there still remains for him to adjust his work to such hopes, though they may not be particularly enchanting. But even for the realization of these hopes certain conditions are necessary which one cannot find or foresee in young men, particularly if they are unprotected by society. But in every case the educated man always appears tolerably refined and has a chance to become current coin, whereas the uneducated offends and repels, and if he falls he will mostly find himself deserted. We all shall agree that avoidance of gross ignorance helps to start and polish a person, though such ignorance cannot be completely avoided even by relatively good instruction which does not meet any interest.

111. If on the other hand the teacher succeeds in developing in the pupil manifold interest, then the education becomes a noble task in that it helps mankind to realize the great practical ethical ideas.[5] These ideas will become the more self-evident to the pupil less it is necessary to teach him merely to swim on the waves of society as was the case with the unsusceptible type. On the other hand it is necessary to combine exact methods of thinking and self-criticism with the enthusiasm which can be imparted to the susceptible pupil by such means as religion and history. Of particular use for such an examining attitude is the capacity of clear ethical discrimination. For by its own nature the human mind is not so well disposed as to apprehend clearly the ideas of justice, equity, perfection and sympathy and to act accordingly. In addition a person with the capacity for inner freedom not rarely abandons traditional ideals and inclines towards eccentric claims and opinions for which, he thinks, he has to fight and to bring sacrifices in order to carry off the crown of martyrdom. The striving for the unusual and the exceptional is in the spirit of the time, but it does not fit our country. Hence what education has to do is to preserve in talented Youth their natural courage and openmindedness but not to inspire them with burning ambition.

114. Altogether there ought to be more diversity in our school-system than exists to-day. Each school receives a certain character from its teachers and this is generally desirable. In addition not all children are fitted for the same school.

Some are longing for knowledge to such a degree that they are never satisfied. For them a rich storehouse of intellectual goods is desirable.

Other children need much supervision. For them a school with severe discipline will be best fitted.

Still other children need friendly attachment, it would be a pity if they could not find teachers who understand them.

Some are lazy in scholarly studies, but talented for business; for them a brilliant academic institution is not the right place but only a modest secondary school which does not seek its merits in a high standard of scholarship, but in a steady implanting of useful knowledge.

But especially in the more elementary forms of training uniformity is less desirable than variety. For there the diversity of dispositions and needs is extremely great and so far this variety has been not sufficiently explored, nor sufficiently utilized.

Notes

1. In paragraphs 113 and 114 of the same work Herbart states expressly that the value of the ancient languages cannot be found in the acquisition of formal discipline. Their value lies, according to him, in the preparation for certain professions and particularly in the obligation of our civilization to preserve among the educated adequate awareness of its cultural roots. "No doubt our knowledge would soon lose its foundations and we should lose all criteria of good style in the rhetorical arts if ever the learning of ancient languages should be given up, further more we have to preserve carefully all the historical threads which enable us to trace back and weigh the origin of our culture, otherwise we may lose it."
2. *See Science of Education*, Book II, Chapters 4 and 5.
3. In paragraph 83 of the same work Herbart subdivides interest as expressing of in the acquisition of *knowledge* (empirical, speculative and aesthetic) in interest as expressing itself in form of *sympathy* (sympathy with the individual; sympathy with the welfare of society; religious feeling of the care and dependence of the human race).
4. In paragraph 7 Herbart says the conduct of man's life is determined by the following motives:

1. *Occupations:*	2. *Dispositions:*
work	social intercourse
entertaining recreation	[approval]
relaxation.	[love] and the reverse
3. *Family-relationships:*	4. *Services:*
the spouse	compulsory
the parents	paid
the rest of the family.	honorary.

5. These practical ideas, explained in paragraph 27 are:

Original ideas:	*Derived ideas:*
Inner freedom (Innere Freiheit)	inspired society (Bessel to Gesellschaft)
Living for perfection (Vollkommenheit)	culture (Kultursystem)
Empathy (Wohlwollen)	commonweal (Verwaltungssystem)
Justice	Lawful government (Rechtsgesellschaft)
Equity	just reward (Lohnsystem)

16

An Address to the Public; Particularly to the Members of the Legislature of New York, Proposing a Plan for Improving Female Education

Emma Hart Willard

Address, & C.

The object of this Address, is to convince the public, that a reform, with respect to female education, is necessary; that it cannot be effected by individual exertion, but that it requires the aid of the legislature; and further, by shewing the justice, the policy, and the magnanimity of such an undertaking, to persuade that body to endow a seminary for females, as the commencement of such reformation. The idea of a college for males will naturally be associated with that of a seminary, instituted and endowed by the public; and the absurdity of sending ladies to college, may, at first thought, strike every one to whom this subject shall be proposed. I therefore hasten to observe, that the seminary here recommended, will be as different from those appropriated to the other sex, as the female character and duties are from the male. The business of the husbandman is not to waste his endeavors, in seeking to make his orchard attain the strength and majesty of his forest, but to rear each, to the perfection of its nature. That the improvement of female education will be considered by our enlightened citizens as a subject of importance, the liberality with which they part with their property to educate their daughters, is a sufficient evidence; and why should they not, when assembled in the legislature, act in concert to effect a noble object, which, though dear to them individually, cannot be accomplished by their unconnected exertions. If the improvement of the American female character, and that alone, could be effected by public liberality, employed in giving better means of instruction; such improvement of one half of society, and

Source: Emma Hart Willard, *Woman and the Higher Education* (New York: Harper & Bros., 1893).

that half, which barbarous and despotic nations have ever degraded, would of itself be an object, worthy of the most liberal government on earth; but if the female character be raised, it must inevitably raise that of the other sex; and thus does the plan proposed, offer, as the object of legislative bounty, to elevate the whole character of the community.

As evidence that this statement does not exaggerate the female influence in society, our sex need but be considered, in the single relation of mothers. In this character, we have the charge of the whole mass of individuals, who are to compose the succeeding generation; during that period of youth, when the pliant mind takes any direction, to which it is steadily guided by a forming hand. How important a power is given by this charge! yet, little do too many of my sex know how, either to appreciate or improve it. Unprovided with the means of acquiring that knowledge, which flows liberally to the other sex- having our time of education devoted to frivolous acquirements, how should we understand the nature of the mind, so as to be aware of the importance of those early impressions, which we make upon the minds of our children? -or how should we be able to form enlarged and correct views, either of the character, to which we ought to mould them, or of the means most proper to form them aright?

Considered in this point of view, were the interests of male education alone to be consulted, that of females becomes of sufficient importance to engage the public attention. Would we rear the human plant to its perfection, we must first fertilize the soil which produces it. If it acquire its first bent and texture upon a barren plain, it will avail comparatively little, should it be afterwards transplanted to a garden. In the arrangement of my remarks, I shall pursue the following order.

I. Treat of the defects of the present mode of female education, and their causes.
II. Consider the principles, by which education should be regulated.
III. Sketch a plan of a female seminary.
IV. Shew the benefits which society would receive from such seminaries.

Defects in the Present Mode of Female Education, and Their Causes

Civilized nations have long since been convinced that education, as it respects males, will not, like trade, regulate itself; and hence, they have made it a prime object to provide that sex with everything requisite to facilitate their progress in learning; but female education has been left to the mercy of private adventurers; and the consequence has been to our sex, the same, as it would have been to the other, had legislatures left their accommodations, and means of instruction, to chance also. Education cannot prosper in any community, unless, from the ordinary motives which actuate the human mind, the best

and most cultivated talents of that community, can be brought into exercise in that way. Male education flourishes, because, from the guardian care of legislatures, the presidencies and professorships of our colleges are some of the highest objects to which the eye of ambition is directed. Not so with female institutions. Preceptresses of these, are dependent on their pupils for support, and are consequently liable to become the victims of their caprice. In such a situation, it is not more desirable to be a preceptress, than it would be, to be a parent, invested with the care of children, and responsible for their behaviour, but yet, depending on them for subsistence, and destitute of power to enforce their obedience. Feminine delicacy requires, that girls should be educated chiefly by their own sex. This is apparent from considerations, that regard their health and conveniences, the propriety of their dress and manners, and their domestic accomplishments.

Boarding schools, therefore, whatever may be their defects, furnish the best mode of education provided for females.

Concerning these schools it may be observed:

1. They are temporary institutions, formed by individuals, whose object is present emolument. But they cannot be expected to be greatly lucrative; therefore, the individuals who establish them, cannot afford to provide suitable accommodations, as to room. At night, the pupils are frequently crowded in their lodging rooms; and during the day they are generally placed together in one apartment, where there is a heterogeneous mixture of different kinds of business, accompanied with so much noise and confusion, as greatly to impede their progress in study.
2. As individuals cannot afford to provide suitable accommodations as to room, so neither can they afford libraries, and other apparatus, necessary to teach properly the various branches in which they pretend to instruct.
3. Neither can the individuals who establish these schools afford to provide suitable instruction. It not unfrequently happens, that one instructress teaches, at the same time and in the same room, ten or twelve distinct branches. If assistants are provided, such are usually taken as can be procured for a small compensation. True, in our large cities, preceptresses provide their pupils with masters, though at an expense, which few can afford. Yet none of these masters are responsible for the general proficiency or demeanour of the pupils. Their only responsibility, is in the particular branch which they teach; and to a preceptress, who probably does not understand it herself, and who is, therefore incapable of judging, whether or not it is well taught.
4. It is impossible, that in these schools such systems should be adopted and enforced, as are requisite for properly classing the pupils. Institutions for young gentlemen are founded by public authority, and are permanent; they are endowed with funds, and their instructors and overseers, are invested with authority to make such laws, as they shall

deem most salutary. From their permanency, their laws and rules are well known. With their funds they procure libraries, philosophical apparatus, and other advantages, superior to what can elsewhere be found; and to enjoy these, individuals are placed under their discipline, who would not else be subjected to it. Hence the directors of these institutions can enforce, among other regulations, those which enable them to make a perfect classification of their students. They regulate their qualifications for entrance, the kind and order of their studies, and the period of their remaining at the seminary. Female schools present the reverse of this. Wanting permanency, and dependent on individual patronage, had they the wisdom to make salutary regulations, they could neither enforce nor purchase compliance. The pupils are irregular in their times of entering and leaving school; and they are of various and dissimilar acquirements. Each scholar, of mature age, thinks she has a right to judge for herself respecting what she is to be taught; and the parents of those, who are not, consider, that they have the same right to judge for them. Under such disadvantages, a school cannot be classed, except in a very imperfect manner.

5. It is for the interest of instructresses of boarding schools, to teach their pupils showy accomplishments, rather than those, which are solid and useful. Their object in teaching is generally present profit. In order to realize this, they must contrive to give immediate celebrity to their schools. If they attend chiefly to the cultivation of the mind, their work may not be manifest at the first glance; but let the pupil return home, laden with fashionable toys, and her young companions, filled with envy and astonishment, are never satisfied until they are permitted to share the precious instruction. If it is true, with the turn of the fashion, the toys, which they are taught to make will become obsolete; and no benefit remain to them, of perhaps the only money, that will ever be expended on their education; but the object of the instructress may be accomplished notwithstanding, if that is directed to her own, rather than her pupil's advantages.

6. As these schools are private establishments, their preceptresses are not accountable to any particular persons. Any women has a right to open a school in any place; and no one, either from law or custom, can prevent her. Hence the public are liable to be imposed upon, both with respect to the character and acquirements of preceptresses. I am far, however, from asserting that this is always the case. It has been before observed, that in the present state of things, the ordinary motives which actuate the human mind, would not induce ladies of the best and most cultivated talents, to engage in the business of instructing, from choice. But some have done it from necessity, and occasionally, an extraordinary female has occupied herself in instructing, because she felt that impulse to be active and useful, which is the characteristic of a vigorous and noble mind; and because she found few avenues to extensive usefulness open to her sex. But if such has

been the fact, it has not been the consequence of any system, from which a similar result can be expected to recur with regularity; and it remains true, that the public are liable to imposition, both with regard to the character and acquirements of preceptresses. Instances have lately occurred, in which women of bad reputation, at a distance from scenes of their former life, have been entrusted by our unsuspecting citizens with the instruction of their daughters. But the moral reputation of individuals, is more a matter of public notoriety than their literary attainments; hence society is more liable to be deceived with regard to the acquirements of instructresses than with respect to their character. Those women, however, who deceive society as to the advantages which they give their pupils, are not charged with any ill intention. They teach as they were taught, and believe that the pubic are benefitted by their labours. Acquiring, in their youth, a high value for their own superficial accomplishments, they regard all others as supernumerary, if not unbecoming. Although these considerations exculpate individuals, yet they do not diminish the injury which society receives; for they show, that the worst which is to be expected from such instruction, is not that the pupils will remain ignorant; but that, by adopting the views of their teachers, they will have their minds barred against future improvement, by acquiring a disrelish, if not a contempt for useful knowledge.

7. Although, from a want of public support, preceptresses of boarding schools have not the means of enforcing such a system as would lead to a perfect classification of their pupils; and although they are confined in other respects within narrow limits, yet, because these establishments are not dependant on any public body, within these limits, they have a power far more arbitrary and uncontrolled, than is allowed the learned and judicious instructors of our male seminaries. They can, at their option, omit their own duties, and excuse their pupils from theirs. They can make absurd and ridiculous regulations. They can make improper and even wicked exactions of their pupils.

Thus the writer has endeavoured to point out the defects of the present mode of female education; chiefly in order to show, that the great cause of these defects consists in a state of things, in which legislatures, undervaluing the importance of women in society, neglect to provide for their education, and suffer it to become the sport of adventurers for fortune, who may be both ignorant and vicious.

Of the Principles by Which Education Should Be Regulated

To contemplate the principles which should regulate systems of instruction, and consider how little those principles have been regarded in educating our sex, will show the defects of female education in a still stronger point of light,

and will also afford a standard, by which any plan for its improvement may be measured. Education should seek to bring its subjects to the perfection of their moral, intellectual and physical nature in order, that they may be of the greatest possible use to themselves and others: or, to use a different expression, that they may be means of the greatest possible happiness of which they are capable, both as to what they enjoy, and what they communicate. Those youth have the surest chance of enjoying and communicating happiness, who are best qualified, both by internal dispositions, and external habits, to perform with readiness, those duties, which their future life will most probably give them occasion to practice. Studies and employments should, therefore, be selected, from one or both of the following considerations; either, because they are peculiarly fitted to improve the faculties; or, because they are such, as the pupil will most probably have occasion to practise in future life.

These are the principles, on which systems of male education are founded; but female education has not yet been systematized. Chance and confusion reign here. Not even is youth considered in our sex, as in the other, a season, which should be wholly devoted to improvement. Among families, so rich as to be entirely above labour, the daughters are hurried through the routine of boarding school instruction, and at an early period introduced into the gay world; and, thenceforth, their only object is amusement. - Mark the different treatment, which the sons of these families receive. While their sisters are gliding through the mazes of the midnight dance, they employ the lamp, to treasure up for future use the riches of ancient wisdom; or to gather strength and expansion of mind, in exploring the wonderful paths of philosophy. When the youth of two sexes has been spent so differently, is it strange, or is nature in fault, if more mature age has brought such a difference of character, that our sex have been considered by the other, as the pampered, wayward babies of society, who must have some rattle put into our hands to keep us from doing mischief to ourselves or others? (Several noted writers have recommended certain accomplishments to our sex, to keep us from scandal and other vices; or to use Mr. Addison's expression, "to keep us out of harm's way.");

Another difference in the treatment of the sexes is made in our country, which, though not equally pernicious to society, is more pathetically unjust to our sex. How often have we seen a student, who, returning from his literary pursuits, finds a sister, who was his equal in acquirements, while their advantages were equal, of whom he is now ashamed. While his youth was devoted to study, and he was furnished with the means, she, without any object of improvement, drudged at home, to assist in the support of the father's family, and perhaps to contribute to her brother's subsistence abroad: and now, a being of a lower order, the rustic innocent wonders and weeps at his neglect. Not only has there been a want of system concerning female education, but much of what has been done, has proceeded upon mistaken principles

One of these is, that, without a regard to the different periods of life, proportionate to their importance, the education of females has been too exclusively directed, to fit them for displaying to advantage the charms of

youth and beauty. Though it may be proper to adorn this period of life, yet, it is incomparably more important, to prepare for the serious duties of maturer years. Though well to decorate the blossom, it is far better to prepare for the harvest. In the vegetable creation, nature seems but to sport, when she embellishes the flower; while all her serious cares are directed to perfect the fruit.

Another error is, that it has been made the first object in educating our sex, to prepare them to please the other. But reason and religion teach, that we too are primary existencies; that it is for us to move, in the orbit of our duty, around the Holy Centre of perfection, the companions, not the satellites of men; else, instead of shedding around us an influence, that may help to keep them in their proper course, we must accompany them in their wildest deviations

I would not be understood to insinuate, that we are not, in particular situations, to yield obedience to the other sex. Submission and obedience belong to every being in the universe, except the great Master of the whole. Nor is it a degrading peculiarity to our sex, to be under human authority. Whenever one class of human beings, derive from another the benefits of support and protection, they must pay its equivalent, obedience. Thus, while we receive these benefits from our parents, we are all, without distinction of sex, under their authority; when we receive them from the government of our country, we must obey our rulers; and when our sex take the obligations of marriage, and receive protection and support from the other, it is reasonable, that we too should yield obedience. Yet is neither the child, nor the subject, nor the wife, under human authority, but in subservience to the divine. Our highest responsibility is to God, and our highest interest is to please him; therefore, to secure this interest, should our education be directed.

Neither would I be understood to mean, that our sex should not seek to make themselves agreeable to the other. The error complained of, is that the taste of men, whatever it might happen to be, has been made a standard for the formation of the female character. In whatever we do, it is of the utmost importance, that the rule, by which we work, be perfect. For if otherwise, what is it, but to err upon principle? A system of education, which leads one class of human beings to consider the approbation of another, as their highest object, teaches, that the rule of their conduct should be the will of beings, imperfect and erring like themselves, rather than the will of God, which is the only standard of perfection.

Having now considered female education, both in theory and practice, and seen, that in its present state, it is in fact a thing "without form and void," the mind is naturally led to inquire after a remedy for the evils it has been contemplating. Can individuals furnish this remedy? It has heretofore been left to them, and we have seen the consequence. If education is a business, which might naturally prosper, if left to individual exertion, why have legislatures intermeddled with it at all? If it is not, why do they make their daughters illegitimates, and bestow all their cares upon their sons? It is the duty of a government, to do all in its power to promote the present and future prosperity of the nation, over which it is placed. This prosperity will depend

on the character of its citizens. The characters of these will be formed by their mothers; and it is through the mothers, that the government can control the characters of its future citizens, to form them such as will ensure their country's prosperity. If this is the case, then it is the duty of our present legislators to begin now, to form the characters of the next generation, by controling that of the females, who are to be their mothers, while it is yet with them a season of improvement. But should the conclusion be almost admitted, that our sex too are the legitimate children of the legislature; and, that it is their duty to afford us a share of their paternal bounty; the phantom of a college-learned lady, would be ready to rise up, and destroy every good resolution, which the admission of this truth would naturally produce in our favour. To shew that it is not a masculine education which is here recommended, and to afford a definite view of the manner in which a female institution might possess the respectability, permanency, and uniformity of operation of those appropriated to males; and yet differ from them, so as to be adapted to that difference of character and duties, to which the softer sex should be formed, is the object of the following imperfect.

Sketch of a Female Seminary

From considering the deficiencies in boarding schools, much may be learned, with regard to what would be needed, for the prosperity and usefulness of a public seminary for females.

I. There would be needed a building, with commodious rooms for lodging, and recitation, apartments for the reception of apparatus, and for the accommodation of the domestic department.

II. A library, containing books on the various subjects in which the pupils were to receive instruction; musical instruments, some good paintings, to form the taste and serve as models for the execution of those who were to be instructed in that art; maps, globes, and a small collection of philosophical apparatus.

III. A judicious board of trust, competent and desirous to promote its interests, would in a female, as in a male literary institution, be the corner stone of its prosperity. On this board it would to depend to provide.

IV. Suitable instruction. This article may be subdivided under four heads.

1. Religious and Moral
2. Literary
3. Domestic
4. Ornamental

1. Religious and Moral. A regular attention to religious duties would, of course be required of the pupils by the laws of the institution. The trustees would be careful to appoint no instructors, who would not teach religion and morality, both by their example, and by leading the minds of the pupils

to perceive, that these constitute the true end of all education. It would be desirable, that the young ladies should spend part of their Sabbaths in hearing discourses relative to the peculiar duties of their sex. The evidences of Christianity, and moral philosophy, would constitute a part of their studies.

2. Literary Instruction. To make an exact enumeration of the branches of literature, which might be taught, would be impossible, unless the time of the pupils' continuance at the seminary, and the requisites for entrance, were previously fixed. Such an enumeration would be tedious, nor do I conceive that it would be at all promotive of my object. The difficulty complained of, is not, that we are at a loss what sciences we ought to learn, but that we have not proper advantages to learn any. Many writers have given us excellent advice with regard to what we should be taught, but no legislature has provided us the means of instruction. Not however, to pass lightly over this fundamental part of education, I will mention one or two of the less obvious branches of science, which, I conceive should engage the youthful attention of my sex.

It is highly important, that females should be conversant with those studies, which will lead them to understand the operations of the human mind. The chief use to which the philosophy of the mind can be applied, is to regulate education by its rules. The ductile mind of the child is intrusted to the mother: and she ought to have every possible assistance, in acquiring a knowledge of this noble material, on which it is her business to operate, that she may best understand how to mould it to its most excellent form.

Natural philosophy has not often been taught to our sex. Yet why should we be kept in ignorance of the great machinery of nature, and left to the vulgar notion, that nothing is curious but what deviates from her common course? If mothers were acquainted with this science, they would communicate very many of its principles to their children in early youth. From the bursting of an egg buried in the fire, I have heard an intelligent mother, lead her prattling inquirer, to understand the cause of the earthquake. But how often does the mother, from ignorance on this subject, give her child the most erroneous and contracted views of the causes of natural phenomena; views, which, though he may afterwards learn to be false, are yet, from the laws of association, ever ready to return, unless the active powers of the mind are continually upon the alert to keep them out. A knowledge of natural philosophy is calculated to heighten the moral taste, by bringing to view the majesty and beauty of order and design; and to enliven piety, by enabling the mind more clearly to perceive, throughout the manifold works of God, that wisdom, in which he hath made them all.

In some of the sciences proper for our sex, the books, written for the other, would need alteration; because, in some they presuppose more knowledge than female pupils would possess; in others, they have parts not particularly interesting to our sex, and omit subjects immediately relating to their pursuits. There would likewise be needed, for a female seminary, some works, which I believe are no where extant, such as a systematic treatise on housewifery.

3. Domestic Instruction should be considered important in a female seminary. It is the duty of our sex to regulate the internal concerns of every family; and unless they be properly qualified to discharge this duty, whatever may be their literary or ornamental attainments, they cannot be expected to make either good wives, good mothers, or good mistresses of families; and if they are none of these, they must be bad members of society; for it is by promoting or destroying the comfort and prosperity of their own families, that females serve or injure the community. To superintend the domestic department, there should be a respectable lady, experienced in the best methods of housewifery, and acquainted with propriety of dress and manners. Under her tuition the pupils ought to be placed for a certain length of time every morning. A spirit of neatness and order should here be treated as a virtue, and the contrary, if excessive and incorrigible, be punished with expulsion. There might be a gradation of employment in the domestic department, according to the length of time the pupils had remained at the institution. The older scholars might then assist the superintendent in instructing the younger, and the whole be so arranged, that each pupil might have advantages to become a good domestic manager by the time she has completed her studies.

This plan would afford a healthy exercise. It would prevent that estrangement from domestic duties, which would be likely to take place in a length of time devoted to study, with those, to whom they were previously familiar; and would accustom those to them, who, from ignorance, might otherwise put at hazard their own happiness, and the prosperity of their families.

These objects might doubtless be effected by a scheme of domestic instruction; and probably others of no inconsiderable importance. It is believed, that housewifery might be greatly improved, by being taught, not only in practice, but in theory. Why may it not be reduced to a system, as well as other arts? There are right ways of performing its various operations; and there are reasons why those ways are right; and why may not rules be formed, their reasons collected; and the whole be digested into a system to guide the learner's practice?

It is obvious, that theory alone, can never make a good artist; and it is equally obvious, that practice unaided by theory, can never correct errors, but must establish them. If I should perform any thing in a wrong manner all my life, and teach my children to perform it in the same manner, still, through my life and theirs, it would be wrong. Without alteration there can be no improvement; but how are we to alter, so as to improve, if we are ignorant of the principles of our art, with which we should compare our practice, and by which we should regulate it. In the present state of things, it is not to be expected, that any material improvements in housewifery should be made. There being no uniformity of method, prevailing among different housewives, of course, the communications from one to another, are not much more likely to improve the art, than a communication, between two mechanics of different trades, would be, to improve each in his respective occupation. But should a system of principles be philosophically arranged,

and taught, both in theory and by practice, to a large number of females, whose minds were expanded and strengthened by a course of literary instruction, those among them, of an investigating turn, would, when they commenced housekeepers, consider their domestic operations as a series of experiments, which either proved or refuted the system previously taught. They would then converse together like those, who practise a common art, and improve each other by their observations and experiments; and they would also be capable of improving the system, by detecting its errors, and by making additions of new principles and better modes of practice.

4. The Ornamental branches, which I should recommend for a female seminary, are drawing and painting, elegant penmanship, music, and the grace of motion. Needle-work is not here mentioned. The best style of useful needle-work should either be taught in the domestic department, or made a qualification for entrance; and I consider that useful, which may contribute to the decoration of a lady's person, or the convenience and neatness of her family. But the use of the needle, for other purposes than these, as it affords little to assist in the formation of the character, I should regard as a waste of time. The grace of motion, must be learnt chiefly from instruction in dancing. Other advantages besides that of a graceful carriage, might be derived from such instruction, if the lessons were judiciously timed. Exercise is needful to the health, and recreation to the cheerfulness and contentment of youth. Female youth could not be allowed to range unrestrained, to seek amusement for themselves. If it was entirely prohibited, they would be driven to seek it by stealth; which would lead them to many improprieties of conduct, and would have a pernicious effect upon their general character, by inducing a habit of treading forbidden paths. The alternative that remains is to provide them with proper recreation, which, after the confinement of the day, they might enjoy under the eye of their instructors. Dancing is exactly suited to this purpose, as also to that of exercise; for perhaps in no way, can so much healthy exercise be taken in so short a time. It has besides, this advantage over other amusements, that it affords nothing to excite the bad passions; but, on the contrary, its effects are, to soften the mind, to banish its animosities, and to open it to social impressions.

It may be said, that dancing would dissipate the attention, and estrange it from study. Balls would doubtless have this effect; but let dancing be practiced every day, by youth of the same sex, without change of place, dress, or company, and under the eye of those, whom they are accustomed to obey, and it would excite no more emotion, than any other exercise or amusement, but in degree, as it is of itself more pleasant. But it must ever be a grateful exercise to youth, as it is one, to which nature herself prompts them, at the sound of animating music.

It has been doubted, whether painting and music should be taught to young ladies, because much time is requisite to bring them to any considerable degree of perfection, and they are not immediately useful. Though these objections have weight, yet they are founded on too limited a view of the

objects of education. They leave out the important consideration of forming the character. I should not consider it an essential point, that the music of a lady's piano should rival that of her master's; or that her drawing room should be decorated with her own paintings, rather than those of others; but it is the intrinsic advantage, which she might derive from the refinement of herself, that would induce me to recommend to her, an attention to those elegant pursuits. The harmony of sound, has a tendency to produce a correspondent harmony of soul; and that art, which obliges us to study nature, in order to imitate her, often enkindles the latent spark of taste of sensibility for her beauties, till it glows to adoration for their author, and a refined love of all his works.

V. There would be needed, for a female, as well as for a male seminary, a system of laws and regulations, so arranged, that both the instructors and pupils would know their duty; and thus, the whole business, move with regularity and uniformity. The laws of the institution would be chiefly directed, to regulate the pupil's qualifications for entrance, the kind and order of their studies, their behaviour while at the institution, the term allotted for the completion of their studies, the punishments to be inflicted on offenders and the rewards or honours, to be bestowed on the virtuous and diligent.

The direct rewards or honors, used to stimulate the ambition of students in colleges, are first, the certificate or diploma, which each receives, who passes successfully through the term allotted to his collegiate studies; and secondly, the appointments to perform certain parts in public exhibitions, which are bestowed by the faculty, as rewards for superior scholarship. The first of these modes is admissible into a female seminary; the second is not; as public speaking forms no part of female education. The want of this mode, might, however, be supplied by examinations judiciously conducted. The leisure and inclination of both instructors and scholars, would combine to produce a thorough preparation for these; for neither would have any other public test of the success of their labors. Persons of both sexes would attend. The less entertaining parts, might be enlivened by interludes, where the pupils in painting and music, would display their several improvements. Such examinations, would stimulate the instructors to give their scholars more attention, by which the leading facts and principles of their studies, would be more clearly understood, and better remembered. The ambition excited among the pupils, would operate, without placing the instructors under the necessity of making distinctions among them, which are so apt to be considered as invidious; and which are, in our male seminaries, such fruitful sources of disaffection.

Perhaps the term allotted for the routine of study at the seminary, might be three years. The pupils, probably, would not be fitted to enter, till about the age of fourteen. Whether they attended to all, or any of the ornamental branches, should be left optional with the parents or guardians. Those who were to be instructed in them, should be entered for a longer term, but if

this was a subject of previous calculation, no confusion would arise from it. The routine of the exercises being established by the laws of the institution, would be uniform, and publicly known; and those, who were previously acquainted with the branches first taught, might enter the higher classes; nor would those who entered the lowest, be obliged to remain during the three years. Thus the term of remaining at the institution, might be either one, two, three, four, or more years; and that, without interfering with the regularity and uniformity of its proceedings.

The writer has now given a sketch of her plan. She has by no means expressed all the ideas, which occurred to her concerning it. She wished to be as concise as possible, and yet afford conviction, that it is practicable, to organize a system of female education, which shall possess the permanency, uniformity of operation, and respectability of our male institutions; and yet differ from them, so as to be adapted, to that difference of character, and duties, to which early instruction should form the softer sex. It now remains, to enquire more particularly, what would be the benefits resulting from such a system.

Benefits of Female Seminaries

In inquiring, concerning the benefits of the plan proposed, I shall proceed upon the supposition, that female seminaries will be patronized throughout our country. Nor is this altogether a visionary supposition. If one seminary should be well organized, its advantages would be found so great, that others would soon be instituted; and, that sufficient patronage can be found to put one in operation, may be presumed from its reasonableness, and from the public opinion, with regard to the present mode of female education. It is from an intimate acquaintance, with those parts of our country, whose education is said to flourish most, that the writer has drawn her picture of the present state of female instruction; and she knows, that she is not alone, in perceiving or deploring its faults. Her sentiments are shared by many an enlightened parent of a daughter, who has received a boarding school education. Counting on the promise of her childhood, the father had anticipated her maturity, as combining what is excellent in mind, with what is elegant in manners. He spared no expense that education might realize to him, the image of his imagination. His daughter returned from boarding school, improved in fashionable airs, and expert in manufacturing fashionable toys; but, in her conversation, he sought in vain, for that refined and fertile mind, which he had fondly expected. Aware that his disappointment has its source in a defective education, he looks with anxiety on his other daughters, whose minds, like lovely buds, are beginning to open. Where shall he find a genial soil, in which he may place them to expand? Shall he provide them male instructors?-Then the graces of their persons and manners, and whatever

forms the distinguishing charm of the feminine character, they cannot be expected to acquire. Shall he give them a private tutoress? She will have been educated at the boarding school, and his daughters will have the faults of its instruction second-handed. Such is now the dilemma of many parents; and it is one, from which they cannot be extricated by their individual exertions. May not then the only plan, which promises to relieve them, expect their vigorous support.

Let us now proceed to inquire, what benefits would result from the establishment of female seminaries.

They would constitute a grade of public education, superior to any yet known in the history of our sex; and through them, the lower grades of female instruction might be controlled. The influence of public seminaries, over these, would operate in two ways; first, by requiring certain qualifications for entrance; and secondly, by furnishing instructresses, initiated in their modes of teaching, and imbued with their maxims. Female seminaries might be expected to have important and happy effects, on common schools in general; and in the manner of operating on these, would probably place the business of teaching children, in hands now nearly useless to society; and take it from those, whose services the state wants in many other ways.

That nature designed for our sex the care of children, she has made manifest, by mental, as well as physical indications. She has given us, in a greater degree than men, the gentle arts of insinuation, to soften their minds, and fit them to receive impressions; a greater quickness of invention to vary modes of teaching to different dispositions; and more patience to make repeated efforts. There are many females of ability, to whom the business of instructing children is highly acceptable, and, who would devote all their faculties to their occupation. They would have no higher pecuniary object to engage their attention, and their reputation as instructors they would consider as important; whereas, whenever able and enterprising men, engage in this business, they consider it, merely as a temporary employment, to further some other object, to the attainment of which, their best thoughts and calculations are all directed. If then women were properly fitted by instruction, they would be likely to teach children better than the other sex; they could afford to do it cheaper; and those men who would otherwise be engaged in this employment, might be at liberty to add to the wealth of the nation, by any of those thousand occupations, from which women are necessarily debarred.

But the females, who taught children, would have been themselves instructed either immediately or indirectly by the seminaries. Hence through these, the government might exercise an intimate, and most beneficial control over common schools. Any one, who has turned his attention to this subject, must be aware, that there is great room for improvement in these, both as to the modes of teaching, and the things taught; and what method could be devised so likely to effect this improvement, as to prepare by instruction, a class of individuals, whose interest, leisure, and natural talents, would combine to make them pursue it with ardour. Such a class of individuals would be

raised up, by female seminaries. And therefore they would be likely to have highly important and happy effects on common schools.

It is believed, that such institutions, would tend to prolong, or perpetuate our excellent government. An opinion too generally prevails, that our present form of government, though good, cannot be permanent. Other republics have failed, and the historian and philosopher have told us, that nations are like individuals; that, at their birth, they receive the seeds of their decline and dissolution. Here deceived by a false analogy, we receive an apt illustration of particular facts, for a general truth. The existence of nations, cannot, in strictness, be compared with the duration of animate life; for by the operation of physical causes, this, after a certain length of time, must cease: but the existence of nations, is prolonged by the succession of one generation to another, and there is no physical cause, to prevent this succession's going on, in a peaceable manner, under a good government, till the end of time. We must then look to other causes, than necessity, for the decline and fall of former republics. If we could discover these causes, and seasonably prevent their operation, then might our latest posterity enjoy the same happy government, with which we are blessed; or if but in part, then might the triumph of tyranny, be delayed, and a few more generations be free.

Permit me then to ask the enlightened politician of my country, whether amidst his researches for these causes, he cannot discover one, in the neglect, which free governments, in common with others, have shown, to whatever regarded the formation of the female character. In those great republics, which have fallen of themselves, the loss of republican manners and virtues, has been the invariable precursor, of their loss of the republican form of government. But is it not in the power of our sex, to give society its tone, both as to manners and morals? And if such is the extent of female influence, is it wonderful, that republics have failed, when they calmly suffered that influence, to become enlisted in favour of luxuries and follies, wholly incompatible with the existence of freedom?

It may be said, that the depravation of morals and manners, can be traced to the introduction of wealth, as its cause. But wealth will be introduced: even the iron laws of Lycurgus could not prevent it. Let us then inquire, if means may not be devised, to prevent its bringing with it the destruction of public virtue. May not these means be found in education? – in implanting, in early youth, habits, that may counteract the temptations, to which, through the influence of wealth, mature age will be exposed? and in giving strength and expansion to the mind, that it may comprehend, and prize those principles, which teach the rigid performance of duty? Education, it may be said, has been tried as a preservation of national purity. But was it applied to every exposed part of the body politic? For if any part has been left within the pestilential atmosphere of wealth, without this preservative, then that part becoming corrupted, would communicate the contagion to the whole; and if so, then has the experiment, whether education may not preserve public virtue, never yet been fairly tried. Such a part has been left in all former experiments. Females have been exposed to the contagion of wealth without the preservative of a good education; and they constitute that part of the body

politic, least endowed by nature to resist, most to communicate it. Nay, not merely have they been left without the defense of a good education, but their corruption has been accelerated by a bad one. The character of women of rank and wealth has been, and in the old governments of Europe now is, all that this statement would lead us to expect. Not content with doing nothing to promote their country's welfare, like pampered children, they revel in its prosperity, and scatter it to the winds, with a wanton profusion: and still worse, – they empoision its source, by diffusing a contempt for useful labour. To court pleasure their business, – within her temple, in defiance of the laws of God and man, they have erected the idol fashion; and upon her altar, they sacrifice, with shameless rites, whatever is sacred to virtue or religion. Not the strongest ties of nature, – nor even maternal love can restrain them! Like the worshiper of Moloch, the mother while yet yearning over the new born babe, tears it from the bosom, which God has swelled with nutrition for its support, and casts it remorseless from her, the victim of her unhallowed devotion!

But while, with an anguished heart, I thus depict the crimes of my sex, let not the other stand by and smile. Reason declares, that you are guiltier than we. You are our natural guardians,-our brothers,-our fathers, and our rulers. You know that our ductile minds, readily take the impressions of education. Why then have you neglected our education? Why have you looked with lethargic indifference, on circumstances ruinous to the formation of our characters, which you might have controlled? But it may be said, the observations here made, cannot be applied to any class of females in our country. True, they cannot yet; and if they could, it would be useless to make them; for when the females of any country have become thus debased, then, is that country so corrupted, that nothing, but the awful judgements of heaven, can arrest its career of vice. But it cannot be denied, that our manners are verging towards those described; and the change, though gradual, has not been slow: already do our daughters listen with surprise, when we tell them of the republican simplicity of our mothers. But our manners are not as yet so altered, but that, throughout our country, they are still marked with republican virtues.

The inquiry, to which these remarks have conducted us is this – What is offered by the plan of female education, here proposed, which may teach, or preserve, among females of wealthy families, that purity of manners, which is allowed, to be so essential to national prosperity, and so necessary, to the existence of a republican government.

1. Females, by having their understandings cultivated, their reasoning powers developed and strengthened, may be expected to act more from the dictates of reason, and less from those of fashion and caprice.
2. With minds thus strengthened they would be taught systems of morality, enforced by the sanctions of religion; and they might be expected to acquire juster and more enlarged views of their duty, and stronger and higher motives to its performance.

3. This plan of education, offers all that can be done to preserve female youth from a contempt of useful labour. The pupils would become accustomed to it, in conjunction with the high objects of literature, and the elegant pursuits of the fine arts; and it is to be hoped that both from habit and association, they might in future life, regard it as respectable. To this it may be added, that if housewifery could be raised to a regular art, and taught upon philosophical principles, it would become a higher and more interesting occupation; and ladies of fortune, like wealthy agriculturalists, might find, that to regulate their business was an agreeable employment.
4. The pupils might be expected to acquire a taste for moral and intellectual pleasures, which would buoy them above a passion for show and parade, and which would make them seek to gratify the natural love of superiority, by endeavouring to excel others in intrinsic merit, rather than in the extrinsic frivolities of dress, furniture, and equipage.
5. By being enlightened in moral philosophy, and in that, which teaches the operations of the mind, females would be enabled to perceive the nature and extent, of that influence, which they possess over their children, and the obligation, which this lays them under, to watch the formation of their characters with unceasing vigilance, to become their instructors, to devise plans for their improvement, to weed out the vices from their minds, and to implant and foster the virtues. And surely, there is that in the maternal bosom, which, when its pleadings shall be aided by education, will overcome the seductions of wealth and fashion, and will lead the mother, to seek her happiness in communing with her children, and promoting their welfare, rather than in a heartless intercourse, with the votaries of pleasure: especially, when with an expanded mind, she extends her views to futurity, and sees her care to her offspring rewarded by peace of conscience, the blessings of her family, the prosperity of her country, and finally with everlasting happiness to herself and them.

   Thus, laudable objects and employments, would be furnished for the great body of females, who are not kept by poverty from excesses. But among these, as among the other sex, will be found master spirits, who must have pre-eminence, at whatever price they acquire it. Domestic life cannot hold these, because they prefer to be infamous, rather than obscure. To leave such, without any virtuous road to eminence, is unsafe to community; for not unfrequently, are the secret springs of revolution, set in motion by their intrigues. Such aspiring minds, we will regulate, by education, we will remove obstructions to the course of literature, which has heretofore been their only honorable way to distinction; and we offer them a new object, worthy of their ambition; to govern, and improve the seminaries for their sex.

In calling on my patriotic countrymen, to effect so noble an object, the consideration of national glory, should not be overlooked. Ages have rolled

away;-barbarians have trodden the weaker sex beneath their feet;-tyrants have robbed us of the present light of heaven, and fain would take its future. Nations, calling themselves polite, have made us the fancied idols of a ridiculous worship, and we have repaid them with ruin for their folly. But where is that wise and heroic country, which has considered, that our rights are sacred, though we cannot defend them? that tho' a weaker, we are an essential part of the body politic, whose corruption or improvement must affect the whole? and which, having thus considered, has sought to give us by education, that rank in the scale of being, to which our importance entitles us? History shows not that country. It shows many, whose legislatures have sought to improve their various vegetable productions, and their breeds of useful brutes; but none, whose public councils have made it an object of their deliberations, to improve the character of their women. Yet though history lifts not her finger to such an one, anticipation does. She points to a nation, which, having thrown off the shackles of authority and precedent, shrinks not from schemes of improvement, because other nations have never attempted them; but which, in its pride of independence, would rather lead than follow, in the march of human improvement: a nation, wise and magnanimous to plan, enterprising to undertake, and rich in resources to execute. Does not every American exult that this country is his own? And who knows how great and good a race of men, may yet arise from the forming hand of mothers, enlightened by the bounty of that beloved country,-to defend her liberties,-to plan her future improvement, and to raise her to unparalleled glory?

17

Selection from *Improvements in Education, as It Respects the Industrious Classes of the Community*

Joseph Lancaster

Part I

An introductory Account of the State of those Schools in which the Children of Mechanics, &c. are generally educated.

Initiatory Schools

These are a description of schools that abound in every poor neighbourhood about London: they are frequented by boys and girls, indiscriminately, few of them above seven years of age: the mistress is frequently the wife of some mechanic, induced to undertake this task, from a desire to increase a scanty income, or to add to her domestic comforts. The subjects of tuition are comprised in reading and needlework. The number of children that attend a School of this class is very fluctuating, and seldom exceeds thirty; their pay very uncertain. Disorder, noise, &c. seem more the characteristic of these schools, than the improvement of the little ones who attend them.

These unpleasant circumstances effectually prevent schools of this kind being opened by many females, who possess abilities and goodness of heart. While this is the cafe, the public will easily conceive the state they must consequently be in, and the small degree of advantage which can possibly result to the poor children who attend them. From the information I possess, I could easily heighten the colouring of this view; but it would only exhibit the fame objects in different degrees of shade, which I deem needless, as the evil in each

Source: Joseph Lancaster, *Improvements in Education, as It Respects the Industrious Classes of the Community* (London: Darton and Harvey, 1803).

is nearly similar, bearing the same features, if not a perfect likeness. Let us turn from the disgusting scene – from these graves of genius, even in its cradle: let us see what they would be under proper regulations, which, modified, and carried into effect by prudent hands, would soon direct the public attention to them, as institutions pregnant with real usefulness. – It is very evident, that by the excellent modes of preparatory education, (frequent in the more respectable circles,) much invaluable time is saved, and the foundation of instruction so well laid, that when the pupil is removed to a superior school, much of the drudgery of education is over, and the pupil being ready formed to the master's hand, to good order and prompt obedience, his future progress is considerably accelerated.

Why not realize this idea among the poor? Why should not they partake of its benefits? – I am an advocate for this class of schools; (women generally manage them,) the female heart is so well qualified, by its tenderness, to feel for, to sympathise with, the innocent children who attend these schools, at so early an age, that they cannot be placed under better care. The infancy of their pupils requires a combination of the school and nursery, and these schools answer that description, when under proper management: for, to those who are just beginning to sip of learning's stream, its pleasant draughts should not be embittered by stern-browed severity. But it is of peculiar importance to the poor, that these schools should be better regulated, as many children of that class have no education but what they obtain in them, and that at an early age, when totally unfit for other employ: to these, it is of consequence that they should acquire all the knowledge they can while there, for many poor children never obtain a second opportunity. – Frequently their parents are so circumstanced that they must place them out to work as soon as they are fit for it, – and then farewell to school, to which some would never have been sent, had they been fit for any thing else. It is of consequence to all children, that no time should be spent without improvement, whether they ever attend school afterwards or not. It is of advantage in another point of view: the sober, steady, poor man, cheerfully unites with the endeavours of the benevolent, for his childrens' welfare: but there are others, so insensible to all idea of gratitude, that they indignantly spurn the proffered benefit. This mostly happens when their children are able to assist them at work: but when they are too young for work, and are apt to be troublesome at home, their tender age requires a nurse; but nothing can be devised by their parents as a substitute for one, but sending them to an initiatory school, where they are taken care of at a small expence. This is, perhaps, the only opportunity that presents for their instruction during life. Their parents are of the lowest class, by conduct as well as poverty: and would sooner send them to a packthread ground, or other nursery for vice, where their minds are in danger of ruin, for the sake of trifling present gain, than to school, where their morals might be formed aright, and they trained to future usefulness, to themselves, and to the community. Being thus destitute of principle, at another period of their children's age they would, most likely,

spurn the offers of benevolence: but when so young, necessity dictates that they be sent to school.

To those, therefore, who have no other opportunity of education, their proper management is of the greatest importance. At the early age at which such children are sent, their manners are particularly innocent and engaging, of course their parent's affection flows in copious streams, and a hope for the future good of their offspring, held out at such a seasonable time, might induce them to fix them at school, and thus preserve their morals and innocence. I think I am warranted in my conclusion, from the passions of the human heart: the expectation of Good, is denominated Hope; the expectation of Evil is called Fear; and the prospect of either, exceeds the possession of the object desired, or the probation dreaded. I believe this observation will apply to human nature universally, but in particular to objects whose only friend is Charity. It may easily double the good intended to be produced, without increasing the expence. I conceive, the improvement children make in these schools Would be greatly increased by their being placed under good regulations, supplied with proper mistresses, to whom encouragement might be extended according to merit, also to the scholars, by the fame rule. They might be animated to learn reading, writing on slates, and some small portion of arithmetic, at a very early age.

I recommend these three objects to be pursued in conjunction: nothing conduces so much to good order, or so effectually prevents the natural vivacity of children from becoming troublesome in school, as the active employment of every boy in it. This liveliness, combined with the usual waste of time, makes these schools disgusting scenes of noise and riot. When the attention of children is occupied, quietness unavoidably follows, and that without the aid of rigour to enforce it.

The proposed plan of reformation will fill its proper place in a succeeding page; this is only a brief account of the nature of these schools, which I conceive to be so numerous about London, as to contain an aggregate of several thousand children: but I cannot close this introduction, without calling the public attention to a distinct, and almost friendless part of the community. I mean the poor children who are in parish workhouses, who are often friendless, and immured in those receptacles of poverty, depression, and vice; without education and without hope; children, for whom it may be said, the fun never shines: to whom curses and ill treatment are too often substitutes for parental smiles, or maternal care. How often have I viewed you, ye poor oppressed children, when pacing, with solemn steps and downcast eye, along the streets to a place of public worship! – How has the fettled gloom of unhappiness, visible on some of your countenances, attracted my sorrowful attention, and forced from my eyes the unavailing tears of pity? – And you, ye guardians of the poor, who have families of your own, how is it you do not feel for these? From whom had they their spirits? Whose workmanship are they? – How will you appear before the Judge of quick and dead, under a sense of your neglect? – And, how is it possible, if you possess common

sense, that you can lull your consciences so quietly to sleep, while you feast and riot on the portion of the poor? How can you dare to appear before those who know your misconduct? But it cannot be helped: some men have frontlets of brass! Is it not a horrid thing, that the enormous sum of millions sterling, should swell the amount of our poor's rate and chanties, and yet the poor children be deprived (with some few exceptions) of even an initiatory share of education, and of almost any attention to their morals whatever.

As a citizen of the world, and a friend of mankind, actuated by no sectarian motives in my conduct, but animated by the love of my country, I see, with regret, her noble hearted sons, madly pursuing wealth, and grasping at gain, almost to perdition's door. Are not virtue, integrity, and offices of brotherly kindness, the source of all the comforts we derive from social intercourse? – Are not religion, knowledge, and good morals, the very bands of society? – Why then so eager in the pursuit of riches? and why not rather pay that attention to the infant poor, which their wants requires? I wish the enormous wealth of our country may neither prove a scourge to mankind, nor a canker-worm to destroy her own bowels.

Was the one thousandth part of that care, which is daily bestowed in attaining the fine gold, which may "become dim," or the garment that is liable to be moth-eaten, only given to improve the welfare of the rising generation! by giving them a guarded education, that would early form their minds to virtue, how should we flourish? how would the true ancient spirit of hospitality and mutual good will revive amongst us, and our nation become as a nation of virtuous brethren!

"Full many a gem of purest ray serene, The dark unfathom'd caves of ocean bear; Full many a flower is born to blush unseen, And waste its sweetness on the desert air."

Second Class of Schools

The masters of these are often the refuse of superior schools, and too often of society at large. The pay and number of scholars are alike low and fluctuating; of course there is little encouragement for steady men, either to engage, or continue in this line: it being impossible to keep school, defray its expences, and do the children regular justice, without a regular income. Eventually, many schools, respectable in better times, are abandoned to men of any character, who use as much chicane to fill their pockets as the most despicable pettifogger. Writing books, &c. scribbled through; whole pages filled with scrawls, to hasten the demand for fresh books. These schools are chiefly attended by the children of artificers, &c. whose pay fluctuates with their employ: and is too often withheld by bad principle. Debts are often contracted that do not exceed a shilling, then the parents remove their children from school, and never pay it: the smallness of the sum proving an effectual bar to its rerecovery: the trouble and loss of time being worse than

the loss of money in the first instance. It is to be regretted, that some especial act of the legislature has not effectually secured the pay of the teachers of youth, that they might be secure of having that bread, for which they have laboured with almost unceasing toil. The complaint of bad pay, and difficulty in obtaining it, is almost generally reiterated through every department of education. It operates powerfully to depress and discourage the energy of the teacher's mind: in particular, when (as is commonly the case,) much of that part of the business of school, which is merely mechanical, falls on the master's shoulders: it becomes indeed, laborious, with the addition of a poor consolation, that, it is worse paid for than any other employ in London.

When a man settles himself to this line as an employ, his prospects are often bounded for life. A merchant may extend his dealings, a tradesman may increase his customers, but the teacher's income depends solely upon the number of his scholars. If he is a just man, he ought not to exceed a certain number, without assistance in tuition of some kind. Here then is the *ne plus ultra* of his expectations, which prove as remote from what they ought to be, as the pillars of Hercules are from the Pacific Ocean. It is not much to be wondered at, if these discouraging circumstances often produce deviations from strict rectitude, where principle is not deeply rooted in the mind, which prove very oppressive to parents and scholars; as, in some instances, permitting the boys to write five or six copies in an afternoon, obviously, that more books may be bought of the master, to his profit, &c. In some schools the pens are scarcely ever mended, and, in general, the poor children are much stinted in this article. It is very essential to their improvement, that their pens should be good: and it operates on their minds in a very discouraging manner when otherwise. I am credibly informed, that some masters use pinions in their rough state, neither dutched nor clarified; of course they split up, with teeth like a saw, and write just as well. Such conduct deserves severe reprehension, and admits of no excuse, except the poverty that sometimes occasions it. I have seen writing books, in which it was plain the poor boy had not had one good pen in twenty copies. The reader, who is sensible of the advantage which arises to learners from a plentiful supply of good pens, will easily conceive how discouraging this must be. But encouragement of any kind is seldom adopted from principle, or any other motive, in this class of schools.

Some teachers plead for the lash, the only proper governing medium of well regulated seminaries, in their estimation, and that with as much zeal as the partizans of Robespierre did for the guilotine. Indeed, I am sometimes inclined to doubt whether some men consider youth as rational and intelligent beings, with minds capable of expansion, and talents formed for usefulness. It is a natural inference, from their obvious conduct, that this must be the case; or, at least, if by strange mischance, such a thought did steal into their heads, it was looked at as carefully as an artful lawyer looks at an old musty title deed, with a jealous eye, and then replaces it carelessly on the same

shelf, to gather dust for succeeding generations. But to return to the subject – The desks children write at are often badly suited for that purpose, the school rooms close and confined, and almost all the accommodations unfit for the purpose. Independent of the bad effects such places produce on the children's health, many having to date the ruin of their constitutions from confinement therein, the drunkenness of a school-master is almost proverbial.

Those who mean well, are not able to do so: poverty prevents it; and the number of teachers, who are men of liberal minds, are few; yet, not being sensible of the incalculable advantages arising from system and order, it is no wonder if it is at a very low ebb among them. The poor parent often becomes sensible that something is amiss, but knows not what; and, induced by this motive, hurries his child from one school to another frequently, and thereby makes bad worse: and is eventually disappointed as much as ever. The want of system and order is almost uniform in every class of schools within the reach of the poor, whose indifferent attainments at school, often arise as much from equal impatience and unsettled disposition in their parents, as deficiency of care in the masters, or want of order in their schools. In fact, there is little encouragement for masters, parents, or scholars: and, while this is the case, it is no wonder that ignorance prevails among the poor. Is it strange, that the chariot wheels move heavily, when clogged with mire and dirt? – I am aware, that a schoolmaster must be a very drudge, who seriously endeavours to discharge his duty, and has the chief burthen of a large school resting on himself solely; and hence that disgust which arises in the minds of many against this employ, and that unwillingness the upright man feels to enter into a profession which bears an unpleasant prospect of toilsome labour, above his strength to support, however useful. – But why should it be so? Why the education of youth a more unpleasant employ than one, in which the individual is connected and surrounded with dull inanimate objects? What can be more agreeable, more amiable, or pleasing, than a large school of orderly and docile youth, whose minds are daily expanding by their own efforts, under a master's paternal care. The disgust that has arisen in some minds against school-keeping, as a toilsome employ, applies not to a school conducted by a regular system, but is the consequence of that disorder which is so very prevalent in schools; and the natural effect of the whole responsibility and care resting on the master; who, without method and order in the daily management of his school, is perplexed and harassed like a bull baited by dogs.

The mental powers of boys are similiar to those of men; but in embryo. – The same stimulus that animates men to action, will have a proportionate effect on juvenile minds. – "The hope of reward sweetens labour," and the prospect of something to be attained in future, is very pleasant to the human mind: no man, or class of men are more useful to society, or rendered more happy by their labours, than those whose hopes depend solely on their own exertions. In proportion as this expectation increases, so does exertion keep pace with it, almost beyond conception. The very nature of expectation, is

to operate as a wire-drawing machine to human industry. In proportion as this sweetener of human toil is intermingled in our cup, so do we remit, or increase, our activity. Would the merchant trade, the mariner toil, or the husbandman plough, without the hope of profit, port, or harvest? – Every man has a stimulus to action, which varies with his prospects of retribution; and it is not in the power of our minds to conceive a more unhappy being, than he who has no wants; whose wishes are completely gratified, or evidently incapable of gratification – such a being desponds from mere listlessness. To be destitute of hope, either from repletion or want, is to tread the threshold of despair. – To conclude, as the schoolmaster and scholars we have been treating of, are mostly destitute of proper incitements to industry, the state they are consequently in may be easily conceived.

In these schools, the number of scholars which attend them increases so much in summer, that it is impossible for the master to do them justice; therefore, an assistant becomes necessary, but he cannot retain one long; for, as the scholars decrease in the winter, his income, of course, shrinks by their non-attendance; and perhaps poverty and misery stare him in the face. With these dreary prospects, who would be a schoolmaster? What man of feeling for a beloved wife, and, perhaps, equally beloved children, would make such a sacrifice? – And, if men whose feelings do honour to human nature, decline this task from prudential or commendable motives, in whose hands then is the education of the poor entrusted? – In the hands of those who would not do their duty if they had power; and of those who could not do it if they would, from inability; besides, system and order, the harbingers of success, are almost unknown among them. At a moderate calculation, among a million of persons inhabiting the metropolis, there are, at least, twenty-five thousand children who attend these schools, and cost their parents as many pounds sterling, per annum. What a noble fund for education would this be, if properly employed. And how lamentable a thing it is, that a very large portion of it should be wasted, from irregularity in the parents, or want of judgment in the master: when the virtuous poor man toils, and stints himself, perhaps, in food, that his children may obtain useful learning, and they yet remain ignorant; their invaluable time lost beyond retrieve, and the fond parent cruelly disappointed.

May this plain statement of facts prevail on the friends of the rising generation to interpose for their welfare; that the education of children may no longer be to parent and master a lottery, in which the prizes bear no proportion to the enormous number of blanks.

Part II

Hints respecting the Formation of a Society for improving the State, and facilitating the Means of Education among the industrious Classes of the Community.

It appears, from the preceeding accounts, that reformation in these schools is absolutely necessary: it remains to consider the means best suited to that end. As a friend of youth, I presume to suggest such as I have long thought adapted to the purpose, in hope that, at least, it may pave the way for some better observations on the subject, from persons of more information and discernment than myself. A spirit, breathing the language of independence, is natural to Englishmen, few of whom are disposed to brook compulsion, or submit to the dictates of others, when not softened by reason, or tempered with kindness.

I am sometimes sorry to hear sensible, intelligent men, talk of reformation in this respect by a compulsive law. Coercion of any kind, which grates upon our very hearing it, is the most disgusting, uncouth word in the British vocabulary, I wish always to submit with deference to the opinions of those I respect: but I am likely to continue decided in the opinion, that teachers of any spirit will not bear attempts to cudgel them into reformation, however respectably sanctioned.

I introduce these remarks, from a fear that rich men sometimes presume too much upon their riches; holding out the dictatorial language of lordlings, when doing the poor an act of kindness, instead of performing it as a duty, incumbent on them as men and Christians, let their stations in society be what they may. I am persuaded, that if any attempt is made to improve the education of the poor, and such an unmanly spirit should guide the resolution of a society or committee for that purpose, it would render the design abortive. Success would depend upon the leading persons concerned in promoting such an undertaking. It is not to be supposed, a design of its magnitude could be carried far into effect without public aid and concurrence. In such a case, it would be almost sure of success, if the active members of a society established for that purpose, were inclined to meet the poor as men, as brethren, and as Christians. The sincere teachers of their youth should be met, not with an intention to dictate to them, but to give additional force to their well meant endeavours, and raise them to public esteem.

Let me add, that a society for this purpose should be established on general Christian principles, and on them only. Mankind are divided into sects, and individuals think very differently on religious subjects, from the purest motives; and that gracious common Parent, who loves all his children alike, beholds with approbation every one who worships him in sincerity. Yet it cannot be reasonably expected that conscientious men should promote a religious opinion directly contrary to their own: a Presbyterian, Baptist, Quaker, or any other, cannot, with sincerity, sacrifice their opinions to those of their amiable and Christian brethren in the establishment. Neither can the last, conscientiously, unite entirely in opinion with those of other denominations: but the grand basis of Christianity alone, is broad enough for the whole bulk of mankind to stand on, and join hands as children of one family. This basis is "Glory to God, and the increase of peace and good-will

amongst men." – It is the duty of every man to imitate the conduct of the good Samaritan. Where is the sincere Churchman or Dissenter that would not readily unite to pour the oil and wine into the poor man's wounds. Ah, then! let the friends of youth, among every denomination of Christians, exalt the standard of Education, and rally round it for their preservation; laying aside all religious differences in opinion, and pursue two grand objects: – The promotion of good morals: and the instruction of youth in useful learning, adapted to their respective situations.

This metropolis abounds with many charitable institutions, which nobly display that grand characteristic of the British Nation, *Humanity*. – We have many societies, whose benevolent exertions contribute much to the public good: but among them, I know of none, except the Sunday School establishment, which operates, in a general way, to instruct the poor, and improve their morals: and that, from the short time the children attend school, is but limited in its effects. – Indeed, it is not to be wondered at, that no general plan of this kind has been adopted: there are few things in which it would appear, at first sight, that the different religious interests of sectarians would clash more: and so they must, if a plan of this kind is eagerly pursued by one or more parties, with a view to increase proselytes, or make it a vehicle to convey their favourite tenets. It has been generally conceived, that if any particular sect obtained the principal care in a national system of education, that party would soon be likely to possess the greatest power and influence in the state. Fear that the clergy should aggrandize themselves too much, has produced opposition from Dissenters to any proposal of the kind; on the other hand, the Clergy have opposed any thing of this nature which might originate with Dissenters, locally or generally, fearing an increase of the dissenting influence might prove likely to prejudice the interests of the establishment. – This difference has frequently produced bitterness and rancour, not consistent with the religious professions of either party; whose conduct ought to adorn the doctrines of their Lord and Master. When we view the consequences, they appear very mortifying to the benevolent mind, completely degrading to human nature, and unworthy of any place in the breasts of Englishmen.

Many thousands of youth have been deprived of the benefit of education thereby, their morals ruined, and talents irretrievably lost to society, for want of cultivation: while two parties have been idly contending who should bestow it. – However, there is hope yet left; the common ground of humanity is adapted to all, none can conscientiously scruple to meet there. All are agreed, that the increase of learning and good morals are great blessings to society. If they cannot unite to do good in every particular instance, let them be fellow helpers as far as they can, and cordially assist to do it with one mind; that society at large may no longer suffer loss, by a set of the most valuable and useful men our nation can boast, employing themselves to little better purpose, than to declaim, or make wry faces at one another.

The principal evils attendant on the usual mode of education among the poor, are, first, improper and immoral persons having youth under their care: secondly, the poverty often distinguishing many teachers of this class, and the consequent want of that respect from parents, which contributes materially to support the master's authority: thirdly, what is of equal magnitude, the uncertainty, not only the poor, but persons in circumstances rather superior, are under, as to the character of the teacher they send their children to; which generally proves like a lottery, in which a solid good, in possession, is staked against one entirely speculative: fourthly, the bad accommodations common school rooms afford to the poor children who attend them; many of whom suffer materially in health, by the confinement in places, that, in summer, may be compared to a baker's oven; in winter, to the peak of Derby: fifthly, the almost total want of system, and a proper stimulus to action in the minds of teachers and scholars: sixthly, the diversity of methods of teaching used in different schools, which very much retards the improvement of the scholars; and when it is found needful to remove them from one school to another, they are obliged to lose a portion of their invaluable time, in retracing their former steps to little purpose. The object of the society proposed, should be to remedy these, and other attendant evils.

What is proposed as conducive to this end, is applicable to initiatory, charity, and most other day schools, with some trifling variations, adapted to the occasion. Female schools might be comprised in the list of those worthy the public patronage, with great propriety. It is conceived, that if female education was better regulated, amongst the lower orders of the people, the lives and happiness of many of those poor abandoned females, who now infest and disgrace the streets of this metropolis, would be preserved. Female schools, therefore, call for attention and reformation in a particular manner.

The first object of the proposed society, should be to provide suitable masters and mistresses for any schools they might chuse to establish, and to encourage such persons who have schools of their own, to do their duty by the societies (respectable) patronage, which properly bestowed, and avowed publicly, would (with its attendant benefits,) be very valuable, and conduce much to the credit of the teachers possessing it: so, on the other hand, it would tend to expel immoral and wicked teachers from the profession, as such must ever remain destitute of its protection.

Here, at once, a solid benefit would, in a considerable degree, be insured to masters, parents, and scholars. To the first, a degree of credit in his neighbourhood: to the second, a tolerable certainty of finding a good teacher for his child, and but little chance, that the pittance he is able to spare from his hard earned wages, will be lost (as it often is,) in a commendable endeavour to give his child an education. Also to the scholar, a certainty that his invaluable time will not be wasted under an ignorant and unqualified teacher. I feel diffident in laying these things before the public, but, to me, they appear important objects.

I do not think it a commendable thing for any body of men to infringe the rights of individuals; therefore, it would not be proper for a society to dictate to teachers having schools of their own, how, or what they should teach. I conceive any person, whose moral character and abilities were likely to make him serviceable to the rising generation, should be an object of the society's protection, let his denomination of religion be what it may; and let him pursue whatever methods, of religious or other instruction, his sincere and best intentions may dictate. I am an advocate for kind treatment on the part of the proposed society, and flatter myself, that the good sense of perrons engaged in the education of youth, would induce them to try, or adopt, such measures as the society might recommend, if the advantage was obvious, and practice easy: and this too, without being cudgelled into obedience.

The patronage of such a society would stimulate to exertion many worthy men, who now linger and despond, being without hope. How often is it seen, not only in the various pursuits of life, but in the revolutions of empires, that particular prospects of success not only present the opportunity of action and advantage, but often animate the mind to embrace it? – So would teachers of youth, well fitted for their employ, be daily formed, if the cheering hope of reward animated their labours. But it is very poor encouragement for a man, having a family, to pass laboriously away the prime of his days with the cheerless expectation of ending them in a workhouse or prison. To remedy this, a friendly society might be formed, composed of perrons who were teachers, under the patronage of the society proposed for the reformation of schools, and its funds might be formed into a very respectable stock by the addition of public donations. I conceive, some perrons better skilled in this matter than myself, would easily point out a method whereby a moderate capital would accumulate, till the stock was sufficient to defray the expence of sickness and funerals; and, perhaps, a liberal and honourable support for old age.

In addition to this, a fund might be established for the occasional relief of deserving teachers in distress, or it might be done by private benefactions, if deemed more eligible; but, at any rate, it is a duty the public owe to those concerned in the education of youth: a duty that by no means ought to remain undischarged. This would be very serviceable in cases of sudden and pressing necessity, but should only be used as a *dernier* resort, and without wounding the feelings of the party relieved.

We daily witness the beneficial effect produced to the community by the institution of premiums, held out to encourage the inventions of ingenious mechanics. As the human mind is nearly the fame in every class, allowing for the partial influence of habit on men of particular professions, it is rational to suppose, that similar encouragement would produce a similar, if not superior effect among the teachers of youth, many of whom are, naturally, men of amiable and liberal minds, but discouraged by the depressing circumstances of their employment.

If a society, for encouraging the commendable exertions of teachers, and bettering the state of schools, was established, and gold or silver medals, &c. given, as rewards for merit, it would be requisite that the distribution should be made as public as possible. It might be proper that the society should publish in the newspapers, the list of prizes, &c. with the names and dwellings of the parties who obtain them: for the same reason, handbills should be printed at the society's expence, and distributed about the neighbourhood wherein the teachers resided. These should contain a statement of the delivery of the gold or silver medal, and for what given, at the same time, stating the satisfaction the society possessed, in having the opportunity of rewarding such distinguished merit; and to conclude by recommending him and his school to the respect and patronage of the public in his neighbourhood.

This outline would admit of qualification, according to different degrees of merit; but, it is conceived, it would so effectually establish the reputation of the schoolmaster in his neighbourhood, as to increase the number of his scholars, and also his income, in a considerable degree. Thus, perhaps, a medal, of a value not exceeding five guineas, would prove more valuable to a master, from the honourable circumstances attending its delivery, than a donation of fifty guineas given in privacy and silence.

The whole body of teachers might derive considerable benefit from the benevolent exertions of the society proposed, in another respect. Schoolmasters are at continual expence for Bibles, Testaments, slates, spelling, writing, and other books, quills, &c.: it is conceived, that large impressions of particular books might be printed off, and considerable purchases made of other articles, which should be retailed without profit, at the society's expence, for ready money, in aid of those teachers only, whose connection with the society, and attention to their duty, should entitle them to such a privilege; it is thought, if such bargains were made with prudence, that many masters might save ten guineas per annum by it, on a very moderate calculation; a sum that is of great consequence to persons having families to maintain. Now, if ten guineas were offered as a donation to some men, their independent spirit would make them decline the offer; but few would object to purchase a bargain whereby so much would be saved. If it should happily prove the public disposition to encourage the worthy teachers of youth, I presume it would be thought best to do it in a manner that would not hurt the feelings of any individual. If this idea should be judged expedient for adoption, I conceive, the funds appropriated to this purpose would remain undiminished, except a trifling annual expence for the person employed in vending them, while one thousand or fifteen hundred pounds might be saved to teachers under the society's patronage; and this piece of service would be more grateful to them, from the conviction that it was the consequence of their own industry and merit. I flatter myself, that, if found needful, a wise and benevolent government would readily concur in encouraging a society of this kind, and, perhaps, readily allow a drawback of the total duties on writing paper, for the use of teachers under the society's protection. This would make

a material addition to their fund, and the degree of their usefulness to those they might chuse to protect.

To facilitate the means of rewarding pupils for good behaviour, attention to their studies, &c. by having medals struck (of silver, and inferior metal) in variety, and adapted to the occasion, a diversity of means might be suggested whereby teachers should be enabled to encourage and reward their pupils, without burthening themselves and their families with an imprudent expence.

The institution of a public library, containing books on education, would be well adapted for the information of teachers, many of whom are not able to purchase expensive publications on those subjects.

To endeavour to gain all the information on the subject of tuition, which the peculiar situation of the society, as patrons of education, would most likely afford, in an extensive manner, the publication of which would be attended with great usefulness, and prove a desirable object. It most probably would not be thought proper to insist upon, or enforce, any particular modes of tuition, religious systems, or creeds. If a teacher was honest, assiduous, and careful, it is as much as any society ought to expect from him. It may be remembered, that this proposal goes not to establish a new order of schools, which would be attended with great expence, but to reform those we already have, by enabling and encouraging the masters to do their duty. – Therefore, every master must be left at liberty to pursue the path of his own choice, and yet partake of the expected reward at the end of his toils. – But there remain one or two things which the public opinion will sanction a right to enforce: viz. A due attention to health, cleanliness, and morality.

The object is not, by more than Herculean labour, to produce either a new establishment, or assume an improper power in the old one, but to cause the schools of which it consists to approximate nearer to public utility; and that only by mild, manly, and Christian conduct, on the part of the society.

If such a society should be formed, great care will be needful in admitting members, but abundantly so in chusing the committee.

Such a society, from its great usefulness, would soon become the most beneficial, reflected, and popular of any in the kingdom. Its objects, by a pro-per definition and limitation, might be circumscribed, so as to avoid giving offence, even to *narrow-minds*, while all its benevolent objects would be accomplished, in some hundreds of schools, amongst many thousands of children, at an expence, that, probably, would not exceed fifteen hundred pounds per annum.

An additional object would be worthy the society's notice: to enforce, as much as possible, the regular attendance of the children at school, and that as near the time appointed as can be. It might be worth while to take a select number of scholars, who were fit to be apprenticed, from every school under the society's patronage: the qualification on the pupil's part should be a regular attendance at school, at the proper hour, for a great length of time; these to draw lots for apprentice fees. Five hundred pounds would suffice to

apprentice near one hundred boys, which should be done, not as an act of charity, but a duty, to deserving youth, which it would be an happiness to the society to fulfil.

Premiums might be instituted, at the public expence, for boys whose improvement in learning should merit it. – We frequently witness a considerable abuse of those rejoicing times in schools, called breaking-up; disorder, and even accidents often occur, merely from the boys not being previously trained to walk in order; by training them to this practice, I have taken one hundred and forty, a walk of five miles and back, while they travelled as regular as I could wish, although they reached so far, that on turns or windings of the road, more than one half the number were out of sight. A discipline of this sort might be easily introduced into every school in London, without loss of time; and an exercise of this sort is so agreeable to boys, that they would come into it with cheerfulness.

It is probable, such a society would be productive of much good, at a comparatively small expence, and the influence of all parties concerned remain nearly the same in society as at present. Having done my part, I commit it to the disposal of a wise and gracious Providence; and to its own merits, with a discerning and benevolent public.

18

The Education of Human Nature

Friedrich Froebel

Chapter I: General Theory

An eternal law pervades and governs all things. The basis of this all-controlling law is an all-pervading, living, self-conscious and therefore eternal Unity. This Unity is God. God is the source of all things. Each thing exists only because the divine spirit lives in it and this divine spirit is its essence. The destiny of every thing is to reveal its essence, that is, the divine spirit dwelling in it. It is the special function of man as an intelligent and rational being to realize his essence fully and clearly, to exercise, practise, and reveal the divine spirit in him, freely and consciously in his own life.

The Theory of Education is the body of doctrine derived by thoughtful men from insight into this law, as a guidance in the apprehension and attainment of man's true calling.

The Art of Education is the free application of this knowledge and insight to the development of rational beings and their training towards the fulfilment of their destiny.

The Purpose of Education is the realization of a faithful, pure, inviolate, and therefore holy, life.

Education, then, must develop the divine spirit in man and make him conscious of it, so that his life may become a free expression of that spirit. Education, in other words, should lead man to a clear knowledge of himself, to peace with nature, to unity with God.

The divine essence of things is recognized by its manifestations. But although all education, all instruction, all teaching, all free life, attaches itself to these manifestations of men and things, and through them acts upon the inner spirit, yet education must not draw conclusions concerning the spirit directly from the manifestations. The nature of things is such that in some ways inferences should be drawn negatively.

Source: Friedrich Froebel, *Froebel's Chief Writings on Education*. Translated in English by S.S.F. Fletcher and J. Welton (London: Arnold, 1912), pp. 31–45.

Failure in applying this truth – that is drawing conclusions concerning the essence directly from its manifestations – is the chief reason for the many mistakes of life and education. Hence it is of the utmost importance that parents and teachers should familiarize themselves with the application of it in its smallest details. This would secure a clearness, certainty, and serenity, in the relations between parents and children, pupils and teachers, which are now sought in vain. For the child who outwardly appears to be good is often not good inwardly; that is, he does not desire the good deliberately, nor from love, esteem, and recognition, of it. On the other hand, the churlish, stubborn, self-willed, child, who outwardly appears to be naughty, has frequently within himself the most active, eager and vigorous desire for the good; while the absent-minded boy is often following a fixed thought which makes him disregard everything around him.

Hence the fundamental principles of education, instruction, and teaching, should be passive and protective, not directive and interfering.

We give room and time to young plants and animals, well knowing that then they will develop and grow according to the laws inherent in them. We do not interfere, because we know that this would disturb their healthy development. But the young child is treated as wax or clay which can be moulded into any form. Why does man, wandering through gardens and fields, meadows and groves, fail to open his mind, and refuse to listen to the lesson which nature silently teaches? See how the weed, growing amid obstacles and restraints, scarcely gives a hint that it obeys an inner law. Then look at it growing in the open field, and see what conformity to law it shows, what harmonious life in all its parts. So children who appear sickly and constrained because their parents have forced upon them in their tender years a form and calling opposed to their nature, might under natural conditions develop with beauty, uniformity, and harmony.

In dealing with objects of nature we often follow the right road, but go astray when we deal with men. And yet, forces are at work in both which have sprung from one source, and which obey the same law. Hence it is important that man should consider nature also from this point of view.

It is true that nature rarely shows us its original purity intact in man. Therefore we must presuppose it in individuals until the contrary is clearly manifest. Otherwise, the original state where it might still be found intact might easily be destroyed. But if the inner spirit and its outward manifestations show unmistakably that the original state has been injured, then a strictly directive education is required.

But it cannot always be demonstrated with certainty that the inner spirit has been injured; at least it is difficult to discover the source and tendency of the injury. The final test of this is found in the man himself. Hence, from this point of view again, education must be passive and protective rather than directive, otherwise the free and conscious revelation of the divine spirit in man – which is the free development of the human race – is lost. But this development is the final aim of all education and life, for it is the ultimate destiny of man.

It follows that purely directive education should not begin until self-consciousness is attained; for only then is the essential nature of the individual evident. Hence, before the origin and kind of the defect of the primitive healthy nature in any pupil become manifest, all that can be done is to place him in an environment so adapted to him that it will make clear both to himself and to others the consequences of his actions, and at the same time afford the fewest opportunities for the exercise of his evil tendencies.

Nevertheless, the eternal spiritual ideal speaks with absolute and relentless authority when he to whom it addresses itself either sees the reason of the command or accepts it with simple and childlike faith. In all good education, in all real instruction, all true teaching, then, necessity should evoke freedom, law should induce self-determination, external compulsion should develop internal free will, outer hatred should beget inner love. But all education, instruction, and teaching, fail whenever hatred gives birth to hatred, law to deceit and crime, compulsion to slavery; when oppression degrades the oppressed, and severity leads to deceit and obstinacy. To avoid this, and to attain its opposite, all directive education must be adapted to the child's nature. This is attained when it expresses an immutable law and excludes all caprice. So all true education, teaching, and instruction, must always be two-sided. It must *give and take*, unite and divide, be directive and adaptable, active, and passive, definite and flexible, firm and yielding. So it is with the pupil.

But between teacher and pupil, between command and obedience, there must be a third term to which each must submit. This is the *Right*, the *Best* which necessarily, and yet without arbitrariness, inheres in the situation. The child sees very clearly whether the biddings of teacher or parent are personal and arbitrary, or are the expressions of necessary and universal law. In this neither child, boy, nor youth, easily errs.

Hence may be derived the general formula of instruction: Do this, and note the consequences of your act in this special case and the knowledge you thus attain. Similarly the general rule of life may be thus formulated: Show forth your spiritual essence in your outward acts, and in this way learn the nature and needs of that inner essence.

Herein we find both the reason of the following demand and the mode in which it can be met. The educator should make plain the universal relations involved in particular acts and the mode in which universal laws find expression in particular deeds, and should illustrate both from life. The external acts should reveal the workings of the internal spirit, and the spirit should disclose itself in outward conduct, while both should show an essential unity. The educator must look at the finite in the light of its infinite meaning, and understand infinite meaning through finite manifestations, while he must see in life the harmony of both. In a word, he must discern the divine element in man and find the essence of humanity in God, and seek to show how in life each element involves the other. The more man studies himself, both as individual man and in the course of human development, the more clearly and unmistakably does this inherence of man in God and God in man become manifest.

In these considerations we find the only true aim of education. So parents should from the first recognize in their child a manifestation of the divine spirit and membership of the human family, and consequently realize their responsibility to God and to humanity as well as to the child himself. Further, they should keep before their minds that the union of divine and human attributes in the child relates him to the whole human race – past, present and future; and should so order his education that the requirements of these relations may be satisfied.

Consequently, the form of man's life should not be regarded as perfect, and therefore fixed and unchangeable; but on the contrary as continuously and steadily advancing from one stage to another in an infinitely progressive development.

Certainly each race and each individual of necessity passes through all the stages already traversed. Were it not so, neither the past nor the present could be understood. But this passage should be made not by mere imitation but through free assimilation.

The true development of each child harmonizes the intellectual and emotional qualities which in his parents may be mere dormant possibilities which they do not even suspect to exist. So his development as a child of God shows the unity and harmony of God and nature, of the infinite and the finite. Again, his development as a member of the family exhibits the nature, capacities and tendencies of the family in purity and harmony. Lastly, his development as a member of the human race shows the nature, capacities, and tendencies, of the whole of humanity.

All these will be most completely secured if each individual develops as perfectly as possible on the lines indicated by his own individual nature. For then the law of natural development which rules the whole universe is expressed in the particular form of his own personality. Then the life of man shows this unity of his nature with the nature of all things; his individuality manifests the unity of his inner spirit with his outer acts; the diversity of these acts exhibits the variety of his relations to the world. Only in this three-fold yet unified way can the inner nature clearly find expression. Whenever one is wanting, or is but imperfectly recognized, the expression is incomplete. The recognition and application of the three-fold aspect alone leads to real knowledge and true insight.

It follows that, from his very birth, this nature of the child should be recognized by allowing him freely to put forth all his activities. The exercise of one power should not hinder that of another. So he should not be fettered, bound, nor wrapped in swaddling clothes, nor, after a while, put into leading strings. He should early learn that he himself is the source of all his powers, and realizing this, use them freely – grasp with his hands, stand and walk on his feet, look and see with his eyes; in short, use all his powers appropriately and harmoniously. Really to be master of one's powers is the most difficult of all arts, and one only to be learnt if it be practised from the first.

The child's very first activity is an exhibition of energy. But all energy is relative to some counter-energy. So the child puts forth energy in crying, in thrusting with his feet against everything which resists them, in grasping with his hands whatever they touch. Soon after, if not at the same time, his sympathy begins to develop. This finds expression in his smile and in his movements expressive of pleasure when he is surrounded by comfortable warmth, clear light, and fresh air. This is the beginning of human consciousness. Thus the first manifestations of the child's human life are content and uneasiness, pleasure and pain, smiles and tears.

Content, pleasure, smiles, betoken whatever the child's consciousness accepts as suited to the unhindered development of his true human nature. To secure and foster these is, then, the first step in education. On the other hand, in the earliest days uneasiness, pain, tears, mark all that is inimical to that development. To discover and remove such hindrances is also the task of early education.

In these earliest days no stubborn self-will is shown by the child's crying, fretfulness, and restlessness. But so soon as the baby even dimly feels that his uneasiness or pain is due to the caprice, carelessness, or negligence, of another, such wilfulness is born. Exactly when that is, nor exactly how it comes about, we cannot say. But it is then that obstinacy begins to develop. And no fault is so fundamental or so evil as obstinacy. Both to the child and to his surroundings it is almost fatal. To the child, because it can hardly be uprooted without danger to the true strength of his nature; to his surroundings, because from it spring deceit, lying, lawlessness, and many other repulsive vices.

Even when the right way is taken mistakes are easily made in following it. The true development of man's nature involves that by bearing small and trifling pains he gains the power of enduring even heavy and crushing sufferings and troubles. When, then, it is certain that the fretful, restless, and crying, baby has all he really needs and that nothing is present which can hurt him, it is well to leave him alone and give him time to grow calm again and to regain his normal state. For if once the little one has by crying extorted sympathy and help demanded by no real suffering, education has lost ground which future compulsion will hardly regain. Still more so if this happen repeatedly. For even babies have a keen sense for the weaknesses of those around them; and, if once opportunity be given, they will rather exert their innate living force in compelling the attendance of others than in bearing their own burdens or in doing anything to remove them.

At this stage the developing human being is most appropriately called a 'suckling,' for assimilation from without covers practically all his activities. His surroundings, in all their variety, are material for his activity. Infinitely important is it, then, that these should not give him occasion to absorb the unwholesome, the mean, the vulgar, the evil, or the doubtful. On the contrary, they should offer only that which is of good repute and apt to inspire confidence. So the faces about him should be open and bright, the air pure, the

light clear, the room clean. For alas! life itself is not long enough to change the trend given in those early years when the whole life was surrendered to influences from without. So it is that often man's hardest struggles are with the self which is rooted in these early experiences. Who then can question the importance of the educative care of the nursling?

Mothers recognize the significance of the child's first smile, as showing not merely a consciousness of bodily individuality, but also the birth of a higher feeling of community. At first this binds the child only to the mother; later to the father, the brothers, and the sisters. Ultimately it reaches out from the family in ever-widening circles till it relates the child to the whole of humanity. As this feeling of family community is rooted in the higher unity of man with man in God it is the germ of all true religious feeling and of all yearning for unity with the Eternal. This early and vague manifestation of the divine spirit in man should be fostered and nurtured till it matures into explicit apprehension.

If parents desire to give their children, as the highest good in life, a firm hold on this never-failing support, their union with those children must be both real and evident wherever in prayer – be it in the home or in the open fields – they acknowledge the common and unifying Fatherhood in God. Let it not be said that the children do not grasp this unity; that is to deny their highest life. They both can and will; unless, indeed, by having already run wild they have become estranged not only from their parents but from their own true selves. They grasp it not in thought but in feeling. Religious feeling which does not grow up from the earliest years can hardly develop in maturity into a full and ardent union with God in all the circumstances of life.

Not in religious training only but in every aspect of training, it is most important that the child's development be recognized as a steady evolution of stage from stage. Most disastrous is it to act on the opposite theory – to divide the very marrow of life by marking sharp contrasts and setting definite limits between stage and stage, and so losing sight of the ever-present identity of the inner essence in all the relations in life. In actual life the stages – infant, child, boy or girl, youth or maiden, man or woman, old man or matron – show an unbroken transition. Nowhere do they appear as separate and distinct. Most harmful is it to disregard this – to look upon the child or the boy as so wholly different from the youth or the man that their common human nature is acknowledged but dimly in thought or speech, and scarcely at all in act. Yet this is commonly done. The boy fails to remember that he was once a child and that the child will in time be a boy; similarly the youth ignores the bonds between himself and the boy. Worst of all, the grown man no longer finds in himself his own early stages of development, but speaks of the child, the boy, and the youth, as beings unlike himself in nature, capacities, and tendencies. This dividing up of life into contrasted stages is due to a lack of observation of one's own development, beginning in early years and ever becoming more precise. It originates more evils than can be enumerated.

Far otherwise would it be if parents looked for their child to pass through all the stages of development, omitting none; especially if they bore in mind that the strong and perfect development of each successive stage is grounded in the vigour and completeness of all the preceding stages. Parents are all too apt to overlook this. They regard a child as surely a boy when once he has reached the age of boyhood, as of necessity a youth or man when he has attained those respective conventional ages. Not so. It is not the reaching a conventional age which makes him boy or youth or man, but the having so lived through childhood, and subsequently through boyhood and youth, that in each stage he has truly satisfied the needs of his whole being, whether they be intellectual, emotional, or physical. The failure to recognize that the early stages of development are thus related to those which follow makes the task of the boy's later teachers and educators almost insuperably hard. Either a boy thus brought up fancies he can skip over all the instruction proper to an earlier stage, or he suffers if at too early an age something unsuited to his stage of development – such as preparation for a special future occupation – be placed before him as a model or a purpose. The child, the boy, the man, should have no other purpose than to be at each stage just what that stage demands. Then, like a new shoot from a healthy bud, each stage will spring forth in its turn, and in each he will with like purpose and effort fulfil its requirements.

Only thus, by adequate development in each preceding stage, can the adequate development of any of the later stages be secured. This is particularly pertinent to the development of natural capacity for the production of material results, that is, for work and industry. The current ideas of work and industry are entirely false and deadening. They regard work as oppressive, degrading, and utterly devoid of life. But God himself works always. Each thought of his is not merely a deed or a product; it is essentially a living productive energy working out its results through all the ages. The Spirit of God hovered over the shapeless void, and, by its transforming energy, stones, plants, animals, man, came to birth and began, each in its own way, to live its destined life. But "God created man in his own image"; therefore man should work and produce as God does. *His* Spirit too, should stir the empty void and call it into life. This is the very essence of the meaning of work; this the high purpose of productive energy. It is through work and industry that we realize our likeness to God, if only the outer bodily activity be known – or even vaguely felt – to be the outcome and embodiment of a living thought within seeking to find expression. Thus, little by little we come to a truer knowledge of God and understand his nature more clearly; thus, both in outer act and in inner life, we feel him ever nearer to us.

The notion that man labours only to gain material necessaries and comforts is degrading, and if it cannot be uprooted yet it should not be spread. It should be spurned by all who would see life truly. That man should work is, in truth, of his very essence; by work he gives scope to the living divine

spirit within him, and so enters into the knowledge that he himself is, in his very nature, akin to God.

Compared with this spiritual function of work, that of earning a livelihood appears as unimportant and artificial. But man's inner spirit can find full expression in outer acts only in a definite order of time. So that if at any period of life a person fail to use the power of work appropriate to that stage, he is bound later to find the higher form of that power lacking – a lack due solely to this early neglect. When this is found actually to be so in any particular case there is no means of repairing the mischief. The want must be recognized and endured. But let it be a warning to avoid such disaster in the future. So it becomes plain that from earliest childhood the growing human being should be trained for productive activity. Both his spiritual and his bodily nature demand it; and in this matter the fulfilment of the demands of the spirit necessarily carries with it the satisfaction of those of the body.

In the awakening of the senses and the spontaneous activity of the limbs of the babe we see the earliest seeds of productive impulse; in the play, building, and modelling, of early childhood the tender buds of promise; then comes the period wherein the boy should be prepared for future industry and diligent work. Every child, boy, and youth, whatever his rank or condition, should spend at least one or two hours a day in some serious and definite productive work. For the lessons taught by work and by actual life are at once the most easily learnt and the most valuable and formative. Yet both children and adults now-a-days give much time and attention to aimless and frivolous pursuits; little to purposive work. They dislike bodily work in the present, and believe they will not need it in the future. To change this attitude is the difficult but bounden duty of every educational institution. The present-day training of children, both in home and in school, cultivates at once bodily laziness and mental indolence, and so wastes a vast amount of potential human energy. So schools would do well to provide work-hours as well as study-hours. Surely in time this will be realized and acted upon.

This early training in industry is as important as is early training in religion, and is related to it. For when it is carried out in harmony with its vital inner meaning it confirms and elevates religion. Religion which inspires no productive effort easily passes into empty formalism; it becomes a mere ghost of the reality. On the other hand, work devoid of religion degrades man into a beast of burden, a machine. Work and religion must go hand in hand; for God works ever and always. But as human energy develops, it should not show itself only in the inner and confident restfulness of religion or in the outer productiveness of work. It should also be directed upon itself, and in itself find strength to bear and to endure. So shall it manifest itself in self-control, in temperance, in frugality. Wherever religion, industry, self-control – one as they are in their essence – harmoniously rule the life, there is heaven upon earth – peace, joy, sound-mindedness, grace, and blessedness.

To sum up: man is in the child; the unity of humanity is inherent in childhood; so it follows that all that the man shall ever be or do exists in germ in him as an infant. So if we would train him aright, so as to develop both his individuality and his common human nature, we must from the first see him both as a particular human being and as in essential relations to his surroundings. But the unity of his inner life finds many and diverse manifestations, which appear successively in time. So it is in diverse particular experiences that the child learns to know both the world as related to himself and his own inner life as related to the world. Hence it follows that his powers and tendencies, the activities of his senses and limbs, should be developed in order, each as it appears in his life.

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First Annual Report of the Massachusetts School Board (1837)

Horace Mann

Another topic, in some respects kindred to the last, is the apathy of the people themselves towards our common schools. The wide usefulness of which this institution is capable is shorn away on both sides, by two causes diametrically opposite. On one side there is a portion of the community who do not attach sufficient value to the system to do the things necessary to its healthful and energetic working. They may say excellent things about it, they may have a conviction of its general utility; but they do not understand, that the wisest conversation not embodied in action, that convictions too gentle and quiet to coerce performance, are little better than worthless. The prosperity of the system always requires some labor. It requires a conciliatory disposition, and oftentimes a little sacrifice of personal preferences. A disagreement about the location of a school-house, for instance, may occasion the division of a district, and thus inflict permanent impotency upon each of its parts. In such cases, a spirit of forbearance and compromise averting the evil, would double the common fund of knowledge for every child in the territory. Except in those cases, where it is made necessary by the number of the scholars, the dismemberment of a district, though it may leave the body, drains out its life-blood. So through remissness or ignorance on the part of parent and teacher, the minds of children may never be awakened to a consciousness of having, within themselves, blessed treasures of innate and noble faculties, far richer than any outward possessions can be; they may never be supplied with any foretaste of the enduring satisfactions of knowledge; and hence, they may attend school for the allotted period, merely as so many male and female automata, between four and sixteen years of age. As the progenitor of the human race, after being perfectly fashioned in every limb and organ and feature, might have lain till this time, a motionless body in the midst of the beautiful garden of Eden, had not the Creator

Source: Horace Mann, *Report, together with the Report of the Secretary of the Board of the Massachusetts State Board of Education* (Boston, 1837), pp. 29–33.

breathed into him a living soul; so children, without some favoring influences to woo out and cheer their faculties, may remain mere inanimate forms, while surrounded by the paradise of knowledge. It is generally believed, that there is an increasing class of people amongst us, who are losing sight of the necessity of securing ample opportunities for the education of their children. And thus, on one side, the institution of common schools is losing its natural support, if it be not incurring actual opposition.

Opposite to this class, who tolerate, from apathy, a depression in the common schools, there is another class who affix so high a value upon the culture of their children, and understand so well the necessity of a skilful preparation of means for its bestowment, that they turn away from the common schools, in their depressed state, and seek, elsewhere, the helps of a more enlarged and thorough education. Thus the standard, in descending to a point corresponding with the views and wants of one portion of society, falls below the demands and the regards of another. Out of different feelings grow different plans; and while one remains fully content with the common school, the other builds up the private school or the academy. The education fund is thus divided into two parts. Neither of the halves does a quarter of the good which might be accomplished by a union of the whole. One party pays an adequate price, but has a poor school; the other has a good school, but at more than four-fold cost. Were their funds and their interest combined, the poorer school might be as good as the best; and the dearest almost as low as the cheapest. This last mentioned class embraces a considerable portion, perhaps a majority of the wealthy persons in the state; but it also includes another portion, numerically much greater, who, whether rich or poor, have a true perception of the sources of their children's individual and domestic well-being, and who consider the common necessaries of their life, their food and fuel and clothes, and all their bodily comforts as superfluities, compared with paramount necessity of a proper mental and moral culture of their offspring.

The maintenance of free schools rests wholly upon the social principle. It is emphatically a case where men, individually powerless, are collectively strong. The population of Massachusetts, being more than *eighty* to the square mile, gives it the power of maintaining common schools. Take the whole range of the western and south-western states, and their population, probably, does not exceed a dozen or fifteen to the square mile. Hence, except in favorable localities, common schools are impossible; as the population upon a territory of convenient size for a district, is too small to sustain a school. Here, nothing is easier. But by dividing our funds, we cast away our natural advantages. We voluntarily reduce ourselves to the feebleness of a state, having but half our density of population.

It is generally supposed, that this severance of interests, and consequent diminution of power, have increased much of late, and are now increasing in an accelerated ratio. This is probable, for it is a self-aggravating evil. Its origin and progress are simple and uniform. Some few persons in a village

or town, finding the advantages of the common school inadequate to their wants, unite to establish a private one. They transfer their children from the former to the latter. The heart goes with the treasure. The common school ceases to be visited by those whose children are in the private. Such parents decline serving as committee men. They have now no personal motive to vote for or advocate any increase of the town's annual appropriation for schools; to say nothing of the temptation to discourage such increase in indirect ways, or even to vote directly against it. If, by this means, some of the best scholars happen to be taken from the common school, the standard of that school is lowered. The lower classes in a school have no abstract standard of excellence, and seldom aim at higher attainments than such as they daily witness. All children, like all men, rise easily to the common level. There, the mass stop; strong minds only ascend higher. But raise the standard, and, by a spontaneous movement, the mass will rise again and reach it. Hence the removal of the most forward scholars from a school is not a small misfortune. Again; the teacher of the common school rarely visits or associates except where the scholars of his own school are the origin of the acquaintance, and the bond of attachment. All this inevitably depresses and degrades the common school. In this depressed and degraded state, another portion of the parents find it, in fitness and adequacy, inferior to their wants; and, as there is now a private school in the neighborhood, the strength of the inducement, and the facility of the transfer, overbalance the objection of increased expense, and the doors of the common school close, at once, upon their children, and upon their interest in its welfare. Thus another blow is dealt; then others escape; action and reaction alternate, until the common school is left to the management of those, who have not the desire or the power either to improve it or to command a better....

The theory of our laws and institutions undoubtedly is, *first*, that in every district of every town in the Commonwealth, there should be a free district school, sufficiently safe, and sufficiently good, for all the children within its territory, where they may be well instructed in the rudiments of knowledge, formed to propriety of demeanor, and imbued with the principles of duty: and, *secondly*, in regard to every town, having such an increased population as implies the possession of sufficient wealth, that there should be a school of an advanced character, offering an equal welcome to each one of the same children, whom a peculiar destination, or an impelling spirit of genius, shall send to its open doors, – especially to the children of the poor, who cannot incur the expenses of a residence from home in order to attend such a school. It is on this common platform, that a general acquaintanceship should be formed between the children of the same neighborhood. It is here, that the affinities of a common nature should unite them together so as to give the advantages of pre-occupancy and a stable possession to fraternal feelings, against the alienating competitions of subsequent life.

After the state shall have secured to all its children, that basis of knowledge and morality, which is indispensable to its own security; after it shall

have supplied them with the instruments of that individual prosperity, whose aggregate will constitute its own social prosperity; then then may be emancipated from its nonage, each one to go withersoever his well-instructed mind shall determine. At this point, seminaries for higher learning, academies and universities, should stand ready to receive, at private cost, all whose path to any ultimate destination may lie through their halls. Subject, of course, to many exceptions; – all, however, inconsiderable, compared with the generality of the rule, – this is the paternal and comprehensive theory of our institutions; and, is it possible, that a practical contradiction of this theory can be wise, until another shall be devised, offering some chances at least of equally valuable results?

Amongst any people, sufficiently advanced in intelligence, to perceive, that hereditary opinions on religious subjects are not always coincident with truth, it cannot be overlooked, that the tendency of the private school system is to assimilate our modes of education to those of England, where churchmen and dissenters, – each sect according to its own creed, – maintain separate schools, in which children are taught, from their tenderest years to wield the sword of polemics with fatal dexterity; and where the gospel, instead of being a temple of peace, is converted into an armory of deadly weapons, for social, interminable warfare. Of such disastrous consequences, there is but one remedy and one preventive. It is the elevation of the common schools. Until that is accomplished, (for which, however, they ought to cooperate,) those who are able, not only will, but they are bound by the highest obligations, to provide surer and better means for the education of their children.

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Twelfth Annual Report of the Massachusetts School Board (1848)

Horace Mann

Under the Providence of God, our means of education are the grand machinery by which the "raw material" of human nature can be worked up into inventors and discoverers, into skilled artisans and scientific farmers, into scholars and jurists, into the founders of benevolent institutions, and the great expounders of ethical and theological science. By means of early education, these embryos of talent may be quickened, which will solve the difficult problems of political and economical law; and by them, too, the genius may be kindled which will blaze forth in the Poets of Humanity. Our schools, far more than they have done, may supply the Presidents and Professors of Colleges, and Superintendents of Public Instruction, all over the land; and send, not only into our sister states, but across the Atlantic, the men of practical science, to superintend the construction of the great works of art. Here, too, may those judicial powers be developed and invigorated, which will make legal principles so clear and convincing as to prevent appeals to force; and, should the clouds of war ever lower over our country, some hero may be found, – the nursling of our schools, and ready to become the leader of our armies, – that best of all heroes, who will secure the glories of a peace, unstained by the magnificent murders of the battle-field. . . .

Without undervaluing any other human agency, it may be safely affirmed that the Common School, improved and energized, as it can easily be, may become the most effective and benignant of all the forces of civilization. Two reasons sustain this position. In the first place, there is a universality in its operation, which can be affirmed of no other institution whatever. If administered in the spirit of justice and conciliation, all the rising generation may be brought within the circle of its reformatory and elevating influences. And, in the second place, the materials upon which it operates are so pliant and ductile as to be susceptible of assuming a greater variety of forms than

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Source: Lawrence A. Cremin (ed.), *Report, together with the Report of the Secretary of the Board of the Massachusetts State Board of Education* (Boston, 1848), pp. 84–97.

any other earthly work of the Creator. The inflexibility and ruggedness of the oak, when compared with the lithe sapling or the tender germ, are but feeble emblems to typify the docility of childhood, when contrasted with the obduracy and intractableness of man. It is these inherent advantages of the Common School, which, in our own State, have produced results so striking, from a system so imperfect, and an administration so feeble. In teaching the blind, and the deaf and dumb, in kindling the latent spark of intelligence that lurks in an idiot's mind, and in the more holy work of reforming abandoned and outcast children, education has proved what it can do, by glorious experiments. These wonders, it has done in its infancy, and with the lights of a limited experience; but, when its faculties shall be fully developed, when it shall be trained to wield its mighty energies for the protection of society against the giant vices which now invade and torment it; – against intemperance, avarice, war, slavery, bigotry, the woes of want and the wickedness of waste, – then, there will not be a height to which these enemies of the race can escape, which it will not scale, nor a Titan among them all, whom it will not slay.

Now I proceed, then, in endeavoring to show how the true business of the schoolroom connects itself, and becomes identical, with the great interests of society. The former is the infant, immature state of those interests; the latter, their developed, adult state. As "the child is father to the man," so may the training of the schoolroom expand into the institutions and fortunes of the State. . . .

Intellectual Education, as a Means of Removing Poverty, and Securing Abundance

Another cardinal object which the government of Massachusetts, and all the influential men in the State should propose to themselves, is the physical well-being of all the people, – the sufficiency, comfort, competence, of every individual, in regard to food, raiment, and shelter. And these necessaries and conveniences of life should be obtained by each individual for himself, or by each family for themselves, rather than accepted from the hand of charity, or extorted by poor-laws. It is not averred that this most desirable result can, in all instances, be obtained; but it is, nevertheless, the end to be aimed at. True statesmanship and true political economy, not less than true philanthropy, present this perfect theory as the goal, to be more and more closely approximated by our imperfect practice. The desire to achieve such a result cannot be regarded as an unreasonable ambition; for, though all mankind were well-fed, well-clothed, and well-housed, they might still be but half-civilized. . . .

According to the European theory, men are divided into classes, – some to toil and earn, others to seize and enjoy. According to the Massachusetts theory, all are to have an equal chance for earning, and equal security in the

enjoyment of what they earn. The latter tends to equality of condition; the former to the grossest inequalities. Tried by any Christian standard of morals, or even by any of the better sort of heathen standards, can any one hesitate, for a moment, in declaring which of the two will produce the greater amount of human welfare; and which, therefore, is the more conformable to the Divine will? The European theory is blind to what constitutes the highest glory, as well as the highest duty, of a State. . . .

I suppose it to be the universal sentiment of all those who mingle any ingredient of benevolence with their notions on Political Economy, that vast and overshadowing private fortunes are among the greatest dangers to which the happiness of the people in a republic can be subjected. Such fortunes would create a feudalism of a new kind; but one more oppressive and unrelenting than that of the Middle Ages. The feudal lords in England, and on the continent, never held their retainers in a more abject condition of servitude, than the great majority of foreign manufacturers and capitalists hold their operatives and laborers at the present day. The means employed are different, but the similarity in results is striking. What force did then, money does now. The villein of the Middle Ages had no spot of earth on which he could live, unless one were granted to him by his lord. The operative or laborer of the present day has no employment, and therefore no bread, unless the capitalist will accept his services. The vassal had no shelter but such as his master provided for him. Not one in five thousand of English operatives, or farm laborers, is able to build or own even a hovel; and therefore they must accept such shelter as Capital offers them. The baron prescribed his own terms to his retainers; those terms were peremptory, and the serf must submit or perish. The British manufacturer or farmer prescribes the rate of wages he will give to his work-people; he reduces these wages under whatever pretext he pleases; and they too have no alternative but submission or starvation. In some respects, indeed, the condition of the modern dependant is more forlorn than that of the corresponding serf class in former times. Some attributes of the patriarchal relation did spring up between the lord and his leges, to soften the harsh relations subsisting between them. Hence came some oversight of the condition of children, some relief in sickness, some protection and support in the decrepitude of age. But only in instances comparatively few, have kindly offices smoothed the rugged relation between British Capital and British Labor. The children of the work-people are abandoned to their fate; and, notwithstanding the privations they suffer, and the dangers they threaten, no power in the realm has yet been able to secure them an education; and when the adult laborer is prostrated by sickness, or eventually worn out by toil and age, the poor-house, which has all along been his destination, becomes his destiny.

Now two or three things will doubtless be admitted to be true, beyond all controversy, in regard to Massachusetts. By its industrial condition, and its business operations, it is exposed, far beyond any other state in the Union,

to the fatal extremes of overgrown wealth and desperate poverty. Its population is more dense than that of any other state. It is four or five times more dense than the average of all the other states, taken together; and density of population has always been one of the proximate causes of social inequality. According to population and territorial extent, there is far more capital in Massachusetts, – capital which is movable, and instantaneously available, – than in any other state in the Union; and probably both these qualifications respecting population and territory could be omitted without endangering the truth of the assertion. It has been recently stated, in a very respectable public journal, on the authority of a writer conversant with the subject, that, from the last of June, 1846, to the 1st of August, 1848, the amount of money invested, by the citizens of Massachusetts, "in manufacturing cities, railroads, and other improvements," is "fifty-seven millions of dollars, of which more than fifty has been paid in and expended." The dividends to be received by the citizens of Massachusetts from June, 1848, to April, 1849, are estimated, by the same writer, at ten millions, and the annual increase of capital at "little short of twenty-two millions." If this be so, are we not in danger of naturalizing and domesticating among ourselves those hideous evils which are always engendered between Capital and Labor, when all the capital is in the hands of one class, and all the labor is thrown upon another?

Now, surely, nothing but Universal Education can counter-work this tendency to the domination of capital and the servility of labor. If one class possesses all the wealth and the education, while the residue of society is ignorant and poor, it matters not by what name the relation between them may be called; the latter, in fact and in truth, will be the servile dependents and subjects of the former. But if education be equably diffused, it will draw property after it, by the strongest of all attractions; for such a thing never did happen, and never can happen, as that an intelligent and practical body of men should be permanently poor. Property and labor, in different classes, are essentially antagonistic: but property and labor, in the same class, are essentially fraternal. The people of Massachusetts have, in some degree, appreciated the truth, that the unexampled prosperity of the State, – its comfort, its competence, its general intelligence and virtue, – is attributable to the education, more or less perfect, which all its people have received; but are they sensible of a fact equally important? – namely, that it is to this same education that two thirds of the people are indebted for not being, to-day, the vassals of as severe a tyranny, in the form of capital, as the lower classes of Europe are bound to in the form of brute force.

Education, then, beyond all other devices of human origin, is the great equalizer of the conditions of men – the balance-wheel of the social machinery. I do not here mean that it so elevates the moral nature as to make men disdain and abhor the oppression of their fellowmen. This idea pertains to another of its attributes. But I mean that it gives each man the independence and the means, by which he can resist the selfishness of other men. It does better than to disarm the poor of their hostility towards the rich; it prevents

being poor. Agrarianism is the revenge of poverty against wealth. The wanton destruction of the property of others, – the burning of hay-ricks and corn-ricks, the demolition of machinery, because it supersedes hand-labor, the sprinkling of vitriol on rich dresses, – is only agrarianism run mad. Education prevents both the revenge and the madness. On the other hand, a fellow-feeling for one's class or caste is the common instinct of hearts not wholly sunk in selfish regards for person, or for family. The spread of education, by enlarging the cultivated class or caste, will open a wider area over which the social feelings will expand; and, if this education should be universal and complete, it would do more than all things else to obliterate factitious distinctions in society.

The main idea set forth in the creeds of some political reformers, or revolutionizers, is that some people are poor because others are rich. This idea supposes a fixed amount of property in the community, which, by fraud or force, or arbitrary law, is unequally divided among men; and the problem presented for solution is, how to transfer a portion of this property from those who are supposed to have too much, to those who feel and know that they have too little. At this point, both their theory and their expectation of reform stop. But the beneficent power of education would not be exhausted, even though it should peaceably abolish all the miseries that spring from the coexistence, side by side, of enormous wealth and squalid want. It has a higher function. Beyond the power of diffusing old wealth, it has the prerogative of creating new. It is a thousand times more lucrative than fraud; and adds a thousandfold more to a nation's resources than the most successful conquests. Knaves and robbers can obtain only what was before possessed by others. But education creates or develops new treasures, – treasures not before possessed or dreamed of by any one. . . .

If a savage will learn how to swim, he can fasten a dozen pounds' weight to his back, and transport it across a narrow river, or other body of water of moderate width. If he will invent an axe, or other instrument, by which to cut down a tree, he can use the tree for a float, and one of its limbs for a paddle, and can thus transport many times the former weight, many times the former distance. Hollowing out his log, he will increase, what may be called, its tonnage, – or, rather, its poundage, – and, by sharpening its ends, it will cleave the water both more easily and more swiftly. Fastening several trees together, he makes a raft, and thus increases the buoyant power of his embryo water-craft. Turning up the ends of small poles, or using knees of timber instead of straight pieces, and grooving them together, or filling up the interstices between them, in some other way, so as to make them water-right, he brings his rude raft literally into ship-shape. Improving upon hull below and rigging above, he makes a proud merchantman, to be wafted by the winds from continent to continent. But, even this does not content the adventurous naval architect. He frames iron arms for his ship; and, for oars, affixes iron wheels, capable of swift revolution, and stronger than the strong sea. Into iron-walled cavities in her bosom, he puts iron organs of massive structure

and strength, and of cohesion insoluble by fire. Within these, he kindles a small volcano; and then, like a sentient and rational existence, this wonderful creation of his hands cleaves oceans, breasts tides, defies tempests, and bears its living and jubilant freight around the globe. Now, take away intelligence from the ship-builder, and the steamship, – that miracle of human art, – falls back into a floating log; the log itself is lost; and the savage swimmer, bearing his dozen pounds on his back, alone remains.

And so it is, not in one department only, but in the whole circle of human labors. The annihilation of the sun would no more certainly be followed by darkness, than the extinction of human intelligence would plunge the race at once into the weakness and helplessness of barbarism. To have created such beings as we are, and to have placed them in this world, without the light of the sun, would be no more cruel than for a government to suffer its laboring classes to grow up without knowledge...

For the creation of wealth, then, – for the existence of a wealthy people and a wealthy nation, – intelligence is the grand condition. The number of improvers will increase, as the intellectual constituency, if I may so call it, increases. In former times, and in most parts of the world even at the present day, not one man in a million has ever had such a development of mind, as made it possible for him to become a contributor to art or science. Let this development precede, and contributions, numberless, and of inestimable value, will be sure to follow. That Political Economy, therefore, which busies itself about capital and labor, supply and demand, interest and rents, favorable and unfavorable balances of trade; but leaves out of account the element of a wide-spread mental development, is nought but stupendous folly. The greatest of all the arts in political economy is, to change a consumer into a producer; and the next greatest is to increase the producer's producing power; – an end to be directly attained, by increasing his intelligence...

Political Education

The necessity of general intelligence, – that is, of education, (for I use the terms as substantially synonymous: because general intelligence can never exist without general education, and general education will be sure to produce general intelligence,) – the necessity of general intelligence, under a republican form of government, like most other very important truths, has become a very trite one. It is so trite, indeed, as to have lost much of its force by its familiarity. Almost all the champions of education seize upon this argument, first of all; because it is so simple as to be understood by the ignorant, and so strong as to convince the skeptical. Nothing would be easier than to follow in the train of so many writers, and to demonstrate, by logic, by history, and by the nature of the case, that a republican form of government, without intelligence in the people, must be, on a vast scale, what a

mad-house, without superintendent or keepers, would be, on a small one; – the despotism of a few succeeded by universal anarchy, and anarchy by despotism, with no change but from bad to worse. Want of space and time alike forbid me to attempt any full development of the merits of this theme; but yet, in the closing one of a series of reports, partaking somewhat of the nature of a summary of former arguments, an omission of this topic would suggest to the comprehensive mind the idea of incompleteness.

That the affairs of a great nation or state are exceedingly complicated and momentous, no one will dispute. Nor will it be questioned that the degree of intelligence that superintends, should be proportioned to the magnitude of the interests superintended. He who scoops out a wooden dish needs less skill than the maker of a steam-engine or a telescope. The dealer in small wares requires less knowledge than the merchant who exports and imports to and from all quarters of the globe. An ambassador cannot execute his functions with the stock of attainments or of talents sufficient for a parish clerk. Indeed, it is clear, that the want of adequate intelligence, – of intelligence commensurate with the nature of the duties to be performed, – will bring ruin or disaster upon any department. A merchant loses his intelligence, and he becomes a bankrupt. A lawyer loses his intelligence, and he forfeits all the interests of his clients. Intelligence abandons a physician, and his patients die, with more than the pains of natural dissolution. Should judges upon the bench be bereft of this guide, what havoc would be made of the property and the innocence of men! Let this counsellor be taken from executive officers, and the penalties due to the wicked would be visited upon the righteous, while the rewards and immunities of the righteous would be bestowed upon the guilty. And so, should intelligence desert the halls of legislation, weakness, rashness, contradiction, and error would glare out from every page of the statute book. Now, as a republican government represents almost all interests, whether social, civil or military, the necessity of a degree of intelligence adequate to the due administration of them all, is so self-evident, that a bare statement is the best argument.

But in the possession of this attribute of intelligence, elective legislators will never far surpass their electors. By a natural law, like that which regulates the equilibrium of fluids, elector and elected, appointer and appointee, tend to the same level. It is not more certain that a wise and enlightened constituency will refuse to invest a reckless and profligate man with office, or discard him if accidentally chosen, than it is that a foolish or immoral constituency will discard or eject a wise man. This law of assimilation, between the choosers and the chosen, results, not only from the fact that the voter originally selects his representative according to the affinities of good or of ill, of wisdom or of folly, which exist between them; but if the legislator enacts or favors a law which is too wise for the constituent to understand, or too just for him to approve, the next election will set him aside as certainly as if he had made open merchandise of the dearest interests of the people, by perjury and for a bribe. And if the infinitely Just and Good, in giving laws

to the Jews, recognized the "hardness of their hearts," how much more will an earthly ruler recognize the baseness or wickedness of the people, when his heart is as hard as theirs! In a republican government, legislators are a mirror reflecting the moral countenance of their constituents. And hence it is, that the establishment of a republican government, without well-appointed and efficient means for the universal education of the people, is the most rash and foolhardy experiment ever tried by man. Its fatal results may not be immediately developed, – they may not follow as the thunder follows the lightning, – for time is an element in maturing them, and the calamity is too great to be prepared in a day; but, like the slow-accumulating avalanche, they will grow more terrific by delay, and, at length, though it may be at a late hour, will overwhelm with ruin whatever lies athwart their path. It may be an easy thing to make a Republic; but it is a very laborious thing to make Republicans; and woe to the republic that rests upon no better foundations than ignorance, selfishness, and passion. Such a Republic may grow in numbers and in wealth. As an avaricious man adds acres to his lands, so its rapacious government may increase its own darkness by annexing provinces and states to its ignorant domain. Its armies may be invincible, and its fleets may strike terror into nations on the opposite sides of the globe, at the same hour. Vast in its extent, and enriched with all the prodigality of nature, it may possess every capacity and opportunity of being great, and of doing good. But if such a Republic be devoid of intelligence, it will only the more closely resemble an obscene giant who has waxed strong in his youth, and grown wanton in his strength; whose brain has been developed only in the region of the appetites and passions, and not in the organs of reason and conscience; and who, therefore, is boastful of his bulk alone, and glories in the weight of his heel and in the destruction of his arm. Such a Republic, with all its noble capacities for beneficence, will rush with the speed of a whirlwind to an ignominious end; and all good men of after-times would be fain to weep over its downfall, did not their scorn and contempt at its folly and its wickedness, repress all sorrow for its fate. . . .

However elevated the moral character of a constituency may be; however well informed in matters of general science or history, yet they must, if citizens of a Republic, understand something of the true nature and functions of the government under which they live. That any one who is to participate in the government of a country, when he becomes a man, should receive no instruction respecting the nature and functions of the government he is afterwards to administer, is a political solecism. In all nations, hardly excepting the most rude and barbarous, the future sovereign receives some training which is supposed to fit him for the exercise of the powers and duties of his anticipated station. Where, by force of law, the government devolves upon the heir, while yet in a state of legal infancy, some regency, or other substitute, is appointed, to act in his stead, until his arrival at mature age; and, in the meantime, he is subjected to such a course of study and discipline, as will tend to prepare him, according to the political theory of the

time and the place, to assume the reins of authority at the appointed age. If, in England, or in the most enlightened European monarchies, it would be a proof of restored barbarism, to permit the future sovereign to grow up without any knowledge of his duties, – and who can doubt that it would be such a proof, – then, surely, it would be not less a proof of restored, or of never-removed barbarism, amongst us, to empower any individual to use the elective franchise, without preparing him for so momentous a trust. Hence, the constitution of the United States, and of our own State, should be made a study in our Public Schools. The partition of the powers of government into the three co-ordinate branches, – legislative, judicial, and executive, – with the duties appropriately devolving upon each; the mode of electing or of appointing all officers, with the reason on which it was founded; and, especially, the duty of every citizen, in a government of laws, to appeal to the courts for redress, in all cases of alleged wrong, instead of undertaking to vindicate his own rights by his own arm; and, in a government where the people are the acknowledged sources of power, the duty of changing laws and rulers by an appeal to the ballot, and not by rebellion, should be taught to all the children until they are fully understood.

Had the obligations of the future citizen been sedulously inculcated upon all the children of this Republic, would the patriot have had to mourn over so many instances, where the voter, not being able to accomplish his purpose by voting, has proceeded to accomplish it by violence; where, agreeing with his fellow-citizens, to use the machinery of the ballot, he makes a tacit reservation, that, if that machinery does not move according to his pleasure, he will wrest or break it? If the responsibleness and value of the elective franchise were duly appreciated, the day of our State and National elections would be among the most solemn and religious days in the calendar. Men would approach them, not only with preparation and solicitude, but with the sobriety and solemnity, with which discreet and religious-minded men meet the great crises of life. No man would throw away his vote, through caprice or wantonness, any more than he would throw away his estate, or sell his family into bondage. No man would cast his vote through malice or revenge, any more than a good surgeon would amputate a limb, or a good navigator sail through perilous straits, under the same criminal passions.

But, perhaps, it will be objected, that the constitution is subject to different readings, or that the policy of different administrations has become the subject of party strife; and, therefore, if any thing of constitutional or political law is introduced into our schools, there is danger that teachers will be chosen on account of their affinities to this or that political party; or that teachers will feign affinities which they do not feel, in order that they may be chosen; and so each schoolroom will at length become a miniature political club-room, exploding with political resolves, or flaming out with political addresses, prepared, by beardless boys, in scarcely legible hand-writing, and in worse grammar.

With the most limited exercise of discretion, all apprehensions of this kind are wholly groundless. There are different readings of the constitution, it is true; and there are partisan topics which agitate the country from side to side; but the controverted points, compared with those about which there is no dispute, do not bear the proportion of one to a hundred. And what is more, no man is qualified, or can be qualified, to discuss the disputable questions, unless previously and thoroughly versed in those questions, about which there is no dispute. In the terms and principles common to all, and recognized by all, is to be found the only common medium of language and of idea, by which the parties can become intelligible to each other; and there, too, is the only common ground, whence the arguments of the disputants can be drawn.

It is obvious, on the other hand, that if the tempest of political strife were to be let loose upon our Common Schools, they would be overwhelmed with sudden ruin. Let it be once understood, that the schoolroom is a legitimate theatre for party politics, and with what violence will hostile partisans struggle to gain possession of the stage, and to play their parts upon it! Nor will the stage be the only scene of gladiatorial contests. These will rage in all the avenues that lead to it. A preliminary advantage, indispensable to ultimate success, will be the appointment of a teacher of the true faith. As the great majority of the schools in the State are now organized, this can be done only by electing a prudential committee, who will make what he calls political soundness paramount to all other considerations of fitness. Thus, after petty skirmishings among neighbors, the fierce encounter will begin in the district's primary assembly, – in the schoolroom itself. This contest being over, the election of the superintending, or town's committee, must be determined in the same way, and this will bring together the combustibles of each district, to burn with an intenser and a more devouring flame, in the town meeting. It is very possible, nay, not at all improbable, that the town may be of one political complexion, while a majority of the districts are of the opposite. Who shall moderate the fury of these conflicting elements, when they rage against each other; and who shall save the dearest interests of the children from being consumed in the fierce combustion? If parents find that their children are indoctrinated into what they call political heresies, will they not withdraw them from the school; and, if they withdraw them from the school, will they not resist all appropriations to support a school from which they derive no benefit?

But, could the schools, themselves, survive these dangers for a single year, it would be only to encounter others still more perilous. Why should not the same infection that poisons all the relations of the schoolroom, spread itself abroad, and mingle with all questions of external organization and arrangement? Why should not political hostility cause the dismemberment of districts, already too small; or, what would work equal injury, prevent the union of districts, whose power of usefulness would be doubled by a combination of their resources? What better could be expected, than that one

set of school books should be expelled, and another introduced, as they might be supposed, however remotely, to favor one party or the other; or, as the authors of the books might belong to one party or the other? And who could rely upon the reports, or even the statistics of a committee, chosen by partisan votes, goaded on by partisan impulses, and responsible to partisan domination; and this, too, without any opportunity of control or check from the minority? Nay, if the schools could survive long enough to meet the crisis, why should not any and every measure be taken, either to maintain an existing political ascendancy, or to recover a lost one, in a school district, or in a town, which has even been taken by unscrupulous politicians, to maintain or to recover an ascendancy at the polls? Into a district, or into a town, voters may be introduced from abroad, to turn the scale. An employer may dismiss the employed, for their refusal to submit to his dictation; or make the bread that is given to the poor man's children, perform the double office of payment for labor to be performed, and of a bribe for principle to be surrendered. And, beyond all this, if the imagination can conceive any thing more deplorable than this, what kind of political doctrines would be administered to the children, amid the vicissitudes of party domination, – their alternations of triumph and defeat? This year, under the ascendancy of one side, the constitution declares one thing; and commentaries, glosses, and the authority of distinguished names, all ratify and confirm its decisions. But victory is a fickle goddess. Next year, the vanquished triumph; and constitution, gloss, and authority, make that sound doctrine, which was pestilent error before, and that false, which was true. Right and wrong have changed sides. The children must now join in chorus to denounce what they had been taught to reverence before, and to reverence what they had been taught to denounce. In the mean time, those great principles, which, according to Cicero, are the same at Rome and at Athens, the same now and forever; – and which, according to Hooker, have their seat in the bosom of God, become the fittest emblems of chance and change.

Long, however, before this series of calamities would exhaust itself upon our schools, these schools themselves would cease to be. The plough-share would have turned up their foundations. Their history would have been brought to a close, – a glorious and ascending history, until struck down by the hand of political parricide; then, suddenly falling with a double ruin, – with death, and with ignominy. But to avoid such a catastrophe, shall all teaching, relative to the nature of our government, be banished from our schools; and shall our children be permitted to grow up in entire ignorance of the political history of their country? In the schools of a republic, shall the children be left without any distinct knowledge of the nature of a republican government; or only with such knowledge as they may pick up from angry political discussions, or from party newspapers; from caucus speeches, or Fourth of July orations, – the Apocrypha of Apocrypha?

Surely, between these extremes, there must be a medium not difficult to be found. And is not this the middle course, which all sensible and judicious men,

all patriots, and all genuine republicans, must approve? – namely, that those articles in the creed of republicanism, which are accepted by all, believed in by all, and which form the common basis of our political faith, shall be taught to all. But when the teacher, in the course of his lessons or lectures on the fundamental law, arrives at a controverted text, he is either to read it without comment or remark; or, at most, he is only to say that the passage is the subject of disputation, and that the schoolroom is neither the tribunal to adjudicate, nor the forum to discuss it.

Such being the rule established by common consent, and such the practice, observed with fidelity under it, it will come to be universally understood, that political proselytism is no function of the school; but that all indoctrination into matters of controversy between hostile political parties is to be elsewhere sought for, and elsewhere imparted. Thus, may all the children of the Commonwealth receive instruction in the great essentials of political knowledge, – in those elementary ideas without which they will never be able to investigate more recondite and debatable questions; – thus, will the only practicable method be adopted for discovering new truths, and for discarding, – instead of perpetuating, – old errors; and thus, too, will that pernicious race of intolerant zealots, whose whole faith may be summed up in two articles, – that they, themselves, are always infallibly right, and that all dissenters are certainly wrong, – be extinguished, – extinguished, not by violence, nor by proscription, but by the more copious inflowing of the light of truth.

21

On Education

Ralph Waldo Emerson

A new degree of intellectual power seems cheap at any price. The use of the world is that man may learn its laws. And the human race have wisely signified their sense of this, by calling wealth, means – Man being the end. Language is always wise. Therefore I praise New England because it is the country in the world where is the freest expenditure for education. We have already taken, at the planting of the Colonies (for aught I know for the first time in the world), the initial step, which for its importance might have been resisted as the most radical of revolutions, thus deciding at the start the destiny of this country – this, namely, that the poor man, whom the law does not allow to take an ear of corn when starving, nor a pair of shoes for his freezing feet, is allowed to put his hand into the pocket of the rich, and say, You shall educate me, not as you will, but as I will: not alone in the elements, but, by further provision, in the languages, in sciences, in the useful and in elegant arts. The child shall be taken up by the State, and taught, at the public cost, the rudiments of knowledge, and, at last, the ripest results of art and science.

Humanly speaking, the school, the college, society, make the difference between men. All the fairy tales of Aladdin or the invisible Gyges or the talisman that opens kings' palaces or the enchanted halls underground or in the sea, are any fictions to indicate the one miracle of intellectual enlargement. When a man stupid becomes a man inspired, when one and the same man passes out of the torpid into the perceiving state, leaves the din of trifles, the stupor of the senses, to enter into the quasi-omniscience of high thought – up and down, around, all limits disappear. No horizon shuts down. He sees things in their causes, all facts in their connection. One of the problems of history is the beginning of civilization. The animals that accompany and serve man make no progress as races. Those called domestic are capable of learning of man a few tricks of utility or amusement, but they cannot communicate

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the skill to their race. Each individual must be taught anew. The trained dog cannot train another dog. And Man himself in many faces retains almost the unteachableness of the beast. For a thousand years the islands and forests of a great part of the world have been led with savages who made no steps of advance in art or skill beyond the necessity of being fed and warmed. Certain nations with a better brain and usually in more temperate climates have made such progress as to compare with these as these compare with the bear and the wolf.

Victory over things is the office of man. Of course, until it is accomplished, it is the war and insult of things over him. His continual tendency, his great danger, is to overlook the fact that the world is only his teacher, and the nature of sun and moon, plant and animal only means of arousing his interior activity. Enamored of their beauty, comforted by their convenience, he seeks them as ends, and fast loses sight of the fact that they have worse than no values, that they become noxious, when he becomes their slave.

This apparatus of wants and faculties, this craving body, whose organs ask all the elements and all the functions of Nature for their satisfaction, educate the wondrous creature which they satisfy with light, with heat, with water, with wood, with bread, with wool. The necessities imposed by his most irritable and all-related texture have taught Man hunting, pasturage, agriculture, commerce, weaving, joining, masonry, geometry, astronomy. Here is a world pierced and belted with natural laws, and fenced and planted with civil partitions and properties, which all put new restraints on the young inhabitant. He too must come into this magic circle of relations, and know health and sickness, the fear of injury, the desire of external good, the charm of riches, the charm of power. The household is a school of power. There, within the door, learn the tragicomedy of human life. Here is the sincere thing, the wondrous composition for which day and night go round. In that routine are the sacred relations, the passions that bind and sever. Here is poverty and all the wisdom its hated necessities can teach, here labor drudges, here affections glow, here the secrets of character are told, the guards of man, the guards of woman, the compensations which, like angels of justice, pay every debt: the opium of custom, whereof all drink and many go mad. Here is Economy, and Glee, and Hospitality, and Ceremony, and Frankness, and Calamity, and Death, and Hope.

Every man has a trust of power – every man, every boy a jurisdiction, whether it be over a cow or a rood of a potato-field, or a fleet of ships, or the laws of a state. And what activity the desire of power inspires! What toils it sustains! How it sharpens the perceptions and stores the memory with facts. Thus a man may well spend many years of life in trade. It is a constant teaching of the laws of matter and of mind. No dollar of property can be created without some direct communication with nature, and of course some acquisition of knowledge and practical force. It is a constant contest with the active faculties of men, a study of the issues of one and another

course of action, an accumulation of power, and, if the higher faculties of the individual be from time to time quickened, he will gain wisdom and virtue from his business.

As every wind draws music out of the Aeolian harp, so doth every object in Nature draw music out of his mind. Is it not true that every landscape I behold, every friend I meet, every act I perform, every pain I suffer, leaves me a different being from that they found me? That poverty, love, authority, anger, sickness, sorrow, success, all work actively upon our being and unlock for us the concealed faculties of the mind? Whatever private or petty ends are frustrated, this end is always answered. Whatever the man does, or whatever befalls him, opens another chamber in his soul – that is, he has got a new feeling, a new thought, a new organ. Do we not see how amazingly for this end man is fitted to the world?

What leads him to science? Why does he track in the midnight heaven a pure spark, a luminous patch wandering from age to age, but because he acquires thereby a majestic sense of power; learning that in his own constitution he can set the shining maze in order, and finding and carrying their law in his mind, can, as it were, see his simple idea realized up yonder in giddy distances and frightful periods of duration. If Newton come and first of men perceive that not alone certain bodies fall to the ground at a certain rate, but that all bodies in the Universe, the universe of bodies, fall always, and at one rate; that every atom in nature draws to every other atom – he extends the power of his mind not only over every cubic atom of his native planet, but he reports the condition of millions of worlds which his eye never saw. And what is the charm which every one, every new plant, every new fact touching winds, clouds, ocean currents, the secrets of chemical composition and decomposition possess for Humboldt. What but that much revolving of similar facts in his mind has shown him that always the mind contains in its transparent chambers the means of classifying the most refractory phenomena, of depriving them of all casual and chaotic aspect, and subordinating them to a bright reason of its own, and so giving to man a sort of property – yea, the very highest property in every district and particle of the globe.

By the permanence of Nature, minds are trained alike, and made intelligible to each other. In our condition are the roots of language and communication, and these instructions we never exhaust.

In some sort the end of life is that the man should take up the universe into himself, or out of that quarry leave nothing unrepresented. Yonder mountain must migrate into his mind. Yonder magnificent astronomy he is at last to import, fetching away moon, and planet, solstice, period, comet and binal star, by comprehending their relation and law. Instead of the timid stripling he was, he is to be the stalwart Archimedes, Pythagoras, Columbus, Newton, of the physic, metaphysic and ethics of the design of the world.

For truly the population of the globe has its origin in the aims which their existence is to serve; and so with every portion of them. The truth takes flesh

in forms that can express it; and thus in history an idea always overhangs, like the moon, and rules the tide which rises simultaneously in all the souls of a generation.

Whilst thus the world exists for the mind; whilst thus the man is ever invited inward into shining realms of knowledge and power by the shows of the world, which interpret to him the infinitude of his own consciousness – it becomes the office of a just education to awaken him to the knowledge of this fact.

We learn nothing rightly until we learn the symbolical character of life. Day creeps after day, each full of facts, dull, strange, despised things, that we cannot enough despise – call heavy, prosaic, and desert. The time we seek to kill: the attention it is elegant to divert from things around us. And presently the aroused intellect finds gold and gems in one of these scorned facts – then finds that the day of facts is a rock of diamonds; that a fact is an Epiphany of God.

We have our theory of life, our religion, our philosophy; and the event of each moment, the shower, the steamboat disaster the passing of a beautiful face, the apoplexy of our neighbor, are all tests to try our theory, the approximate result we call truth, and reveal its defects. If I have renounced the search of truth, if I have come into the port of some pretending dogmatism, some new church or old church, some Schelling or Cousin, I have died to all use of these new events that are born out of prolific time into multitude of life every hour. I am as a bankrupt to whom brilliant opportunities offer in vain. He has just foreclosed his freedom, tied his hands, locked himself up and given the key to another to keep.

When I see the doors by which God enters into the mind; that there is no sot or fop, ruffian or pedant into whom thoughts do not enter by passages which the individual never left open, I can expect any revolution in character. "I have hope," said the great Leibnitz, "that society may be reformed, when I see how much education may be reformed."

It is ominous, a presumption of crime, that this word Education has so cold, so hopeless a sound. A treatise on education, a convention for education, a lecture, a system, affects us with slight paralysis and a certain yawning of the jaws. We are not encouraged when the law touches it with its fingers. Education should be as broad as man. Whatever elements are in him that should foster and demonstrate. If he be dexterous, his tuition should make it appear; if he be capable of dividing men by the trenchant sword of his thought, education should unsheathe and sharpen it; if he is one to cement society by his all-reconciling affinities, oh! hasten their action! If he is jovial, if he is mercurial, if he is a great-hearted, a cunning artificer, a strong commander, a potent ally, ingenious, useful, elegant, witty, prophet, diviner – society has need of all these. The imagination must be addressed. Why always coast on the surface and never open the interior of nature, not by science, which is surface still, but by poetry? Is not the Vast an element of the mind? Yet what teaching, what book of this day appeals to the Vast?

Our culture has truckled to the times – to the senses. It is not manworthy. If the vast and the spiritual are omitted, so are the practical and the moral. It does not make us brave or free. We teach boys to be such men as we are. We do not teach them to aspire to be all they can. We do not give them a training as if we believed in their noble nature. We scarce educate their bodies. We do not train the eye and the hand. We exercise their understandings to the apprehension and comparison of some facts, to a skill in numbers, in words; we aim to make accountants, attorneys, engineers; but not to make able, earnest, great-hearted men. The great object of Education should be commensurate with the object of life. It should be a moral one; to teach self-trust; to inspire the youthful man with an interest in himself; with a curiosity touching his own nature; to acquaint him with the resources of his mind, and to teach him that there is all his strength, and to inflame him with a piety towards the Grand Mind in which he lives. Thus would education conspired with the Divine Providence. A man is a little thing whilst he works by and for himself, but, when he gives voice to the rules of love and justice, is godlike, this word is current in all countries; and all men, though his enemies, are made his friends and obey it as their own.

In affirming that the moral nature of man is the predominant element and should therefore be mainly consulted in the arrangements of a school, I am very far from wishing that it should swallow up all the other instincts and faculties of man. It should be enthroned in his mind, but if it monopolize the man he is not yet sound, he does not yet know his wealth. He is in danger of becoming merely devout, and wearisome through the monotony of his thought. It is not less necessary that the intellectual and the active faculties should be nourished and matured. Let us apply to this subject the light of the same torch by which we have looked at all the phenomena of the time; the infinitude, namely, of every man. Everything teaches that.

One fact constitutes all my satisfaction, inspires all my trust, viz., this perpetual youth, which, as long as there is any good in us, we cannot get rid of. It is very certain that the coming age and the departing age seldom understand each other. The old man thinks the young man has no distinct purpose, for he could never get any thing intelligible and earnest out of him. Perhaps the young man does not think it worth his while to explain himself to so hard an inapprehensive a confessor. Let him be led up with a longsighted forbearance, and let not the sallies of his petulance or folly be checked with disgust or indignation or despair.

I call our system a system of despair, and I find all the correction, all the revolution that is needed and that the best spirits of this age promise, in one word, in Hope. Nature, when she sends a new mind into the world, fills it beforehand with a desire for that which she wishes it to know and do. Let us wait and see what is this new creation, of what new organ the great Spirit had need when it incarnated this new Will. A new Adam in the garden, he is to name all the beasts in the field, all the gods in the sky. And jealous provision seems to have been made in his constitution that you shall not invade and

contaminate him with the worn weeds of your language and opinions. The charm of life is this variety of genius, these contrasts, and flavors by which Heaven has modulated the identity of truth, and there is a perpetual hankering to violate this individuality, to warp his ways of thinking and behavior to resemble or reflect your thinking and behavior. A low self-love in the parent desires that his child should repeat his character and fortune; an expectation which the child, if justice is done him, will nobly disappoint. By working on the theory that this resemblance exists, we shall do what in us lies to defeat his proper promise and produce the ordinary and mediocre. I suffer whenever I see that common sight of a parent or senior imposing his opinion and way of thinking and being on a young soul to which they are totally unfit. Cannot we let people be themselves, and enjoy life in their own way? You are trying to make that man another you. One's enough.

Or we sacrifice the genius of the pupil, the unknown possibilities of his nature, to a neat and safe uniformity, as the Turks whitewash the costly mosaics of ancient art which the Greeks left on their temple walls. Rather let us have men whose manhood is only the continuation of their boyhood, natural characters still; such are able and fertile for heroic action; and not that sad spectacle with which we are too familiar, educated eyes in uneducated bodies.

I like boys, the masters of the playground and of the street – boys, who have the same liberal ticket of admission to all shops, factories, armories, town-meetings, caucuses, mobs, target – shootings, as flies have; quite unsuspected, coming in as naturally as the janitor – known to have no money in their pockets, and themselves not suspecting the value of this poverty; putting nobody on his guard, but seeing the inside of the show – hearing all the asides. There are no secrets from them, they know everything that befalls in the fire company, the merits of every engine and of every man at the brakes, how to work it, and are swift to try their hand at every part; so too the merits of every locomotive on the rails, and will coax the engineer to let them ride with him and pull the handles when it goes to the engine-house. They are there only for fun, and not knowing that they are at school, in the court-house, or the cattle-show, quite as much and more than they were, an hour ago, in the arithmetic class.

They know truth from counterfeit as quick as the chemist does. They detect weakness in your eye and behavior a week before you open your mouth, and have given you the benefit of their opinion quick as a wink. They make no mistakes, have no pedantry, but entire belief on experience. Their elections at baseball or cricket are founded on merit, and are right. They don't pass for swimmers until they can swim, nor for stroke-oar until they can row: and I desire to be saved from their contempt. If I can pass with them, I can manage well enough with their fathers.

Everybody delights in the energy with which boys deal and talk with each other; the mixture of fun and earnest, reproach and coaxing, love and wrath, with which the game is played – the good-natured yet defiant independence of a leading boy's behavior in the schoolyard. How we envy in later life the

happy youths to whom their boisterous games and rough exercise furnish the precise element which frames and sets off their school and college tasks, and reaches them, when least they think it, the use and meaning of these. In their fun and extreme freak they hit on the topmost sense of Horace. The young giant, brown from his hunting tramp, tells his story well, interlarded with lucky allusions to Homer, to Virgil, to college songs, to Walter Scott; and Jove and Achilles, partridge and trout, opera and binomial theorem, Caesar in Gaul, Sherman in Savannah, and hazing in Holworthy, dance through the narrative in merry confusion, yet the logic is good. If he can turn his books to such picturesque account in his fishing and hunting, it is easy to see how his reading and experience, as he has more of both, will interpenetrate each other. And every one desires that this pure vigor of action and wealth of narrative, cheered with so much humor and street rhetoric, should be carried into the habit of the young man, purged of its uproar and rudeness, but with all its vivacity entire. His hunting and campings-out have given him an indispensable basel I wish to add a taste for good company; through his impatience of bad. That stormy genius of his needs a little direction to games, charades, verses of society, song, and a correspondence year by year with his wisest and best friends. Friendship is an order of nobility; from its revelations we come more worthily into nature. Society he must have or he is poor indeed; he gladly enters a school which forbids conceit, affectation, emphasis and dullness, and requires of each only the flower of his nature and experience: requires good will, beauty, wit, and select information; teaches by practice the law of conversation, namely, to hear as well as to speak.

Meantime, if circumstances do not permit the high social advantages, solitude has also its lessons. The obscure youth learns there the practice instead of the literature of his virtues: and, because of the disturbing effect of passion and sense, which by a multitude of trifles impede the mind's eye from the quiet search of that fine horizon-line which truth keeps – the way to knowledge and power has ever been an escape from too much engagement with affairs and possessions; a way, not through plenty and superfluity, but by denial and renunciation, into solitude and privation; and, the more is taken away, the more; real and inevitable wealth of being is made known to us. The solitary knows the essence of the thought, the scholar in society only its fair face. There is no want of example of great men, great benefactors, who have been monks and hermits in habit. The bias of mind is sometimes irresistible in that direction. The man is, as it were, born deaf and dumb, and dedicated to a narrow and lonely life. Let him study the art of solitude, yield as gracefully as he can to his destiny. Why cannot he get the good of his doom, and if it is from eternity a settled fact that he and society shall be nothing to each other, why need he blush so, and make wry faces to keep up a freshman's seat in the fine world? Heaven often protects valuable souls charged with great secrets, great ideas, by long shutting them up with their own thoughts. And the most genial and amiable of men must alternate society with solitude, and learn its severe lessons.

There comes the period of the imagination to each, a later youth; the power of beauty, the power of books, of poetry. Culture makes his books realities to him, their characters more brilliant, more effective on his mind, than his actual mates. Do not spare to put novels into the hands of young people as an occasional holiday and experiment but, above all, good poetry in all kinds, epic, tragedy, lyric. If we can touch the imagination, we serve them, they will never forget it. Let him read *Tom Brown at Rugby*, read *Tom Brown at Oxford*, better yet, read *Hodson's Life* – Hodson who took prisoner the King of Delhi. They teach the same truth – a trust, against all appearances, against all privations, in your own worth, and not in tricks, plotting, or patronage.

I believe that our own experience instructs us that the secret of Education lies in respecting the pupil. It is not for you to choose what he shall know, what he shall do. It is chosen and foreordained, and he only holds the key to his own secret. By your tampering and thwarting and too much governing he may be hindered from his end and kept out of his own. Respect the child. Wait and see the new product of Nature. Nature loves analogies, but not repetitions. Respect the child. Be not too much his parent. Trespass not on his solitude.

But I hear the outcry which replies to this suggestion – Would you verily throw up the reins of public and private discipline; would you leave the young child to the mad career of his own passions and whimsies, and call this anarchy a respect for the child's nature? I answer – Respect the child, respect him to the end, but also respect yourself. Be the companion of his thought, the friend of his friendship, the lover of his virtue – but no kinsman of his sin. Let him find you so true to yourself that you are the irreconcilable hater of his vice and the imperturbable slighter of his trifling. The two points in a boy's training are, to keep his *naturel* and train off all but that – to keep his *naturel*, but stop off his uproar, fooling, and horseplay – keep his nature and arm it with knowledge in the very direction to which it points.

Here are the two capital facts, Genius and Drill. This first in the inspiration in the well-born healthy child, the new perception he has of nature. Somewhat he sees in forms or hears in music or apprehends in mathematics, or believes practicable in mechanics or possible in political society, which no one else sees or hears or believes. This is the perpetual romance of new life, the invasion of God into the old dead world, when he sends into quiet houses a young soul with a thought which is not met, looking for something which is not there, but which ought to be there: the thought is dim but it is sure, and he casts about restless for means and masters to verify it; he makes wild attempts to explain himself and invoke the aid and consent of the by-standers. Baffled for want of language and methods to convey his meaning, not yet clear to himself, he conceives that though not in this house or town, yet in some other house or town is the wise master who can put him in possession of the rules and instruments to execute his will. Happy this child with a bias, with a thought which enrrances him, leads him, now into deserts now into cities, the fool of an idea. Let him follow it in good and

in evil report, in good or bad company; it will justify itself; it will lead him at last into the illustrious society of the lovers of truth.

In London, in a private company, I became acquainted with a gentleman, Sir Charles Fellowes, who, being at Xanthus, in the Aegean Sea, had seen a Turk point with his staff to some carved work on the corner of a stone almost buried in the soil. Fellowes scraped away the dirt, was struck with the beauty of the sculptured ornaments, and, looking about him, observed more blocks and fragments like this. He returned to the spot, procured laborers and uncovered many blocks. He went back to England, bought a Greek grammar and learned the language; he read history and studied ancient art to explain his stones; he interested Gibson the sculptor; he invoked the assistance of the English Government; he called in the succor of Sir Humphry Davy to analyze the pigments; of experts in coins, of scholars and connoisseurs; and at last in his third visit brought home to England such statues and marble reliefs and such careful plans that he was able to reconstruct, in the British Museum where it now stands, the perfect model of the Ionic trophy-monument, fifty years older than the Parthenon of Athens, and which had been destroyed by earthquakes, then by iconoclast Christians, then by savage Turks. But mark that in the task he had achieved an excellent education, and become associated with distinguished scholars whom he had interested in his pursuit; in short, had formed a college for himself; the enthusiast had found the master, the masters, whom he sought. Always genius seeks genius, desires nothing so much as to be a pupil and to find those who can lend it aid to perfect itself.

Nor are the two elements, enthusiasm and drill, incompatible. Accuracy is essential to beauty. The very definition of the intellect is Aristotle's: "that by which we know terms or boundaries." Give a boy accurate perceptions. Teach him the difference between the similar and the same. Make him call things by their right names. Pardon in him no blunder. Then he will give you solid satisfaction as long as he lives. It is better to teach the child arithmetic and Latin grammar than rhetoric or moral philosophy, because they require exactitude of performance; it is made certain that the lesson is mastered, and that power of performance is worth more than the knowledge. He can learn anything which is important to him now that the power to learn is secured: as mechanics say, when one has learned the use of tools, it is easy to work at a new craft.

Letter by letter, syllable by syllable, the child learns to read, and in good time can convey to all the domestic circle the sense of Shakespeare. By many steps each just as short, the stammering boy and the hesitating collegian, in the school debates, in college clubs, in mock court, comes at last to full, secure, triumphant unfolding of his thought in the popular assembly, with a fullness of power that makes all the steps forgotten.

But this function of opening and feeding the human mind is not to be fulfilled by any mechanical or military method; is not to be trusted to any skill less large than Nature itself. You must not neglect the form, but you must secure the essentials. It is curious how perverse and intermeddling we

are, and what vast pains and cost we incur to do wrong. Whilst we all know in our own experience and apply natural methods in our own business – in education our common sense fails us, and we are continually trying costly machinery against nature, in patent schools and academies and in great colleges and universities.

The natural method forever confutes our experiments, and we must still come back to it. The whole theory of the school is on the nurse's or mother's knee. The child is as hot to learn as the mother is to impart. There is mutual delight. The joy of our childhood in hearing beautiful stories from some skillful aunt who loves to tell them, must be repeated in youth. The boy wishes to learn to skate; to coast, to catch a fish in the brook, to hit a mark with a snowball or a stone; and a boy a little older is just as well pleased to teach him these sciences. Not less delightful is the mutual pleasure of teaching and learning the secret of algebra, or of chemistry, or of good reading and good recitation of poetry or of prose, or of chosen facts in history or in biography.

Nature provided for the communication of thought by planting with it in the receiving mind a fury to impart it. 'Tis so in every art, in every science. One burns to tell the new fact, the other burns to hear it. See how far a young doctor will ride or walk to witness a new surgical operation. I have seen a carriage-maker's shop emptied of all its workmen into the street, to scrutinize a new pattern from New York. So in literature, the young man who has taste for poetry, for fine images, for noble thoughts, is insatiable for this nourishment, and forgets all the world for the more learned friend – who finds equal joy in dealing out his treasures.

Happy the natural college thus self-instituted around every natural teacher; the young men of Athens around Socrates; of Alexander around Plotinus; of Paris around Abelard; of Germany around Fichte, or Niebuhr, or Goethe: in short the natural sphere of every leading mind. But the moment this is organized, difficulties begin. The college was to be the nurse and home of genius; but, though every young man is born with some determination in his nature, and is a potential genius; is at last to be one; it is, in the most, obstructed and delayed, and, whatever they may hereafter be, their senses are now opened in advance of their minds. They are more sensual than intellectual. Appetite and indolence they have, but no enthusiasm. These come in numbers to the college: few geniuses: and the teaching comes to be arranged for these many, and not for those few. Hence the instruction seems to require skillful tutors, of accurate and systematic mind, rather than ardent and inventive masters. Besides, the youth of genius are eccentric, won't drill, are irritable, uncertain, explosive, solitary, not men of the world, not good for every-day association. You have to work for large classes instead of individuals; you must lower your flag and reef your sails to wait for the dull sailors; you grow departmental, routinary, military almost with your discipline and college police. But what doth such a school to form a great and heroic character? What abiding Hope can it inspire? What Reformer will it nurse? What poet will it breed to sing to the human race? What discoverer

of Nature's laws will it prompt to enrich us by disclosing in the mind the statute which all matter must obey? What fiery soul will it send out to warm a nation with his charity? What tranquil mind will it have fortified to walk with meekness in private and obscure duties, to wait and to suffer? Is it not manifest that our academic institutions should have a wider scope; that they should not be timid and keep the ruts of the last generation, but that wise men thinking for themselves and heartily seeking the good of mankind, and counting the cost of innovation, should dare to arouse the young to a just and heroic life; that the moral nature should be addressed in the school-room, and children should be treated as the high-born candidates of truth and virtue?

So to regard the young child, the young man, requires, no doubt, rare patience: a patience that nothing but faith in the medial forces of the soul can give. You see his sensualism; you see his want of those tastes and perceptions which make the power and safety of your character. Very likely. But he has something else. If he has his own vice, he has its correlative virtue. Every mind should be allowed to make its own statement in action, and its balance will appear. In these judgments one needs that foresight which was attributed to an eminent reformer, of whom it was said "his patience could see in the bud of the aloe the blossom at the end of a hundred years." Alas for the cripple Practice when it seeks to come up with the bird theory, which flies before it.

Try your design on the best school. The scholars are of all ages and temperaments and capacities. It is difficult to class them, some are too young, some are slow, some perverse. Each requires so much consideration, that the morning hope of the teacher, of a day of love and progress, is often closed at evening by despair. Each single case, the more it is considered, shows more to be done: and the strict conditions of the hours, on one side, and the number of tasks, on the other. Whatever becomes of our method, the conditions stand fast – six hours, and thirty, fifty, or a hundred and fifty pupils. Something must be done, and done speedily, and in this distress the wisest are tempted to adopt violent means, to proclaim martial law, corporal punishment, mechanical arrangement, bribes, spies, wrath, main strength and ignorance, in lieu of that wise genial providential influence they had hoped, and yet hope at some future day to adopt. Of course the devotion to details reacts injuriously on the teacher. He cannot indulge his genius, he cannot delight in personal relations with young friends, when his eye is always on the clock, and twenty classes are to be dealt with before the day is done. Besides, how can he please himself with genius, and foster modest virtue? A sure proportion of rogue and dunce finds its way into every school and requires a cruel share of time, and the gentle teacher, who wished to be a Providence to youth, is grown a martinet, sore with suspicions; knows as much vice as the judge of a police court, and his love of learning is lost in the routine of grammars and books of elements.

A rule is so easy that it does not need a man to apply it; an automaton, a machine, can be made to keep a school so. It facilitates labor and thought so much that there is always the temptation in large schools to omit the

endless task of meeting the wants of each single mind, and to govern by steam. But it is at frightful cost. Our modes of Education aim to expedite, to save labor; to do for masses what cannot be done for masses, what must be done reverently, one by one: say rather, the whole world is needed for the tuition of each pupil. The advantages of this system of emulation and display are so prompt and obvious, it is such a time-saver, it is so energetic on slow and on bad natures, and is of so easy application, needing no sage or poet, but any tutor or schoolmaster in his first term can apply it – that it is not strange that this calomel of culture should be a popular medicine. On the other hand, total abstinence from this drug, and the adoption of simple discipline and the following of nature involves at once immense claims on the time, the thoughts, on the Life of the teacher. It requires time, use, insight, event, all the great lessons and assistances of God; and only to think of using it implies character and profoundness; to enter on this course of discipline is to be good and great. It is precisely analogous to the difference between the use of corporal punishment and the methods of love. It is so easy to bestow on a bad boy a blow, overpower him, and get obedience without words, that in this world of hurry and distraction, who can wait for the returns of reason and the conquest of self; in the uncertainty too whether that will ever come? And yet the familiar observation of the universal compensations might suggest the fear that so summary a stop of a bad humor was more jeopardous than its continuance.

Now the correction of this quack practice is to import into Education the wisdom of life. Leave this military hurry and adopt the pace of Nature. Her secret is patience. Do you know how the naturalist learns all the secrets of the forest, of plants, of birds, of beasts, of reptiles, of fishes, of the rivers and the sea? When he goes into the woods the birds fly before him and he finds none; when he goes to the river bank, the fish and the reptile swim away and leave him alone. His secret is patience; he sits down, and sits still; he is a statue; he is a log. These creatures have no value for their time, and he must put as low a rate on his. By dint of obstinate sitting still, reptile, fish, bird and beast, which all wish to return to their haunts, begin to return. He sits still; if they approach, he remains passive as the stone he sits upon. They lose their fear. They have curiosity too about him. By and by the curiosity masters the fear, and they come swimming, creeping and dying towards him; and as he is still immovable, they not only resume their haunts and their ordinary labors and manners, show themselves to him in their work-day trim, but also volunteer some degree of advances towards fellowship and good understanding with a biped who behaves so civilly and well. Can you not baffle the impatience and passion of the child by your tranquility? Can you not wait for him, as Nature and Providence do? Can you not keep for his mind and ways, for his secret, the same curiosity you give to the squirrel, snake, rabbit, and the sheldrake and the deer? He has a secret; wonderful methods in him; he is – every child – a new style of man; give him time and opportunity. Talk of Columbus and Newton! I tell you the child just born in yonder hovel

is the beginning of a revolution as great as theirs. But you must have the believing and prophetic eye. Have the self-command you wish to inspire. Your teaching and discipline must have the reserve and taciturnity of Nature. Teach them to hold their tongues by holding your own. Say little; do not snarl; do not chide; but govern by the eye. See what they need, and that the right thing is done.

I confess myself utterly at a loss in suggesting particular reforms in our ways of teaching. No discretion that can be lodged with a school-committee, with the overseers or visitors of an academy, of a college, can at all avail to reach these difficulties and perplexities, but they solve themselves when we leave institutions and address individuals. The will, the male power, organizes, imposes its own thought and wish on others, and makes that military eye which controls boys as it controls men; admirable in its results, a fortune to him who has it, and only dangerous when it leads the workman to overvalue and overuse it and precludes him from finer means. Sympathy, the female force – which they must use who have not the first – deficient in instant control and the breaking down of resistance, is more subtle and lasting and creative. I advise teachers to cherish mother-wit. I assume that you will keep the grammar, reading, writing and arithmetic in order; 'tis easy and of course you will. But smuggle in a little contraband wit, fancy, imagination, thought.

If you have a taste which you have suppressed because it is not shared by those about you, tell them that. Set this law up, whatever becomes of the rules of the school: they must not whisper, much less talk; but if one of the young people says a wise thing, greet it, and let all the children clap their hands. They shall have no book but school-books in the room; but if one has brought in a Plutarch or Shakespeare or Don Quixote or Goldsmith or any other good book, and understands what he reads, put him at once at the head of the class. Nobody shall be disorderly, or leave his desk without permission, but if a boy runs from his bench, or a girl, because the fire falls, or to check some injury that a little dastard is inflicting behind his desk on some helpless sufferer, take away the medal from the head of the class and give it on the instant to the brave rescuer. If a child happens to show that he knows any fact about astronomy, or plants, or birds, or rocks, or history, that interests him and you, hush all the classes and encourage him to tell it so that all may hear. Then you have made your school-room like the world. Of course you will insist on modesty in the children, and respect to their teachers, but if the boy stops you in your speech, cries out that you are wrong and sets you right, hug him! To whatsoever upright mind, to whatsoever hearing heart I speak, to you it is committed to educate men.

By simple living, by an illuminable soul, you inspire, you correct, you instruct, you raise, you embellish all. By your own act you teach the behold how to do the practicable. According to the depth from which you draw your life, such is the depth not only of your strenuous effort, but of your manners and presence. The beautiful nature of the world has here blended your happiness with your power. Work straight on in absolute duty, and you lend an arm and

an encouragement to all the youth of the universe. Consent yourself to be an organ of your highest thought, and lo! suddenly you put all men in your debt, and are the fountain of an energy that goes pulsing on with waves of benefit to the borders of society, to the circumference of things.

22

Report of the Committee of Ten

National Education Association

The Committee of Ten appointed at the meeting of the National Educational Association at Saratoga on the 9th of July, 1892, have the honor to present the following report:

At the meeting of the National Council of Education in 1891, a Committee appointed at a previous meeting made a valuable report through their Chairman, Mr. James H. Baker, then Principal of the Denver High School, on the general subject of uniformity in school programmes and in requirements for admission to college. The Committee was continued, and was authorized to procure a Conference on the subject of uniformity during the meeting of the National Council in 1892, the Conference to consist of representatives of leading colleges and secondary schools in different part of the country. This Conference was duly summoned, and held meetings at Saratoga on July 7th, 8th, and 9th, 1892. There were present between twenty and thirty delegates. Their discussions took a wide range, but resulted in the following specific recommendations, which the Conference sent to the National Council of Education then in session.

1. That it is expedient to hold a conference of school and college teachers of each principal subject which enters into the programmes of secondary schools in the United States and into the requirements for admission to college – as, for example, of Latin, of geometry, or of American history – each conference to consider the proper limits of its subject, the best methods of instruction, the most desirable allotment of time for the subject, and the best methods of testing the pupils' attainments therein, and each conference to represent fairly the different parts of the country.

2. That a Committee be appointed with authority to select the members of these conferences and to arrange their meetings, the results of all the conferences to be reported to this Committee for such action as it may deem

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appropriate, and to form the basis of a report to be presented to the Council by this Committee.

3. That this Committee consist of the following gentlemen:

Charles W. Eliot, President of Harvard University, Cambridge, Mass., *Chairman*.
William T. Harris, Commissioner of Education, Washington, D. C.
James B. Angell, President of the University of Michigan, Ann. Arbor, Mich.
John Tetlow, Head Master of the Girls' High School and the Girls' Latin School, Boston, Mass.
James M. Taylor, President of Vassar College, Poughkeepsie, N. Y.
Oscar D. Robinson, Principal of the High School, Albany, N. Y.
James H. Baker, President of the University of Colorado, Boulder, Colo.
Richard H. Jesse, President of the University of Missouri, Columbia, Mo.
James C. Mackenzie, Head Master of the Lawrenceville School, Lawrenceville, N. J.
Henry C. King, Professor in Oberlin College, Oberlin, Ohio.

These recommendations of the Conference were adopted by the National Council of Education on the 9th of July; and the Council communicated the recommendations to the Directors of the National Educational Association, with the further recommendation that an appropriation not exceeding $2500 be made by the Association towards the expenses of these conferences. On the 12th of July the Directors adopted a series of resolutions under which a sum not exceeding $2500 was made available for this undertaking during the academic year 1892–93.

Every gentleman named on the above Committee of Ten accepted his appointment; and the Committee met, with every member present, at Columbia College, New York City, from the 9th to the 11th of November, 1892, inclusive.

In preparation for this meeting, a table had been prepared by means of a prolonged correspondence with the principals of selected secondary schools in various parts of the country, which showed the subjects taught in forty leading secondary schools in the United States, and the total number of recitations, or exercises, allotted to each subject. Nearly two hundred schools were applied to for this information; but it did not prove practicable to obtain within three months verified statements from more than forty schools. This table proved conclusively, first, that the total number of subjects taught in these secondary schools was nearly forty, thirteen of which, however, were found in only a few schools; secondly, that many of these subjects were taught for such short periods that little training could be derived from them; and thirdly, that the time allotted to the same subject in the different schools varied widely. Even for the older subjects, like Latin and algebra, there appeared to be a wide diversity of practice with regard to the time allotted to them.

Since this table was comparative in its nature, – that is, permitted comparisons to be made between different schools, – and could be easily misunderstood and misapplied by persons who had small acquaintance with school programmes, it was treated as a confidential document; and was issued at first only to the members of the Committee of Ten and the principals of the schools mentioned in the table. Later, it was sent – still as a confidential paper – to the members of the several conferences organized by the Committee of Ten.

The Committee of Ten, after a preliminary discussion on November 9th, decided on November 10th to organize conferences on the following subjects: – 1. Latin; 2. Greek; 3. English; 4. Other Modern Languages; 5. Mathematics; 6. Physics, Astronomy, and Chemistry; 7. Natural History (Biology, including Botany, Zoölogy, and Physiology); 8. History, Civil Government, and Political Economy; 9. Geography (Physical Geography, Geology, and Meteorology). They also decided that each Conference should consist of ten members. They then proceeded to select the members of each of these Conferences, having regard in the selection to the scholarship and experience of the gentlemen named, to the fair division of the members between colleges on the one hand and schools on the other, and to the proper geographical distribution of the total membership. (pp. 3–5)

* * *

On one very important question of general policy which affects profoundly the preparation of all school programmes, the Committee of Ten and all the Conferences are absolutely unanimous. Among the questions suggested for discussion in each Conference were the following: –

7. Should the subject be treated differently for pupils who are going to college, for those who are going to a scientific school, and for those who, presumably, are going to neither?

8. At what age should this differentiation begin, if any be recommended?

The 7th question is answered unanimously in the negative by the Conferences, and the 8th therefore needs no answer. The Committee of Ten unanimously agree with the Conferences. Ninety-eight teachers, intimately concerned either with the actual work of American secondary schools, or with the results of that work as they appear in students who come to college, unanimously declare that every subject which is taught at all in a secondary school should be taught in the same way and to the same extent to every pupil so long as he pursues it, no matter what the probable destination of the pupil may be, or at what point his education is to cease. Thus, for all pupils who study Latin, or history, or algebra, for example, the allotment of time and the method of instruction in a given school should be the same year by year. Not that all the pupils should pursue every subject for the same number of years; but so long as they do pursue it, they should all be treated alike. It has been a very general custom in American high schools and academies to make

up separate courses of study for pupils of supposed different destinations, the proportions of the several studies in the different courses being various. The principle laid down by the Conferences will, if logically carried out, make a great simplification in secondary school programmes. It will lead to each subject's being treated by the school in the same way by the year for all pupils, and this, whether the individual pupil be required to choose between courses which run through several years, or be allowed some choice among subjects year by year. (pp. 16–17)

* * *

As samples of school programmes constructed within the schedules of Table III[1] the Committee present the following working programmes, which they recommend for trial wherever the secondary school period is limited to four years. All four combined might, of course, be tabulated as one programme with options by subject.

These four programmes taken together use all the subjects mentioned in Table III, and usually, but not always, to about the amounts there indicated. History and English suffer serious contraction in the Classical programme. All four programmes conform to the general recommendations of the Conferences, that is, – they treat each subject in the same way for all pupils with trifling exceptions; they give time enough to each subject to win from it the kind of mental training it is fitted to supply; they put the different principal subjects on an approximate equality so far as time-allotment is concerned; they omit all short information courses; and they make sufficiently continuous the instruction in each of the main lines, namely, language, science, history and mathematics. With slight modifications, they would prepare the pupils for admission to appropriate courses in any American college or university on the existing requirements; and they would also meet the new college requirements which are suggested below.

In preparing these programmes, the Committee were perfectly aware that it is impossible to make a satisfactory secondary school programme, limited to a period of four years, and founded on the present elementary school subjects and methods. In the opinion of the Committee, several subjects now reserved for high schools, – such as algebra, geometry, natural science, and foreign languages, – should be begun earlier than now, and therefore within the schools classified as elementary; or, as an alternative, the secondary school period should be made to begin two years earlier than at present, leaving six years instead of eight for the elementary school period. Under the present organization, elementary subjects and elementary methods are, in the judgment of the Committee, kept in use too long.

The most striking differences in the four programmes will be found, as is intimated in the headings, in the relative amounts of time given to foreign languages. In the Classical programme the foreign languages get a large share of time; in the English programme a small share. In compensation, English and history are more developed in the English programme than in the Classical.

Many teachers will say, at first sight, that physics comes too early in these programmes and Greek too late. One member of the Committee is firmly of the opinion that Greek comes too late. The explanation of the positions assigned to these subjects is that the Committee of Ten attached great importance to two general principles in programme making: – In the first place they endeavored to postpone till the third year the grave choice between the Classical course and the Latin-Scientific. They believed that this bifurcation should occur as late as possible, since the choice between these two roads often determines for life the youth's career. Moreover, they believed that it is possible to make this important decision for a boy on good grounds.

Table IV

Year	*Classical* *Three foreign languages (One modern)*	
I.	Latin	5 p.
	English	4 p.
	Algebra	4 p.
	History	4 p.
	Physical Geography	3 p.
		20 p.
II.	Latin	5 p.
	English	2 p.
	*German [or French] begun	4 p.
	Geometry	3 p.
	Physics	4 p.
	History	4 p.
		20 p.
III.	Latin	4 p.
	Greek	5 p.
	English	3 p.
	German [or French]	4 p.
	Mathematics { Algebra 2 / Geometry 2 }	4 p.
		20 p.
IV.	Latin	4 p.
	Greek	5 p.
	English	2 p.
	German [or French]	1 p.
	Chemistry	3 p.
	Trigonometry & Higher Algebra to	4 p.
	History	
		20 p.

*In any school in which Greek can be better taught than a modern language, or in which local public opinion or the history of the school makes it desirable to teach Greek on an ample way, Greek may be substituted for German or French in the second year of the Classical programme.

(Continued)

(Continued)

Year	*Latin-Scientific* *Two foreign languages (One modern)*	
I.	Latin	5 p.
	English	4 p.
	Algebra	4 p.
	History	4 p.
	Physical Geography	3 p.
		20 p.
II.	Latin	5 p.
	English	2 p.
	German [or French] begun	4 p.
	Geometry	3 p.
	Physics	3 p.
	Botany or Zoology	3 p.
		20 p.
III.	Latin	4 p.
	English	3 p.
	German [or French]	4 p.
	Mathematics {Algebra 2 / Geometry 2}	4 p.
	Astronomy ½ yr. & Meteorology ½ yr.	3 p.
	History	2 p.
		20 p.
IV.	Latin	4 p.
	English {as in Classical 2 / additional 2}	4 p.
	German [or French]	3 p.
	Chemistry	3 p.
	Trigonometry & Higher Algebra or History	3 p.
	Geology or Physiography ½ yr. and Anatomy, Physiology, & Hygiene ½ yr.	3 p.
		20 p.

Year	*Modern languages* *Two foreign languages (Both modern)*	
I.	French [or German] begun	5 p.
	English	4 p.
	Algebra	4 p.
	History	4 p.
	Physical Geography	3 p.
		20 p.

Year	*Modern Languages* *Two foreign languages (Both modern)*	
	French [or German]	4 p.
	English	2 p.
	German [or French] begun	5 p.
II.	Geometry	3 p.
	Physics	3 p.
	Botany or Zoölogy	3 p.
		20 p.
	French [or German]	4 p.
	English	3 p.
	German [or French]	4 p.
III.	Mathematics (Algebra 1 / Geometry 2)	4 p.
	Astronomy ½ yr. & Meteorology ½ yr.	3 p.
	History	2 p.
		20 p.
	French [or German]	3 p.
	English (as in Classical 2 / additional 2)	4 p.
	German [or French]	4 p.
	Chemistry	3 p.
IV.	Trigonometry & Higher Algebra 1 / or / History	3 p.
	Geology or Physiography ½ yr. / and / Anatomy, Physiology, & Hygiene ½ yr.	3 p.
		20 p.

Year	*English* *One foreign language (Ancient or modern)*	
	Latin, or German, or French	5 p.
	English	4 p.
	Algebra	4 p.
I.	History	4 p.
	Physical Geography	3 p.
		20 p.
	Latin, or German, or French	5 or 4 p.
	English	3 or 4 p.
	Geometry	3 p.
II.	Physics	3 p.
	History	3 p.
	Botany or Zoölogy	3 p.
		20 p.

(*Continued*)

(*Continued*)

Year	*English* / *One foreign language (Ancient or modern)*	
III.	Latin, or German, or French	4 p.
	English [as in others 2; additional 2]	5 p.
	Mathematics [Algebra 2; Geometry 2]	4 p.
	Astronomy ½ yr. & Meteorology ½ yr.	3 p.
	History [as in the Latin-Scientific 2; additional 2]	4 p.
		20 p.
IV.	Latin, or German, or French	4 p.
	English [as in Classical 2; additional 2]	4 p.
	Chemistry	3 p.
	Trigonometry & Higher Algebra	3 p.
	History	3 p.
	Geology or Physiography ½ yr. and Anatomy, Physiology, & Hygiene ½ yr.	3 p.
		20 p.

only when he has had opportunity to exhibit his quality and discover his tastes by making excursions into all the principal fields of knowledge. The youth who has never studied any but his native language cannot know his own capacity for linguistic acquisition; and the youth who has never made a chemical or physical experiment cannot know whether or not he has a taste for exact science. The wisest teacher, or the most observant parent, can hardly predict with confidence a boy's gift for a subject which he has never touched. In these considerations the Committee found strong reasons for postponing bifurcation, and making the subject of the first two years as truly representative as possible. Secondly, inasmuch as many boys and girls who begin the secondary school course do not stay in school more than two years, the Committee thought it important to select the studies of the first two years in such a way that linguistic, historical, mathematical, and scientific subjects should all be properly represented. Natural history being represented by physical geography, the Committee wished physics to represent the inorganic sciences of precision. The first two years of any one of the four programmes presented above will, in the judgment of the Committee, be highly profitable by themselves to children who can go no farther.

Although the Committee thought it expedient to include among the four programmes, one which included neither Latin nor Greek, and one which included only one foreign language (which might be either ancient or modern), they desired to affirm explicitly their unanimous opinion that, under existing conditions in the United States as to the training of teachers and the provision

of necessary means of instruction, the two programmes called respectively Modern Languages and English must in practice be distinctly inferior to the other two.

In the construction of the sample programmes the Committee adopted twenty as the maximum number of weekly periods, but with two qualifications, namely, that at least five of the twenty periods should be given to unprepared work, and that laboratory subjects should have double periods whenever that prolongation should be possible.

The omission of music, drawing, and elocution from the programmes offered by the Committee was not intended to imply that these subjects ought to receive no systematic attention. It was merely thought best to leave it to local school authorities to determine, without suggestions from the Committee, how these subjects should be introduced into the programmes in addition to the subjects reported on by the Conferences.

The Committee were governed in the construction of the first three programmes by the rule laid down by the language Conferences, namely, that two foreign languages should not be begun at the same time. To obey this rule is to accept strict limitations in the construction of a four years' Classical programme. A five years' or six years' programme can be made much more easily under this restriction. The Committee were anxious to give five weekly periods to every foreign language in the year when it was first attacked; but did not find it possible to do so in every case.

The four programmes can be carried out economically in a single school; because, with a few inevitable exceptions, the several subjects occur simultaneously in at least three programmes and with the same number of weekly periods.

Numerous possible transpositions of subjects will occur to every experienced teacher who examines these specimen programmes. Thus, in some localities it would be better to transpose French and German; the selection and order of science subjects might be varied considerably to suit the needs or circumstances of different schools; and the selection and order of historical subjects admit of large variety.

Many subjects now familiar in secondary school courses of study do not appear in Table II or in the specimen programmes given above; but it must not be supposed that the omitted subjects are necessarily to be neglected. If the recommendations of the Conference were carried out, some of the omitted subjects would be better dealt with under any one of the above programmes than they are now under familiar high school and academy programmes in which they figure as separate subjects. Thus, drawing does not appear as a separate subject in the specimen programmes; but the careful reader of the Conference reports will notice that drawing, both mechanical and free-hand, is to be used in the study of history, botany, zoölogy, astronomy, meteorology, physics, geography, and physiography, and that the kind of drawing recommended by the Conferences is the most useful kind, – namely, that which is applied to recording, describing, and discussing observations.

This abundant use of drawing might not prevent the need of some special instruction in drawing, but it ought to diminish the number of periods devoted exclusively to drawing. Again, neither ethics nor economics, neither metaphysics nor aesthetics appear in the programmes; but in the large number of periods devoted to English and history there would be some time for incidental instruction in the elements of these subjects. It is through the reading and writing required of pupils, or recommended to them, that the fundamental ideas on these important topics are to be inculcated. Again, the industrial and commercial subjects do not appear in these programmes; but book-keeping and commercial arithmetic are provided for by the option for algebra designated in Table III; and if it were desired to provide more amply for subjects thought to have practical importance in trade or the useful arts, it would be easy to provide options in such subjects for some of the science contained in the third and fourth years of the "English" programme. (pp. 45–50)

* * *

One of the subjects which the Committee of Ten were directed to consider was requirements for admission to college; and particularly they were expected to report on uniform requirements for admission to colleges, as well as on a uniform secondary school programme. Almost all the Conferences have something to say about the best mode of testing the attainments of candidates at college admission examinations; and some of them, notably the Conferences on History and Geography, make very explicit declarations concerning the nature of college examinations. The improvements desired in the mode of testing the attainments of pupils who have pursued in the secondary schools the various subjects which enter into the course will be found clearly described under each subject in the several Conference reports; but there is a general principle concerning the relation of the secondary schools to colleges which the Committee of Ten, inspired and guided by the Conferences, feel it their duty to set forth with all possible distinctness.

The secondary schools of the United States, taken as a whole, do not exist for the purpose of preparing boys and girls for colleges. Only an insignificant percentage of the graduates of these schools go to colleges or scientific schools. Their main function is to prepare for the duties of life that small proportion of all the children in the country – a proportion small in number, but very important to the welfare of the nation – who show themselves able to profit by an education prolonged to the eighteenth year, and whose parents are able to support them while they remain so long at school. There are, to be sure, a few private or endowed secondary schools in the country, which make it their principal object to prepare students for the colleges and universities; but the number of these schools is relatively small. A secondary school programme intended for national use must therefore be made for those children whose education is not to be pursued beyond the secondary school. The preparation of a few pupils for college or scientific school should in the

ordinary secondary school be the incidental, and not the principal object. At the same time, it is obviously desirable that the colleges and scientific schools should be accessible to all boys or girls who have completed creditably the secondary school course. Their parents often do not decide for them, four years before the college age, that they shall go to college, and they themselves may not, perhaps, feel the desire to continue their education until near the end of their school course. In order that any successful graduate of a good secondary school should be free to present himself at the gates of the college or scientific school of his choice, it is necessary that the colleges and scientific schools of the country should accept for admission to appropriate courses of their instruction the attainments of any youth who has passed creditably through a good secondary school course, no matter to what group of subjects he may have mainly devoted himself in the secondary school. As secondary school courses are now too often arranged, this is not a reasonable request to prefer to the colleges and scientific schools; because the pupil may now go through a secondary school course of a very feeble and scrappy nature – studying a little of many subjects and not much of any one, getting, perhaps, a little information in a variety of fields, but nothing which can be called a thorough training. Now the recommendations of the nine Conferences, if well carried out, might fairly be held to make all the main subjects taught in the secondary schools of equal rank for the purposes of admission to college or scientific school. They would all be taught consecutively and thoroughly, and would all be carried on in the same spirit; they would all be used for training the powers of observation, memory, expression, and reasoning; and they would all be good to that end, although differing among themselves in quality and substance. In preparing the programmes of Table IV the Committee had in mind that the requirements for admission to colleges might, for schools which adopted a programme derived from that table, be simplified to a considerable extent, though not reduced. A college might say, – We will accept for admission any groups of studies taken from the secondary school programme, provided that the sum of the studies in each of the four years amounts to sixteen, or eighteen, or twenty periods a week, – as may be thought best, – and provided, further, that in each year at least four of the subjects presented shall have been pursued at least three periods a week, and that at least three of the subjects shall have been pursued three years or more. For the purposes of this reckoning, natural history, geography, meteorology, and astronomy might be grouped together as one subject. Every youth who entered college would have spent four years in studying a few subjects thoroughly; and, on the theory that all the subjects are to be considered equivalent in educational rank for the purposes of admission to college, it would make no difference which subjects he had chosen from the programme – he would have had four years of strong and effective mental training. The Conferences on Geography and Modern Languages make the most explicit statement to the effect that college requirements for admission should coincide with high-school requirements for graduation. The Conference on English is of opinion

"that no student should be admitted to college who shows in his English examination and his other examinations that he is very deficient in ability to write good English." This recommendation suggests that an ample English course in the secondary school should be required of all persons who intend to enter college. It would of course be possible for any college to require for admission any one subject, or any group of subjects, in the table, and the requirements of different colleges, while all kept within the table, might differ in many respects; but the Committee are of opinion that the satisfactory completion of any one of the four years' courses of study embodied in the foregoing programmes should admit to corresponding courses in colleges and scientific schools. They believe that this close articulation between the secondary schools and the higher institutions would be advantageous alike for the schools, the colleges, and the country. (pp. 51–53)

Note

Table III is a modified summary of the recommendations from the conferences. It appears on page 41 of the Report, but is not included in these excerpts. *Editor*

23

My Pedagogic Creed

John Dewey

Article I – What Education Is

I believe that all education proceeds by the participation of the individual in the social consciousness of the race. This process begins unconsciously almost at birth, and is continually shaping the individual's powers, saturating his consciousness, forming his habits, training his ideas, and arousing his feelings and emotions. Through this unconscious education the individual gradually comes to share in the intellectual and moral resources which humanity has succeeded in getting together. He becomes an inheritor of the funded capital of civilization. The most formal and technical education in the world cannot safely depart from this general process. It can only organize it or differentiate it in some particular direction.

I believe that the only true education comes through the stimulation of the child's powers by the demands of the social situations in which he finds himself. Through these demands he is stimulated to act as a member of a unity, to emerge from his original narrowness of action and feeling, and to conceive of himself from the standpoint of the welfare of the group to which he belongs. Through the responses which others make to his own activities he comes to know what these mean in social terms. The value which they have is reflected back into them. For instance, through the response which is made to the child's instinctive babblings the child comes to know what those babblings mean; they are transformed into articulate language and thus the child is introduced into the consolidated wealth of ideas and emotions which are now summed up in language.

I believe that this educational process has two sides-one psychological and one sociological; and that neither can be subordinated to the other or neglected without evil results following. Of these two sides, the psychological is the basis. The child's own instincts and powers furnish the material and give the starting point for all education. Save as the efforts of the educator

Source: *The School Journal*, LIV(3) (1897): 77–80.

connect with some activity which the child is carrying on of his own initiative independent of the educator, education becomes reduced to a pressure from without. It may, indeed, give certain external results, but cannot truly be called educative. Without insight into the psychological structure and activities of the individual, the educative process will, therefore, be haphazard and arbitrary. If it chances to coincide with the child's activity it will get a leverage; if it does not, it will result in friction, or disintegration, or arrest of the child nature.

I believe that knowledge of social conditions, of the present state of civilization, is necessary in order properly to interpret the child's powers. The child has his own instincts and tendencies, but we do not know what these mean until we can translate them into their social equivalents. We must be able to carry them back into a social past and see them as the inheritance of previous race activities. We must also be able to project them into the future to see what their outcome and end will be. In the illustration just used, it is the ability to see in the child's babblings the promise and potency of a future social intercourse and conversation which enables one to deal in the proper way with that instinct.

I believe that the psychological and social sides are organically related and that education cannot be regarded as a compromise between the two, or a superimposition of one upon the other. We are told that the psychological definition of education is barren and formal – that it gives us only the idea of a development of all the mental powers without giving us any idea of the use to which these powers are put. On the other hand, it is urged that the social definition of education, as getting adjusted to civilization, makes of it a forced and external process, and results in subordinating the freedom of the individual to a preconceived social and political status.

I believe that each of these objections is true when urged against one side isolated from the other. In order to know what a power really is we must know what its end, use, or function is; and this we cannot know save as we conceive of the individual as active in social relationships. But, on the other hand, the only possible adjustment which we can give to the child under existing conditions, is that which arises through putting him in complete possession of all his powers. With the advent of democracy and modern industrial conditions, it is impossible to foretell definitely just what civilization will be twenty years from now. Hence it is impossible to prepare the child for any precise set of conditions. To prepare him for the future life means to give him command of himself; it means so to train him that he will have the full and ready use of all his capacities; that his eye and ear and hand may be tools ready to command, that his judgment may be capable of grasping the conditions under which it has to work, and the executive forces be trained to act economically and efficiently. It is impossible to reach this sort of adjustment save as constant regard is had to the individual's own powers, tastes, and interests-say, that is, as education is continually converted into psychological terms.

In sum, I believe that the individual who is to be educated is a social individual and that society is an organic union of individuals. If we eliminate the social factor from the child we are left only with an abstraction; if we eliminate the individual factor from society, we are left only with an inert and lifeless mass. Education, therefore, must begin with a psychological insight into the child's capacities, interests, and habits. It must be controlled at every point by reference to these same considerations. These powers, interests, and habits must be continually interpreted – we must know what they mean. They must be translated into terms of their social equivalents – into terms of what they are capable of in the way of social service.

Article II – What the School Is

I believe that the school is primarily a social institution. Education being a social process, the school is simply that form of community life in which all those agencies are concentrated that will be most effective in bringing the child to share in the inherited resources of the race, and to use his own powers for social ends.

I believe that education, therefore, is a process of living and not a preparation for future living.

I believe that the school must represent present life-life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the playground.

I believe that education which does not occur through forms of life, or that are worth living for their own sake, is always a poor substitute for the genuine reality and tends to cramp and to deaden.

I believe that the school, as an institution, should simplify existing social life; should reduce it, as it were, to an embryonic form. Existing life is so complex that the child cannot be brought into contact with it without either confusion or distraction; he is either overwhelmed by the multiplicity of activities which are going on, so that he loses his own power of orderly reaction, or he is so stimulated by these various activities that his powers are prematurely called into play and he becomes either unduly specialized or else disintegrated.

I believe that as such simplified social life, the school life should grow gradually out of the home life; that it should take up and continue the activities with which the child is already familiar in the home.

I believe that it should exhibit these activities to the child, and reproduce them in such ways that the child will gradually learn the meaning of them, and be capable of playing his own part in relation to them.

I believe that this is a psychological necessity, because it is the only way of securing continuity in the child's growth, the only way of giving a background of past experience to the new ideas given in school.

I believe that it is also a social necessity because the home is the form of social life in which the child has been nurtured and in connection with which he has had his moral training. It is the business of the school to deepen and extend his sense of the values bound up in his home life.

I believe that much of present education fails because it neglects this fundamental principle of the school as a form of community life. It conceives the school as a place where certain information is to be given, where certain lessons are to be learned, or where certain habits are to be formed. The value of these is conceived as lying largely in the remote future; the child must do these things for the sake of something else he is to do; they are mere preparation. As a result they do not become a part of the life experience of the child and so are not truly educative.

I believe that the moral education centers upon this conception of the school as a mode of social life, that the best and deepest moral training is precisely that which one gets through having to enter into proper relations with others in a unity of work and thought. The present educational systems, so far as they destroy or neglect this unity, render it difficult or impossible to get any genuine, regular moral training.

I believe that the child should be stimulated and controlled in his work through the life of the community.

I believe that under existing conditions far too much of the stimulus and control proceeds from the teacher, because of neglect of the idea of the school as a form of social life.

I believe that the teacher's place and work in the school is to be interpreted from this same basis. The teacher is not in the school to impose certain ideas or to form certain habits in the child, but is there as a member of the community to select the influences which shall affect the child and to assist him in properly responding to these influences.

I believe that the discipline of the school should proceed from the life of the school as a whole and not directly from the teacher.

I believe that the teacher's business is simply to determine on the basis of larger experience and riper wisdom, how the discipline of life shall come to the child.

I believe that all questions of the grading of the child and his promotion should be determined by reference to the same standard. Examinations are of use only so far as they test the child's fitness for social life and reveal the place in which he can be of the most service and where he can receive the most help.

Article III – The Subject-Matter of Education

I believe that the social life of the child is the basis of concentration, or correlation, in all his training or growth. The social life gives the unconscious unity and the background of all his efforts and of all his attainments.

I believe that the subject matter of the school curriculum should mark a gradual differentiation out of the primitive unconscious unity of social life.

I believe that we violate the child's nature and render difficult the best ethical results, by introducing the child too abruptly to a number of special studies, of reading, writing, geography, etc., out of relation to this social life.

I believe, therefore, that the true center of correlation on the school subjects is not science, nor literature, nor history, nor geography, but the child's own social activities.

I believe that education cannot be unified in the study of science, or so called nature study, because apart from human activity, nature itself is not a unity; nature in itself is a number of diverse objects in space and time, and to attempt to make it the center of work by itself, is to introduce a principle of radiation rather than one of concentration.

I believe that literature is the reflex expression and interpretation of social experience; that hence it must follow upon and not precede such experience. It, therefore, cannot be made the basis, although it may be made the summary of unification.

I believe once more that history is of educative value in so far as it presents phases of social life and growth. It must be controlled by reference to social life. When taken simply as history it is thrown into the distant past and becomes dead and inert. Taken as the record of man's social life and progress it becomes full of meaning. I believe, however, that it cannot be so taken excepting as the child is also introduced directly into social life.

I believe accordingly that the primary basis of education is in the child's powers at work along the same general constructive lines as those which have brought civilization into being.

I believe that the only way to make the child conscious of his social heritage is to enable him to perform those fundamental types of activity which make civilization what it is.

I believe, therefore, in the so-called expressive or constructive activities as the center of correlation.

I believe that this gives the standard for the place of cooking, sewing, manual training, etc., in the school.

I believe that they are not special studies which are to be introduced over and above a lot of others in the way of relaxation or relief, or as additional accomplishments. I believe rather that they represent, as types, fundamental forms of social activity; and that it is possible and desirable that the child's introduction into the more formal subjects of the curriculum be through the medium of these activities.

I believe that the study of science is educational in so far as it brings out the materials and processes which make social life what it is.

I believe that one of the greatest difficulties in the present teaching of science is that the material is presented in purely objective form, or is treated as a new peculiar kind of experience which the child can add to that which he has already had. In reality, science is of value because it gives the ability to

interpret and control the experience already had. It should be introduced, not as so much new subject-matter, but as showing the factors already involved in previous experience and as furnishing tools by which that experience can be more easily and effectively regulated.

I believe that at present we lose much of the value of literature and language studies because of our elimination of the social element. Language is almost always treated in the books of pedagogy simply as the expression of thought. It is true that language is a logical instrument, but it is fundamentally and primarily a social instrument. Language is the device for communication; it is the tool through which one individual comes to share the ideas and feelings of others. When treated simply as a way of getting individual information, or as a means of showing off what one has learned, it loses its social motive and end.

I believe that there is, therefore, no succession of studies in the ideal school curriculum. If education is life, all life has, from the outset, a scientific aspect, an aspect of art and culture, and an aspect of communication. It cannot, therefore, be true that the proper studies for one grade are mere reading and writing, and that at a later grade, reading, or literature, or science, may be introduced. The progress is not in the succession of studies but in the development of new attitudes towards, and new interests in, experience.

I believe finally, that education must be conceived as a continuing reconstruction of experience; that the process and the goal of education are one and the same thing.

I believe that to set up any end outside of education, as furnishing its goal and standard, is to deprive the educational process of much of its meaning and tends to make us rely upon false and external stimuli in dealing with the child.

Article IV – The Nature of Method

I believe that the question of method is ultimately reducible to the question of the order of development of the child's powers and interests. The law for presenting and treating material is the law implicit within the child's own nature. Because this is so I believe the following statements are of supreme importance as determining the spirit in which education is carried on:

1. I believe that the active side precedes the passive in the development of the child nature; that expression comes before conscious impression; that the muscular development precedes the sensory; that movements come before conscious sensations; I believe that consciousness is essentially motor or impulsive; that conscious states tend to project themselves in action.

I believe that the neglect of this principle is the cause of a large part of the waste of time and strength in school work. The child is thrown into a passive, receptive, or absorbing attitude. The conditions are such that he is not permitted to follow the law of his nature; the result is friction and waste.

I believe that ideas (intellectual and rational processes) also result from action and devolve for the sake of the better control of action. What we term reason is primarily the law of orderly or effective action. To attempt to develop the reasoning powers, the powers of judgment, without reference to the selection and arrangement of means in action, is the fundamental fallacy in our present methods of dealing with this matter. As a result we present the child with arbitrary symbols. Symbols are a necessity in mental development, but they have their place as tools for economizing effort; presented by themselves they are a mass of meaningless and arbitrary ideas imposed from without.

2. I believe that the image is the great instrument of instruction. What a child gets out of any subject presented to him is simply the images which he himself forms with regard to it.

I believe that if nine tenths of the energy at present directed towards making the child learn certain things, were spent in seeing to it that the child was forming proper images, the work of instruction would be indefinitely facilitated.

I believe that much of the time and attention now given to the preparation and presentation of lessons might be more wisely and profitably expended in training the child's power of imagery and in seeing to it that he was continually forming definite, vivid, and growing images of the various subjects with which he comes in contact in his experience.

3. I believe that interests are the signs and symptoms of growing power. I believe that they represent dawning capacities. Accordingly the constant and careful observation of interests is of the utmost importance for the educator.

I believe that these interests are to be observed as showing the state of development which the child has reached.

I believe that they prophesy the stage upon which he is about to enter.

I believe that only through the continual and sympathetic observation of childhood's interests can the adult enter into the child's life and see what it is ready for, and upon what material it could work most readily and fruitfully.

I believe that these interests are neither to be humored nor repressed. To repress interest is to substitute the adult for the child, and so to weaken intellectual curiosity and alertness, to suppress initiative, and to deaden interest. To humor the interests is to substitute the transient for the permanent. The interest is always the sign of some power below; the important thing is to discover this power. To humor the interest is to fail to penetrate below the surface and its sure result is to substitute caprice and whim for genuine interest.

4. I believe that the emotions are the reflex of actions.

I believe that to endeavor to stimulate or arouse the emotions apart from their corresponding activities, is to introduce an unhealthy and morbid state of mind.

I believe that if we can only secure right habits of action and thought, with reference to the good, the true, and the beautiful, the emotions will for the most part take care of themselves.

I believe that next to deadness and dullness, formalism and routine, our education is threatened with no greater evil than sentimentalism.

I believe that this sentimentalism is the necessary result of the attempt to divorce feeling from action.

Article V – The School and Social Progress

I believe that education is the fundamental method of social progress and reform.

I believe that all reforms which rest simply upon the enactment of law, or the threatening of certain penalties, or upon changes in mechanical or outward arrangements, are transitory and futile.

I believe that education is a regulation of the process of coming to share in the social consciousness; and that the adjustment of individual activity on the basis of this social consciousness is the only sure method of social reconstruction.

I believe that this conception has due regard for both the individualistic and socialistic ideals. It is duly individual because it recognizes the formation of a certain character as the only genuine basis of right living. It is socialistic because it recognizes that this right character is not to be formed by merely individual precept, example, or exhortation, but rather by the influence of a certain form of institutional or community life upon the individual, and that the social organism through the school, as its organ, may determine ethical results.

I believe that in the ideal school we have the reconciliation of the individualistic and the institutional ideals.

I believe that the community's duty to education is, therefore, its paramount moral duty. By law and punishment, by social agitation and discussion, society can regulate and form itself in a more or less haphazard and chance way. But through education society can formulate its own purposes, can organize its own means and resources, and thus shape itself with definiteness and economy in the direction in which it wishes to move.

I believe that when society once recognizes the possibilities in this direction, and the obligations which these possibilities impose, it is impossible to conceive of the resources of time, attention, and money which will be put at the disposal of the educator.

I believe that it is the business of every one interested in education to insist upon the school as the primary and most effective interest of social progress and reform in order that society may be awakened to realize what the school stands for, and aroused to the necessity of endowing the educator with sufficient equipment properly to perform his task.

I believe that education thus conceived marks the most perfect and intimate union of science and art conceivable in human experience.

I believe that the art of thus giving shape to human powers and adapting them to social service, is the supreme art; one calling into its service the best of artists; that no insight, sympathy, tact, executive power, is too great for such service.

I believe that with the growth of psychological service, giving added insight into individual structure and laws of growth; and with growth of social science, adding to our knowledge of the right organization of individuals, all scientific resources can be utilized for the purposes of education.

I believe that when science and art thus join hands the most commanding motive for human action will be reached; the most genuine springs of human conduct aroused and the best service that human nature is capable of guaranteed.

I believe, finally, that the teacher is engaged, not simply in the training of individuals, but in the formation of the proper social life.

I believe that every teacher should realize the dignity of his calling; that he is a social servant set apart for the maintenance of proper social order and the securing of the right social growth.

I believe that in this way the teacher always is the prophet of the true God and the usherer in of the true kingdom of God.

24

The Function of Education in Democratic Society[1]

Charles W. Eliot

What the function of education shall be in a democracy will depend on what is meant by democratic education. Too many of us think of education for the people as if it meant only learning to read, write, and cipher. Now, reading, writing, and simple ciphering are merely the tools by the diligent use of which a rational education is to be obtained through years of well-directed labor. They are not ends in themselves, but means to the great end of enjoying a rational existence. Under any civilized form of government, these arts ought to be acquired by every child by the time it is nine years of age. Competent teachers, or properly conducted schools, now teach reading, writing, and spelling simultaneously, so that the child writes every word it reads, and, of course, in writing spells the word. Ear, eye, and hand thus work together from the beginning in the acquisition of the arts of reading and writing. As to ciphering, most educational experts have become convinced that the amount of arithmetic which an educated person, who is not some sort of computer, needs to make use of is but small, and that real education should not be delayed or impaired for the the sake of acquiring a skill in ciphering which will be of little use either to the child or to the adult. Reading, writing, and arithmetic, then, are not the goal of popular education.

The goal in all education, democratic or other, is always receding before the advancing contestant, as the top of a mountain seems to retreat before the climber, remoter and higher summits appearing successively as each apparent summit is reached. Nevertheless, the goal of the moment in education is always the acquisition of knowledge, the training of some permanent capacity for productiveness or enjoyment, and the development of character. Democratic education being a very new thing in the world, its attainable objects are not yet fully perceived.

Source: *The Outlook*, LVII (1897): 103–116.

Plato taught that the laborious classes in a model commonwealth needed no education whatever. That seems an extraordinary opinion for a great philosopher to hold; but, while we wonder at it, let us recall that only one generation ago in our Southern States it was a crime to teach a member of the laborious class to read. In feudal society education was the privilege of some of the nobility and clergy, and was one source of the power of these two small classes. Universal education in Germany dates only from the Napoleonic wars; and its object has been to make intelligent soldiers and subjects rather than happy freemen. In England the system of public instruction is but twenty-seven years old. Moreover, the fundamental object of democratic education – to lift the whole population to a higher plane of intelligence, conduct, and happiness – has not yet been perfectly apprehended even in the United States. Too many of our own people think of popular education as if it were only a protection against dangerous superstitions, or a measure of police, or a means of increasing the national productiveness in the arts and trades. Our generation may therefore be excused if it has but an incomplete vision of the goal of education in a democracy.

I proceed to describe briefly the main elements of instruction and discipline in a democratic school. As soon as the easy use of what I have called the tools of education is gained, and even while this familiarity is being gained, the capacities for productiveness and enjoyment should begin to be trained through the progressive acquisition of an elementary knowledge of the external world. The democratic school should begin early – in the very first grades – the study of nature; and all its teachers should, therefore, be capable of teaching the elements of physical geography, meteorology, botany, and zoölogy, the whole forming in the child's mind one harmonious sketch of its complex environment. This is a function of the primary-school teacher which our fathers never thought of, but which every passing year brings out more and more clearly as a prime function of every instructor of little children. Somewhat later in the child's progress toward maturity the great sciences of chemistry and physics will find place in its course of systematic training. From the seventh or eighth year, according to the quality and capacity of the child, plane and solid geometry, the science of form, should find a place among the school studies, and some share of the child's attention that great subject should claim for six or seven successive years. The process of making acquaintance with external nature through the elements of these various sciences should be interesting and enjoyable for every child. It should not be painful, but delightful, and through it all the child's skill in the arts of reading, writing, and ciphering should be steadily developed.

There is another part of every child's environment with which he should early begin to make acquaintance – namely, the human part. The story of the human race should be gradually conveyed to the child's mind from the time he begins to read with pleasure. This story should be conveyed quite as much through biography as through history; and with the descriptions of

facts and real events should be entwined charming and uplifting products of the imagination. I cannot but think, however, that the wholly desirable imaginative literature for children remains, in large measure, to be written. The mythologies, Old Testament stories, fairly tales, and historical romances on which we are accustomed to feed the childish mind contain a great deal that is perverse, barbarous, or trivial; and to this infiltration into children's minds, generation after generation, of immoral, cruel, or foolish ideas is probably to be attributed in part the slow ethical progress of the race. The common justification of our practice is that children do not apprehend the evil in the mental pictures with which we so rashly supply them. But what should we think of a mother who gave her child dirty milk or porridge on the theory that the child would not assimilate the dirt? Should we be less careful of mental and moral food-materials? It is, however, as undesirable as it is impossible to try to feed the minds of children only upon facts of observation or record. The immense product of the imagination in art and literature is a concrete fact with which every educated human being should be made somewhat familiar, such products being a very real part of every individual's actual environment.

Into the education of the great majority of children there enters as an important part their contribution to the daily labor of the household and the farm, or at least of the household. It is one of the serious consequences of the rapid concentration of population into cities and large towns, and of the minute division of labor which characterizes modern industries, that this wholesome part of education is less easily secured than it used to be when the greater part of the population was engaged in agriculture. Organized education must, therefore, supply in urban communities a good part of the manual and moral training which the co-operation of children in the work of father and mother *affords in agricultural communities. Hence the great* importance in any urban population of facilities for training children to accurate handwork, and for teaching them patience, forethought, and good judgment in productive labor.

Lastly, the school should teach every child, by precept, by example, and by every illustration its reading can supply, that the supreme attainment for any individual is vigor and loveliness of character. Industry, persistence, veracity in word and act, gentleness, and disinterestedness should be made to thrive and blossom during school life in the hearts of the children who bring these virtues from their homes well started, and should be planted and tended in the less fortunate children. Furthermore, the pupils should be taught that what is virtue in one human being is virtue in any group of human beings, large or small – a village, a city, or a nation; that the ethical principles which should govern an empire are precisely the same as those which should govern an individual; and that selfishness, greed, falseness, brutality, and ferocity are as hateful and degrading in a multitude as they are in a single savage.

The education thus outlined is what I think should be meant by democratic education. It exists to-day only among the most intelligent people, or

in places singularly fortunate in regard to the organization of their schools; but though it be the somewhat distant ideal of democratic education, it is by no means an unattainable ideal. It is the reasonable aim of the public school in a thoughtful and ambitious democracy. It, of course, demands a kind of teacher much above the elementary-school teacher of the present day; and it also requires a larger expenditure upon the public school than is at all customary as yet in this country. But that better kind of teacher and that larger expenditure are imperatively called for if democratic institutions are to prosper and to promote continuously the real welfare of the mass of the people. The standard of education should not be set at the now attained or the now attainable. It is the privilege of public education to press toward a mark remote.

From the total training during childhood there should result in the child a taste for interesting and improving reading, which should direct and inspire its subsequent intellectual life. That schooling which results in this taste for good reading, however unsystematic or eccentric the schooling may have been, has achieved a main end of elementary education; and that schooling which does not result in implanting this permanent taste has failed. Guided and animated by this impulse to acquire knowledge and exercise his imagination through reading, the individual will continue to educate himself all through life. Without that deep-rooted impulsion he will soon cease to draw on the accumulated wisdom of the past and the new resources of the present; and, as he grows older, he will live in a mental atmosphere which is always growing thinner and emptier. Do we not all know many people who seem to live in a mental vacuum – to whom, indeed, we have great difficulty in attributing immortality, because they apparently have so little life except that of the body? Fifteen minutes a day of good reading would have given any one of this multitude a really human life. The uplifting of the democratic masses depends on this implanting at school of the taste for good reading.

Another important function of the public school in a democracy is the discovery and development of the gift or capacity of each individual child. This discovery should be made at the earliest practicable age, and, once made, should always influence, and sometimes determine, the education of the individual. It is for the interest of society to make the most of every useful gift or faculty which any member may fortunately possess; and it is one of the main advantages of fluent and mobile democratic society that it is more likely than any other society to secure the fruition of individual capacities. To make the most of any individual's peculiar power, it is important to discover it early, and then train it continuously and assiduously. It is wonderful what apparently small personal gifts may become the means of conspicuous service or achievement, if only they get discovered, trained, and applied. A quick eye for shades of color enables a blacksmith to earn double wages in sharpening drills for quarrymen. A delicate sense of touch makes the fortune of a wool-buyer. An extraordinarily perceptive forefinger gives a surgeon the advantage over all his competitors. A fine voice, with good elocution and a strong

memory for faces and parliamentary rules, may give striking political success to a man otherwise not remarkable. In the ideal democratic school no two children would follow the same course of study or have the same tasks, except that they would all need to learn the use of the elementary tools of education – reading, writing, and ciphering. The different children would hardly have any identical needs. There might be a minimum standard of attainment in every branch of study, but no maximum. The perception or discovery of the individual gift or capacity would often be effected in the elementary school, but more generally in the secondary; and the making of these discoveries should be held one of the most important parts of the teacher's work. The vague desire for equality in a democracy has worked great mischief in democratic schools. There is no such thing as equality of gifts, or powers, or faculties, among either children or adults. On the contrary, there is the utmost diversity; and education and all the experience of life increase these diversities, because school, and the earning of a livelihood, and the reaction of the individual upon his surroundings, all tend strongly to magnify innate diversities. The pretended democratic school with an inflexible programme is fighting not only against nature, but against the interests of democratic society. Flexibility of programme should begin in the elementary school, years before the period of secondary education is reached. There should be some choice of subjects of study by ten years of age; and much variety by fifteen years of age. On the other hand, the programmes of elementary as well as of secondary schools should represent fairly the chief divisions of knowledge – namely, language and literature, mathematics, natural science, and history, besides drawing, manual work, and music. If school programmes fail to represent the main varieties of intellectual activity, they will not afford the means of discovering the individual gifts and tendencies of the pupils.

As an outcome of successful democratic education, certain habits of thought should be well established in the minds of all the children before any of them are obliged to leave school in order to help in the support of the family. In some small field each child should acquire a capacity for exact observation, and as a natural result of this acquirement it should come to admire and respect exact observation in all fields. Again, in some small field it should acquire the capacity for exact description, and a respect for exact description in all fields. And, lastly, it should attain, within the limited range of its experience and observation, the power to draw a justly limited inference from observed facts. I need not say that this power of just inference is an admirable one, which many adults never attain as the combined result of their education in childhood and their experience in after life. Yet democratic institutions will not be safe until a great majority of the population can be trusted, not only to observe accurately and state precisely the results of observation, but also to draw just inferences from those results. The masses of the people will always be liable to dangerous delusions, so long as their schools fail to teach the difference between a true cause and an event preceding or accompanying a supposed effect. Thus a year ago our Nation came

to the very brink of a terrible disaster, because millions of our people thought the fall in the price of silver during the past twenty years was the cause of the fall in price of many other American products; whereas the prime cause of the general fall of prices, including the price of silver, was the immense improvement which has taken place since the Civil War in the manufacture and distribution of mechanical power – an operating cause which in the near future is going to produce much more striking effects than it has yet produced.

Any one who has attained to the capacity for exact observation and exact description, and knows what it is to draw a correct inference from well-determined premises, will naturally acquire a respect for these powers when exhibited by others in fields unknown to him. Moreover, any one who has learned how hard it is to determine a fact, to state it accurately, and to draw from it the justly limited inference, will be sure that he himself cannot do these things except in a very limited field. He will know that his own personal activity must be limited to a few subjects if his capacity is to be really excellent in any. He will be sure that the too common belief that a Yankee can turn his hand to anything is a mischievous delusion. Having, as the result of his education, some vision of the great range of knowledge and capacity needed in the business of the world, he will respect the trained capacities which he sees developed in great diversity in other people: in short, he will come to respect and confide in the expert in every field of human activity. Confidence in experts, and willingness to employ them and abide by their decisions, are among the best signs of intelligence in an educated individual or an educated community; and in any democracy which is to thrive, this respect and confidence must be felt strongly by the majority of the population. In the conduct of private and corporation business in the United States, the employment of experts is well recognized as the only rational and successful method. No one would think of building a bridge or a dam, or setting up a power station or a cotton-mill, without relying absolutely upon the advice of intelligent experts. The democracy must learn, in governmental affairs, whether municipal, state, or national, to employ experts and abide by their decisions. Such complicated subjects as taxation, finance, and public works cannot be wisely managed by popular assemblies or their committees, or by executive officers who have no special acquaintance with these most difficult subjects. American experience during the last twenty years demonstrates that popular assemblies have become absolutely incapable of dealing wisely with any of these great subjects. A legislature or a Congress can indicate by legislation the object it wishes to attain; but to devise the means of attaining that object in taxation, currency, finance, or public works, and to expend the money appropriated by the constituted authorities for the object must be functions of experts. Legislators and executives are changed so frequently under the American system of local representation that few gain anything that deserves to be called experience in legislation or administration; while the few

who serve long terms are apt to be so absorbed in the routine work of carrying on the government and managing the party interests that they have no time either for thorough research or for invention. Under present conditions neither expert knowledge nor intellectual leadership can reasonably be expected of them. Democracies will not be safe until the population has learned that governmental affairs must be conducted on the same principles on which successful private and corporate business is conducted; and therefore it should be one of the principal objects of democratic education so to train the minds of the children that when they become adult they shall have within their own experience the grounds of respect for the attainments of experts in every branch of governmental, industrial, and social activity, and of confidence in their advice.

The next function of education in a democracy should be the firm planting in every child's mind of certain great truths which lie at the foundation of the democratic social theory. The first of these truths is the intimate dependence of each human individual on a multitude of other individuals, not in infancy alone, but at every moment of life – a dependence which increases with civilization and with the development of urban life. This sense of mutual dependence among multitudes of human beings can be brought home to children during school life so clearly and strongly that they will never lose it. By merely teaching children whence come their food, drink, clothing, and means of getting light and heat, and how these materials are supplied through the labors of many individuals of many races scattered all over the world, the school may illustrate and enforce this doctrine of intricate interdependence, which really underlies modern democracy – a doctrine never more clearly expressed than in these two Christian sentences, "No man liveth to himself," and "We are every one members one of another." The dependence of every family, and indeed every person, on the habitual fidelity of mechanics, purveyors, railroad servants, cooks, and nurses can easily be brought home to children. Another mode of implanting this sentiment is to trace in history the obligations of the present generation to many former generations. These obligations can be easily pointed out in things material, such as highways, water-works, fences, houses, and barns, and, in New England at least, the stone walls and piles of stone gathered from the arable fields by the patient labor of predecessors on the family farm; but it may also be exhibited to the pupils of secondary schools, and in some measure to the pupils of elementary schools, in the burdens and sufferings which former generations have borne for the establishment of freedom of conscience and of speech, and of toleration in religion, and for the development of the institutions of public justice. Of course, history is full of examples of the violation of this fundamental democratic doctrine of mutual help. Indeed, history, as commonly written, consists chiefly in the story of hideous violations of this principle, such as wars and oppressions, and the selfish struggles of class against class, church against church, and nation against nation; but these violations, with the awful sufferings that follow from them, may be made to point and

emphasize the truth of the fundamental doctrine; and unless the teaching of history in our public schools does this, it were better that the subject should not be taught at all.

Democratic education should also inculcate on every child the essential unity of a democratic community, in spite of the endless diversities of function, capacity, and achievement among the individuals who compose the community. This is a doctrine kindred with that just mentioned, but not identical. It is a doctrine essential to diffused democratic contentment and self-respect, but materially different from the ordinary conception of equality of conditions as a result of democracy; for unity is attainable, while equality of conditions is unnatural and unattainable. The freedom and social mobility which characterize the democratic State permit, and indeed bring about, striking inequalities of condition; and if the surface of democratic society should be leveled off any day, inequalities would reappear on the morrow, unless individual freedom and social mobility should be destroyed. The children of a democratic society should, therefore, be taught at school with the utmost explicitness, and with vivid illustrations, that inequalities of condition are a necessary result of freedom; but that through all inequalities should flow the constant sense of essential unity in aim and spirit. This unity in freedom is the social goal of democracy, the supreme good of all ranks of society, of the highest no less than of the lowest.

Another ethical principle which a democracy should teach to all its children is the familiar Christian doctrine that service rendered to others is the surest source of one's own satisfaction and happiness. This doctrine is a taproot of private happiness among all classes and conditions of men; but in a democracy it is important to public happiness and well-being. In a democracy the public functionary is not a master, but a trusted servant. By excellence of service he earns not only a pecuniary consideration, but also respect and gratitude. This statement applies just as well to a letter-carrier, a fireman, or a village selectman, as it does to a high-school teacher, a judge, or a governor. Democracy applies literally the precept, "if any man would be great among you, let him be your servant." The quality of this faithful service and its rewards should be carefully taught in school to all children of a democracy. The children should learn that the desire to be of great public service is the highest of all ambitions; and they should be shown in biography and in history how the men and women who, as martyrs, teachers, inventors, legislators, and judges, have rendered great service, have thereby won enduring gratitude and honor.

Since it is a fundamental object of a democracy to promote the happiness and well-being of the masses of the population, the democratic school should explicitly teach children to see and utilize the means of happiness which lie about them in the beauties and splendors of nature. The school should be a vehicle of daily enjoyment, and the teacher should be to the child a minister of joy. Democratic society has already learned how to provide itself, at least in the more intelligent communities, with open grounds in cities,

and parks in suburbs, and has in these ways begun to provide directly for the wholesome pleasures of the population. It should be a recognized function of the democratic school to teach the children and their parents how to utilize all accesible means of innocent enjoyment.

Finally, the democratic school must teach its children what the democratic nobility is. The well-trained child will read in history and poetry about patricians, nobles, aristocrats, princes, kings, and emperors, some of them truly noble but many vile; and he will also read with admiring sympathy of the loyalty and devotion which through all the centuries have been felt by generous men and women of humbler condition towards those of higher. He will see what immense virtues these personal loyalties have developed, even when the objects of loyalty have been unworthy; and he will ask himself, What are to be the corresponding virtues in a democracy? The answer is, Fidelity to all forms of duty which demand courage, self-denial, and zeal, and loyal devotion to the democratic ideals of freedom, serviceableness, unity, toleration, public justice, and public joyfulness. The children should learn that the democratic nobility exists, and must exist if democracy is to produce the highest types of character; but that it will consist only of men and women of noble character produced under democratic conditions by the combined influences of fine inherited qualities, careful education, and rich experience. They should learn to admire and respect persons of this quality, and to support them, on occasion, in preference to the ignoble. They should learn that mere wealth has no passport to the democratic nobility; and that membership in it can be transmitted to children only through the transmission of the sound mental and moral qualities which are its sole warrant. This membership should be the rightful ambition of parents for their children, and of children for their future selves. Every person of the true quality, no matter what his station or vocation, is admitted of right to this simple democratic nobility, which home, church, and school unite in recruiting; and there are, consequently, more real nobles under the democratic form of government than under any other.

Note

1. *The Outlook*, Vol. LVII (November 6, 1897), pp. 570–75. An address delivered before the Brooklyn Institute on October 2, 1897.

25

Psychology and the Teaching Art

William James

In the general activity and uprising of ideal interest which every one with an eye for fact can discern all about us in American life, there is perhaps no more promising feature than the fermentation which for a dozen years or more has been going on among the teachers. In whatever sphere of education their functions may lie, there is to be seen among them a really inspiring amount of searching of the heart about the highest concerns of their profession. The renovation of nations begins always at the top, among the reflective members of the state, and spreads slowly outward and downward. The teachers of this country, one may say, have its future in their hands. The earnestness which they at present show in striving to enlighten and strengthen themselves is an index of the nation's probabilities of advance in all ideal directions. The outward organization of education which we have in our United States is perhaps, on the whole, the best organization that exists in any country. The state school systems give a diversity and flexibility, an opportunity for experiment and keenness of competition, nowhere else to be found on such an important scale. The independence of so many of the colleges and universities; the give and take of students and instructors between all; their emulation, and their happy organic relations to the lower schools; the traditions of instruction in them, evolved from the older American recitation-method (and so avoiding on the one hand the pure lecture-system prevalent in Germany and Scotland, which considers too little the individual student, and yet not involving the sacrifice of the instructor to the individual student, which the English tutorial system would seem too often to entail), – all these things (to say nothing of the coeducation of the sexes in whose benefits so many of us heartily believe), all these things, I say, are most happy features of our scholastic life, and from them the most sanguine auguries may be drawn.

Source: William James, *Talks to Teachers on Psychology: And to Students on Some of Life's Ideals* (New York: Henry Holt and Company, 1899).

Having so favorable an organization, all we need is to impregnate it with geniuses, to get superior men and women working more and more abundantly in it and for it and at it, and in a generation or two America may well lead the education of the world. I must say that I look forward with no little confidence to the day when that shall be an accomplished fact.

No one has profited more by the fermentation of which I speak, in pedagogical circles, than we psychologists. The desire of the school teachers for a complete professional training, and their aspiration toward the 'professional' spirit in their work, have led them more and more to turn to us for light on fundamental principles. And in these few hours which we are to spend together you look to me, I am sure, for information concerning the mind's operations, which may enable you to labor more easily and effectively in the several schoolrooms over which you preside.

Far be it from me to disclaim for psychology all title to such hopes. Psychology ought certainly to give the teacher radical help. And yet I confess that, acquainted as I am with the height of some of your expectations, I feel a little anxious lest, at the end of these simple talks of mine, not a few of you may experience some disappointment at the net results. In other words, I am not sure that you may not be indulging fancies that are just a shade exaggerated. That would not be altogether astonishing, for we have been having something like a 'boom' in psychology in this country. Laboratories and professorships have been founded, and reviews established. The air has been full of rumors. The editors of educational journals and the arrangers of conventions have had to show themselves enterprising and on a level with the novelties of the day. Some of the professors have not been unwilling to co-operate, and I am not sure even that the publishers have been entirely inert. 'The new psychology' has thus become a term to conjure up portentous ideas withal; and you teachers, docile and receptive and aspiring as many of you are, have been plunged in an atmosphere of vague talk about our science, which to a great extent has been more mystifying than enlightening. Altogether it does seem as if there were a certain fatality of mystification laid upon the teachers of our day. The matter of their profession, compact enough in itself, has to be frothed up for them in journals and institutes, till its outlines often threaten to be lost in a kind of vast uncertainty. Where the disciples are not independent and critical-minded enough (and I think that, if you teachers in the earlier grades have any defect – the slightest touch of a defect in the world – it is that you are a mite too docile), we are pretty sure to miss accuracy and balance and measure in those who get a license to lay down the law from above.

As regards this subject of psychology, now, I wish at the very threshold to do what I can to dispel the mystification. So I say at once that in my humble opinion there *is* no 'new psychology' worthy of the name. There is nothing but the old psychology which began in Locke's time, plus a little physiology of the brain and senses and theory of evolution, and a few refinements of the introspective detail, for the most part without adaptation to the teacher's use. It is only the fundamental conceptions of psychology which are of real

value to the teacher; and they, apart from the aforesaid theory of evolution, are very far from being new. – I trust that you will see better what I mean by this at the end of all these talks.

I say moreover that you make a great, a very great mistake, if you think that psychology, being the science of the mind's laws, is something from which you can deduce definite programmes and schemes and methods of instruction for immediate schoolroom use. Psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application, by using its originality.

The science of logic never made a man reason rightly, and the science of ethics (if there be such a thing) never made a man behave rightly. The most such sciences can do is to help us to catch ourselves up and check ourselves, if we start to reason or to behave wrongly; and to criticise ourselves more articulately after we have made mistakes. A science only lays down lines within which the rules of the art must fall, laws which the follower of the art must not transgress; but what particular thing he shall do positively within those lines is left exclusively to his own genius. One genius will do his work well and succeed in one way, while another succeeds as well quite differently; yet neither will transgress the lines.

The art of teaching grew up in the schoolroom, out of inventiveness and sympathetic concrete observation. Even where (as in the case of Herbart) the advancer of the art was also a psychologist, the pedagogics and the psychology ran side by side, and the former was not in any sense derived from the latter. The two were congruent, but neither was subordinate. And so everywhere the teaching must *agree* with the psychology, but need not necessarily be the only kind of teaching that would so agree; for many diverse methods of teaching may equally well agree with psychological laws.

To know psychology, therefore, is absolutely no guarantee that we shall be good teachers. To advance to that result, we must have an additional endowment altogether, a happy tact and ingenuity to tell us what definite things to say and do when the pupil is before us. That ingenuity in meeting and pursuing the pupil, that tact for the concrete situation, though they are the alpha and omega of the teacher's art, are things to which psychology cannot help us in the least.

The science of psychology, and whatever science of general pedagogics may be based on it, are in fact much like the science of war. Nothing is simpler or more definite that the principles of either. In war, all you have to do is to work your enemy into a position from which the natural obstacles prevent him from escaping if he tries to; then to fall on him in numbers superior to his own, at a moment when you have led him to think you far away; and so, with a minimum of exposure of your own troops, to hack his force to pieces, and take the remainder prisoners. Just so, in teaching, you must simply work your pupil into such a state of interest in what you are going to teach him that every other object of attention is banished from his mind; then reveal it to him so impressively that he will remember the occasion to his dying day;

and finally fill him with devouring curiosity to know what the next steps in the subject are. The principles being so plain, there would be nothing but victories for the masters of the science, either on the battlefield or in the schoolroom, if they did not both have to make their application to an incalculable quantity in the shape of the mind of their opponent. The mind of your own enemy, the pupil, is working away from you as keenly and eagerly as is the mind of the commander on the other side from the scientific general. Just what the respective enemies want and think, and what they know and do not know, are as hard thing for the teacher and the general to find out. Divination and perception, not psychological pedagogics or theoretical strategy, are the only helpers here.

But, if the use of psychological principles thus be negative rather than positive, it does not follow that it may not be great use, all the same. It certainly narrows the path for experiments and trials. We know in advance, if we are psychologists, that certain methods will be wrong, so our psychology saves us from mistakes. It makes us, moreover, more clear as to what we are about. We gain confidence in respect to any method which we are using as soon as we believe that it has theory as well as practice at its back. Most of all, it fructifies our independence, and it reanimates our interest, to see our subject at two different angles, – to get a stereoscopic view, so to speak, of the youthful organism who is our enemy, and, while handling him with all our concrete tact and divination, to be able, at the same time, to represent to ourselves the curious inner elements of his mental machine. Such a complete knowledge as this of the pupil, at once intuitive and analytic, is surely the knowledge at which every teacher ought to aim.

Fortunately for you teachers, the elements of the mental machine can be easily apprehended, and their workings easily grasped. And, as the most general elements and workings are just those parts of psychology which the teacher finds most directly useful, it follows that the amount of this science which is necessary to all teachers need not be very great. Those who find themselves loving the subject may go as far as they please, and become possibly none the worse teachers for the fact, even though in some of them one might apprehend a little loss of balance from the tendency observable in all of us to overemphasize certain parts of a subject when we are studying it intensely and abstractly. But for the great majority of you a general view is enough, provided it be a true one; and such a general view, one may say, might almost be written on the palm of one's hand.

Least of all need you merely *as teachers*, deem it part of your duty to become contributors to psychological science or to make psychological observation in a methodical or responsible manner. I fear that some of the enthusiasts for child-study have thrown a certain burden on you in this way. By all means let child-study go on, – it is refreshing our sense of the child's life. There are teachers who take a spontaneous delight in filling syllabuses, inscribing observations, compiling statistics, and computing the per cent.

Child-study will certainly enrich their lives. And if its results, as treated statistically, would seem on the whole to have but trifling value, yet the anecdotes and observations of which is in part consist do certainly acquaint us more intimately with our pupils. Our eyes and ears grow quickened to discern in the child before us processes similar to those we have read of as noted in the children, – processes of which we might otherwise have remained inobservant. But, for Heaven's sake, let the rank and file of teachers be passive readers if they so prefer, and feel free not to contribute to the accumulation. Let not the prosecution of it be preached as an imperative duty or imposed by regulation on those to whom it proves an exterminating bore, or who in any way whatever miss in themselves the appropriate vocation for it. I cannot too strongly agree with my colleague Professor Münsterberg, when he says that the teacher's attitude toward the child, being concrete and ethical, is positively opposed to the psychological observer's, which is abstract and analytic. Although some of us may conjoin the attitudes successfully, in most of us they must conflict.

The worst thing that can happen to a good teacher is to get a bad conscience about here profession because she feels herself hopeless as a psychologist. Our teachers are overworked already. Every one who adds a jot or a tittle of unnecessary weight to their burden is a foe of education. A bad conscience increases the weight of every other burden; yet I know that child-study, and other pieces of psychology as well, have been productive of bad conscience in many a really innocent pedagogical breast. I should indeed be glad if this passing word from me might tend to dispel such a bad conscience, if any of you have it; for it is certainly on of those fruits of more or less systematic mystification of which I have already complained. The best teach may be the poorest contributor of child-study material, and the best contributor the poorest teacher. No fact is more palpable than this.

So much for what seems the most reasonable general attitude of the teacher toward the subject which is to occupy our attention.

26

Child-Study and Its Relation to Education

Granville Stanley Hall

Child-study or paidology, often confused with psychogenesis, of which it constitutes a large part, is a new movement which has been well under way hardly a decade. It is already represented by a bibliography of some two thousand titles, including only the books and articles well worth reading, and not comprising the yet larger mass of chaff; by two journals in this country devoted exclusively to it, and by several more which make it a department; by three journals in Germany, two in France, one each in England, Italy, Japan, Russia, and Spain.

Paidology either forms a department, or appears on the programme of most of the leading psychological, philosophical, and educational societies. Its work is supported from the treasury of several of the largest States. Sometimes, as, for example, in New York city, it is a topic in the annual school reports; and expert investigations are paid for out of the municipal treasury. There are several academic chairs devoted mainly or exclusively to it; and I opine that it enters somewhat into the instruction of nearly every course of study that deals with the human mind. There are organizations with which I have been in correspondence in India, South America, Russia, Spain, and Australia; and circles or groups exist in almost every civilized or colonized land.

Studies of child life among the North American Indians, Australian tribes, the Zulus, Chinese, clay-eaters, Kaffirs, Maoris, Arabs, Samoyads, ancient Greeks and Romans, etc., are found in periodicals or publishers' announcements. Child-study forms a section or a part of the work of nearly all the leading women's clubs, summer schools, and organizations of Sunday-school teachers. It is a movement that has been extensively felt in literature, as witness the many books on childhood noticed during the last few years in the journals I edit; and it is even a frequent topic in the daily, weekly, and,

Source: *The Forum*, XXIX (1900): 688–693, 696–702.

especially, the Sunday newspaper press. Teachers of all grades, mothers of all degrees of culture, pupils in colleges and normal schools fill out questionnaires, and perhaps meet to compare results and to report the latest magazine literature upon the subject. I have received some two thousand letters – either unacknowledged or inadequately answered – from all parts of the world, asking how to organize local work, requesting suggestions for reading, or very often seeking advice concerning children. A private secretary devoted solely to this work could do beneficent service; and perhaps a new profession might arise, which might be indicated by some such term as psychic orthopedics or pediatrics.

The teachers foremost in the work are usually the best among the younger men and women, and the academic representation is naturally strongest among those who have not developed the conservatism of age. This, of course, is auspicious, because the ideals of young men and women are proverbially the best material for prophecy. It is obvious that there is often enthusiasm without knowledge, and also that there are a great many camp followers and faddists in the child-study movement, such as are to be found in the wake of all movements when they assume certain proportions. On the other hand, while the work has had plenty of attacks, often bitter and virulent, it has so far had no competent criticism. Like a new planet, it has disturbed the circles of the systematizers, who live and move in the sphere of definitions, and lay down the law for sciences new and old, like surveyors plotting imaginary streets, or policemen enforcing city rules in the country. But critics such as these have so far uniformly violated Coleridge's sensible adage, that we should see to it that we are not ignorant of an author's understanding before we attempt to understand his ignorance. The defenders of things as they are and the leaders of the rear guard of conservatism, who a few years ago poured out their vials of wrath and contempt, are already in various stages of compromise and adjustment.

It is a nondescript and, in some sense, an unparalleled movement – partly psychology, partly anthropology, partly medico-hygienic. It is closely related at every step to the study of instinct in animals, and to the rites and beliefs of primitive people; and it has a distinct ethicophilosophical aspect – partly what a recent writer classed as the higher biology – with a spice of folk-lore and of religious evolution, sometimes with an alloy of gossip and nursery tradition, but possessing a broad, practical side in the pedagogy of all stages. It has all the advantages and the less grave disadvantages of its many-sidedness.

The point of view of the pedagogue, and also of the psychologist, is like that of the one-ninth of an iceberg visible above water, and each often marvels, especially if hostile, that it goes nearly as well straight in the teeth of his disfavor and indifferently with or against the wind of his approval, because he does not see the submerged eight-ninths of it controlled by the currents of a denser medium. An able classifier and over-systematizer deplores that pedagogy "wants to marry psychology." He is belated; they were made one years ago. The physician, who weighs and measures, tests eyes, ears, etc., is

hardly in sight of the philologist, who studies the development of language in the child's speech; and neither knows nor cares much for the unfoldment of the child's sense of self, fear, anger, superstition, nascent periods of interest, capacity, etc.

The uniqueness of the situation consists thus in the new direction and focalization of many scientific departments and methods upon one object, some of which have never before had even this bond of union. Again, the coöperation of the eminent professorial expert with the utterly untrained parent or primary teacher – so that each has an interest in the same matter, and the former awaits the latter's publication with both a filial and a proprietary interest – is a novelty shocking to the esoteric instincts traditional in academic life. It is not strange, therefore, if excessive hopes and fears have been aroused.

One of the oldest objections against child-study, now very rarely heard, is that it is liable to interfere in some way with the naïveté of children, and to make them self-conscious. A few years ago I heard a prominent professor declare, with great emphasis, before an audience of applauding Boston school-masters, that, as for his own children, they should never be mentally vivisected; that they should be loved, not studied, etc. "All that I have to say out of my deepest heart is, simply, I do not believe in it." A prominent New York daily about that time, with most sensational headlines, accused a leading professor of Columbia of subjecting his own children to research, as if it were a new and diabolical species of torture. I lately saw in a yellow journal of Chicago an illustrated account of a Normal School girl who wanted to fill out a questionnaire on crying, and who, after waiting in vain for a fortnight, until her composition was clue, actually pinched her baby brother's ear to get material.

I am ready to take this in all seriousness, and say candidly that if such studies injure ever so little the very few observed for the benefit of the very many we have no adequate warrant for this work. However precious the scientific results, they would be bought at too dear a price. Better a millstone about our necks, and we in the sea, than that we offend the little ones in this way. But the truth is the exact opposite. The best data are gathered as one of the offices of love, with a view to making the tender influences of parents or of school, or of both, more effective; and I cannot think that instincts generally so true are here perverted.

Love and study in this field, as in that of natural science, instead of interfering with, strengthen each other. Not only are we better parents and teachers for both knowing and doing this work, but those who fail to utilize it are neglecting some of the most urgent new duties of a new age. I have received hundreds of letters from parents, who, for the most part, express gratitude that they have learned from it things of vital importance for the welfare of their children; and I could spend much of my time in testing psychical qualities and applying results for parents who write to me or call on me for help about their children. I cannot believe that all these people have perverted

instincts in wanting their children investigated, or that those who express gratitude do so because the mind is enlightened, or seeks to become so, at the expense of the heart.

I have selected fifty topics which seem to me as valuable and representative as any; and in only one of these can there be any question concerning injury or inconvenience in the work of collecting data. There have been studies of very delicate questions; but I know of no case where, even in such instances, precautions were not taken that would satisfy a critic, even if he were constitutionally sentimental or disposed to be sensational.

In the majority of my fifty topics the children never suspect, from first to last, that they are being observed at all, as, *e.g.*, in plays and games, signs of fatigue, automatic movements, positions of the hand, cases of imitation, infant's creeping. In other cases they tap, press a dynamometer, count lines, put a needle through a small hole, read different types a few minutes, name their favorite story, are tested for defects of the eye, ear, power of speech, are weighed, measured, etc. In other topics, like fear, the very calling of attention to these psychoses, which have often secretly haunted adolescence for years, has, in itself, helped toward their dissipation and control, and aided pitiable cases toward what Aristotle said is the definition of education itself – "Learning to fear aright."

What more pathetic object in the world can there be than a misunderstood child? As the elective system is working its way down toward high, and even grammar, school grades, it becomes more important to fit it to the nature and needs of individual children, in order that the school may become a life-and-career-saving institution. Very strange to say, only those whose philosophy is ultra-introspective fear self-consciousness or interference with the naturalness of children. Self-knowledge is a very different thing from self-consciousness; and it is only from the former standpoint that the highest study of mankind is man, and that next to the highest is childhood. There is here a new duty, which is neglected by parents who do not love their children intelligently enough to study them.

Again, some critics have objected to this part of the work – that matter collected by untrained observers can have no value. They ignore, however, the obvious difference between the gathering of raw material and the manufacture of it into forms of value, processes as distinct as the work of the quarryman and the sculptor. Almost any intelligent mother can tell me whether her child has a passion for collecting buttons, bottles, or postage stamps; whether it is attended by imaginary companions; what kind of dolls it plays with; when it cut its first teeth; what mistakes it makes most frequently in addition; what diseases it has had; what are its favorite toys and games. The more skilful can collect data on intense and chronic fears, on manifestations of anger, imitations, automatisms, excessive blushing, number forms; can measure or weigh; can answer a few questions on laughing and crying, creeping, the senses, motor power, only children, the development of language, and many other topics.

The four largest anthropological societies – those of England, France, Germany, and Italy – have each issued little hand-books directing untrained observers who may happen to be among savage races how to collect more complicated data than these, including even vocabularies, religious rites and ideas, and social institutions; and the savants make large use of returns from such sources. A little practice with such material, aided by some experience in collecting data upon the subject, enables the expert frequently to master the sometimes rather difficult problem of the sources of error, to weed it out, boil data down, and in some cases transform it as much as the watch-spring maker metamorphoses the crude ore of the miner into products of a very high value.

It may be somewhat as the physician consults the mother about his patient, or the judge questions an unlettered witness. In general, however, the critics do those who make returns great injustice and dispraise. Among some scores of thousands of returns which I have dealt with, directly or indirectly, many are from leading college professors, more from college graduates, and very many from students. From considerable practice others have developed very rare skill in getting valuable data from their students. No one can begin to appreciate the difficulties in this field or the methods by which they are successfully overcome who has not himself had considerable experience with the work. It is an expert problem, in which the opinions of experts only have value.

Mixed in with the best, there is, indeed, material that is more chaffy than any antagonist I know of has sampled. Perhaps I go too far in holding that, where the quality of work in a great and new field, like this, ranges all the way from utter worthlessness to the very highest value, a critic with real magnanimity would select the best; but I maintain that not only the animus, but also the ability, of a critic is indicated by the grade of work he attacks. Here any one can vanquish to absurdity the weaklings, but no one can impugn the best. I sympathize somewhat with the abler critics in such success as they achieve in the modest task of showing up sub-average work. Like the reformation, or evolution itself, although as yet not comparable in depth and breadth with these great culture movements, genetic psychology has taken a strong hold upon the popular mind, and has enlisted a crowd of camp-followers – some for profit and repute, as the movement gathers breadth and momentum, and others, utterly untrained, whose enthusiasm prompts them to attempt things beyond their power. On the whole I have felt hitherto that perhaps the wheat and tares might best grow together a while longer, lest modest merit be discouraged; and I even fail to see why it is more absurd to show a baby to a class in psychology than to one of medical students, if the conditions chance to favor.

* * *

Much is written about the methods as if they were rivals. This can never be, for all methods are good. Some, like Preyer, Shinn, Moore, and Baldwin,

prefer to focus their work upon one or two children, and to bring to this focus the best they can from the anthropometric, physiological, philological, psychological, and, perhaps, other fields. This is as legitimate as it is to study plants or animals from the standpoint of chemistry, biology, physics, etc.; but experts excel in only one or two lines, and the monographs under this class have their weak as well as their strong points. Moreover, one must adhere very closely to a plain and painstaking record of facts here; hoping that, through the accumulation of a vast body of data, inferences of value may some time be drawn.

One of the above-mentioned authors may perhaps come to stand as a striking illustration of the danger of drawing general conclusions and building speculative conclusions upon a monopaidic basis. We have several interesting memoirs devoted to the very detailed and monographic study of a single case of some typical form of insanity; and the very elaborate application of the method of many sciences to the study of Zola's personality, which lately appeared, suggests a new factor in biographic work. The work done on Casper Hauser, Laura Bridgeman, and the Juke family, illustrates the method.

Another method is to select a single topic or question, and gather data upon it from many children. This, obviously, affords the expert – whether he be a student of language, of the eye or ear, of psychology or pedagogy – a chance to focus more sharply upon one special subject, of scores of which every child is a collection. Some, like Barnes, Boaz, Bowditch, do their best work here by gathering data from very large numbers; others limit themselves to one or a few dozen for more careful work, like Ament, Starbuck, etc. Some, like Miss Williams, Wiltse, Small, etc., do best by gathering material for the express purpose of one topic; while others, led by Principal Russell, collect salient facts of all sorts and let them naturally group themselves about topics later.

Here, perhaps, I might instance my own studies of fears, anger, dolls, laughing and crying, a sense of self, children's collections, contents of their minds on entering school, etc. The object here is to make what Bacon would call *a silva silvarum*, or a large collection of actual facts, and later to group them according to sex, age, etc., so as to present something a little like a composite photograph of the subject. Each individual life is in most respects so limited in its experience that the enlargement of these themes by the comparative method brings out many new and unsuspected features, and is remotely analogous to the use of the microscope.

The simple reading of a copious anthology of well-made and sifted records is for me not only most interesting, but among the most instructive of all forms of psychological literature. It brings one in contact with life on a larger scale; brings out in strong colors what was latent in individual experience; and enriches and amplifies one's knowledge of human nature. I do not wonder that in some normal schools and colleges these bare data, properly grouped and ordered, take the place of text-book instruction. They resemble the physician's personal acquaintance with a rich casuistic material in a hospital of general cases.

Upon the value of the genetic movement for psychology I shall not dwell here, but shall pass to the much-discussed question of its utility for teachers. If psychology be conceived epistemologically as dealing with inner facts primarily non-special – that can never be communicated, described, or measured, that have meaning and value only when transformed according to logical ideals which seek an expression of reality sharply demarcated with water-tight compartments from art, history, physiology, and life itself, so that it might almost be called a psychology devitalized, or versus life – then every teacher in the land may well breathe a sigh of relief to be told that his work is strictly anti-psychological, and that he has not the slightest use for this science.

This utter divorce is, if possible, still further justified if teaching be conceived solely as instruction, or the lodgment of knowledge in mental receptacles, with no reference to methods, or to the predispositions, interests, capacities, etc., of the pupil. However much this may violate the oldest and perhaps most cherished American tradition, that the mental and moral sciences must define the goal and carefully work out the methods of both textbooks and class work, we must submit as victims of these new and jejune definitions that triangulate so many vast mental spaces.

From such conceptions, however valuable in their abstract sphere, I believe all healthful psychological thinking revolts. For one, my conception of psychology is as different from all this as science is from epistemology or metaphysics. I propound here no definitions, but urge that we must, in justice to the human soul, conceive it far more broadly and vitally. From one view-point it is the natural history of the human and prehuman mind in all its aspects, from the ant, bee and wasp up. I would not exclude it from any phenomena of life to which we can apply the term selection.

The psychologist should be in love with life, especially human life, in every aspect of it, as broadly as the author of the *Comédie Humaine* conceived his theme. He passionately loves the acquaintance and friendship of animals, would know their ways, and divine, if he could, how the world looks beneath the skull of the beaver, the dog, or the chimpanzee. He frequents institutions for defectives – the blind, deaf, idiots, insane – where nature has made her great, but cruel, experiments. He loves and is at home with children; is on as familiar terms as is practicable with savages and criminals; frequents the psychological laboratory; and is versed in the history of the great systems. He is penetrated with the faith that even the latter may, and sometime will, be explained in the larger evolutionary way as we explain migrations, nest-building, and the social organization of animals. This is plain, naturalistic thinking, with a standpoint as objective as that of the sciences, but including every addition that self-observation and introspection can make, recognizing, of course, the peculiar conditions that must prevail here.

From this standpoint it is plain that the teacher must know two things: (1) the subject matter to be taught; and (2) the nature and capacity of the minds in which it is to be rooted. The farmer must know soils as well as seeds;

the architect, the nature of material as well as ground-plans and elevations; the physician, his patient's history, and perhaps that of his family, and he must know drugs as well – all partial, but helpful, analogues. If logic and the old philosophy of mind have ever helped the teacher, the new genetic conceptions are incalculably more labor-saving in his work.

Let us consider a single representative point. Every one recognizes the importance of interest, how it quickens attention, short-circuits slower processes, and eases the strain of acquisition, and how the teacher who is well informed on the favorite out-of-school amusements and occupations of his pupils, and on the life led by them, and who knows his classes individually and collectively, can shorten the road of learning. To determine and group these interests more fully than ever occurred to Herbart is one of the quests of child-study. One of its goals now near at hand, and which will involve considerable change both in regard to the methods of teaching every subject in the curriculum and the age at which the different subjects can be most profitably taught, is the determination of nascent periods for both mental and muscular work. We shall very soon have curves of the years when many of the chief culture-interests begin to culminate and decline. This will enable us to say definitely which are the premature and which are the belated subjects; *i.e.*, when the matter of school training can be taught without forcing, and without sinning away the sacred hour of maximal receptivity and capacity.

Among the more incidental advantages of the study of children is the new bond which it often establishes between the home and the school. The teacher who no longer regards his pupils as marionettes, to be treated as groups or classes, but as free units, with a bond of sympathy between each of their hearts and his own, desires to know at least something of the home life of each child, and to come to an understanding with parents. Hence, many very different organizations have arisen, from Superintendent Dutton's educational club in Brookline, Massachusetts, to the circles of mothers who meet the teachers weekly after school at Detroit, Michigan. Again, women teachers are increasing, and the method by which they do their best work is to consider individuals and adapt themselves to personal differences. Child study gives sanction to this method, reinforces it, and tends to make the teacher's service of even greater pecuniary value.

Another advantage of interest in child-study is that it helps to break down to some extent the partitions between grades of work, so that the kindergartner and university professor can cooperate in the same task. Best of all, perhaps, it tends to make family life with plenty of children in it more interesting and desirable. Indeed, it is a part of a great culture-movement marked by a new love of the naive, the spontaneous, and the unsophisticated, by a desire to get at what is primitive and original in human nature as it comes fresh from its primal sources. A prevalent theory of art insists that the greatest defect of all art products is a sign of conscious design, and that the acme of aesthetic enjoyment is reached when it is realized that the poem or picture is a product of unconscious creative force more or less irresistible, and,

as with the greatest geniuses, with no thought of effect. Just so in childhood we are coming again to realize that in its fresh thoughts, feelings, and impulses, we have an oracle which declares that the world and human nature are sound to the core.

More yet. There is really no clue by which we can thread our way through all the mazes of culture and the distractions of modern life save by knowing the true nature and needs of childhood and of adolescence. I urge, then, that civilizations, religions, all human institutions, and the schools, are judged truly, or from the standpoint of the philosophy of history, by this one criterion: namely, whether they have offended against these little ones or have helped to bring childhood and adolescence to an ever higher and completer maturity as generations pass by. Childhood is thus our pillar of cloud by day and fire by night. Other oracles may grow dim, but this one will never fail.

Just as at various times in the history of culture man has turned with renewed zest to the old and ultimate humanistic question of what he really is, his place and meaning in the universe, his whence and whither, so now we are asking with unique interest what a child really is. We are slowly awakening to a recognition that children are not like adults, with all the faculties of maturity on a reduced scale, but unique and very different creatures. Their proportions are so different that if head, body, and limbs were each to grow in its original proportion until they reached adult stature, they would be monsters. Adaptable as children are, their ways and thoughts are not as ours; and the adult can no more get back into the child's soul by introspection than he can pass the flaming sword and reclaim his lost Eden. The recollections of our own childhood are the mere flotsam and jetsam of a wrecked stage of development; and the lost points in psychogenesis must be slowly wrought out with toil and patience.

The child's senses, instincts, views of truth, credulity, emotions, and feelings toward objects have very little in common with ours, and indeed are sometimes almost incommensurate; so that we have to explore our way back slowly and tediously, with many an indirect method, if we would solve the great problem that looms before us. The study of a few hundred biographies of great men reveals a large floating body of storiology that is liable to attach itself to the early years of any one who afterwards attains eminence. This has shown that most of the material constituting the records of childhood and even adolescence is nearly as mythic as Niebuhr found the stories of early Roman history to be. This, although perhaps the very least of all the motivations to it, suggests the advisability of a life and health book as one of the inalienable rights of childhood, which children would be the first to claim if they knew enough to make a declaration of their rights.

In some European towns such books are now opened by municipal order, and are kept through required school life. Here all the monthly examinations through all the years are a standing witness of the child's progress and fitness for advancement. The school doctor here records his fears and advice,

the parents perhaps add their comments, and, in rare cases, the anthropologist or special student supplements all this; so that on the whole there could hardly be a more useful document for giving each child a serviceable kind of self-knowledge of his own strong and weak points as an aid in the choice of a vocation.

One of the most important themes, both practically and scientifically, is adolescence, the springtime of life, when the emotional nature undergoes nothing less than a regeneration, when the child normally passes from egoism to altruism, and the great subordination of the individual to the race slowly makes itself manifest. This is the most critical period of life, because civilization depends on whether these uncertain final stages, which most differentiate man from animals, shall be completed or arrested. When the nature of this period is understood, and its needs are met, the most radical of all educational changes will be found necessary in the high school and early collegiate years in ways I have elsewhere indicated. Every race, savage and enlightened, has recognized this stage. Indeed, in a sense, education begins here, and widens upward to the university and downward toward the kindergarten, somewhat in proportion as civilization advances.

Regarded from the standpoint of the highest biologic law this adolescent stage is the golden period of life. The faculties of both body and soul here reach their acme. Just as the ape reaches at adolescence that point in his development which is nearest to man, and becomes farther from him as he matures, so the human race grows younger and more adolescent, because at this stage only the bud of the super-man that is to be appears.

27

Educational Methods

Jane Addams

As democracy modifies our conception of life, it constantly raises the value and function of each member of the community, however humble he may be. We have come to believe that the most "brutish man" has a value in our common life, a function to perform which can be fulfilled by no one else. We are gradually requiring of the educator that he shall free the powers of each man and connect him with the rest of life. We ask this not merely because it is the man's right to be thus connected, but because we have become convinced that the social order cannot afford to get along without his special contribution. Just as we have come to resent all hindrances which keep us from untrammelled comradeship with our fellows, and as we throw down unnatural divisions, not in the spirit of the eighteenth-century reformers, but in the spirit of those to whom social equality has become a necessity for further social development, so we are impatient to use the dynamic power residing in the mass of men, and demand that the educator free that power. We believe that man's moral idealism is the constructive force of progress, as it has always been; but because every human being is a creative agent and a possible generator of fine enthusiasm, we are sceptical of the moral idealism of the few and demand the education of the many, that there may be greater freedom, strength, and subtilty of intercourse and hence an increase of dynamic power. We are not content to include all men in our hopes, but have become conscious that all men are hoping and are part of the same movement of which we are a part.

Many people impelled by these ideas have become impatient with the slow recognition on the part of the educators of their manifest obligation to prepare and nourish the child and the citizen for social relations. The educators should certainly conserve the learning and training necessary for the successful individual and family life, but should add to that a preparation for the enlarged social efforts which our increasing democracy requires. The democratic ideal demands of the school that it shall give the child's own

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Source: Jane Addams, *Democracy and Social Ethics* (New York: Macmillan, 1902), pp. 98–119.

experience a social value; that it shall teach him to direct his own activities and adjust them to those of other people. We are not willing that thousands of industrial workers shall put all of their activity and toil into services from which the community as a whole reaps the benefit, while their mental conceptions and code of morals are narrow and untouched by any uplift which the consciousness of social value might give them.

We are impatient with the schools which lay all stress on reading and writing, suspecting them to rest upon the assumption that the ordinary experience of life is worth little, and that all knowledge and interest must be brought to the children through the medium of books. Such an assumption fails to give the child any clew to the life about him, or any power to usefully or intelligently connect himself with it. . . .

If we admit that in education it is necessary to begin with the experiences which the child already has and to use his spontaneous and social activity, then the city streets begin this education for him in a more natural way than does the school. The South Italian peasant comes from a life of picking olives and oranges, and he easily sends his children out to pick up coal from railroad tracks, or wood from buildings which have been burned down. Unfortunately, this process leads by easy transition to petty thieving. It is easy to go from the coal on the railroad track to the coal and wood which stand before a dealer's shop; from the potatoes which have rolled from a rumbling wagon to the vegetables displayed by the grocer. This is apt to be the record of the boy who responds constantly to the stimulus and temptations of the street, although in the beginning his search for bits of food and fuel was prompted by the best of motives.

The school has to compete with a great deal from the outside in addition to the distractions of the neighborhood. Nothing is more fascinating than that mysterious "down town," whither the boy longs to go to sell papers and black boots, to attend theatres, and, if possible, to stay all night on the pretence of waiting for the early edition of the great dailies. If a boy is once thoroughly caught in these excitements, nothing can save him from over-stimulation and consequent debility and worthlessness; he arrives at maturity with no habits of regular work and with a distaste for its dulness.

On the other hand, there are hundreds of boys of various nationalities who conscientiously remain in school and fulfil all the requirements of the early grades, and at the age of fourteen are found in factories, painstakingly performing their work year after year. These later are the men who form the mass of the population in every industrial neighborhood of every large city; but they carry on the industrial processes year after year without in the least knowing what it is all about. The one fixed habit which the boy carries away with him from the school to the factory is the feeling that his work is merely provisional. In school the next grade was continually held before him as an object of attainment, and it resulted in the conviction that the sole object of present effort is to get ready for something else. This tentative attitude takes the last bit of social stimulus out of his factory work; he pursues it merely as

a necessity, and his very mental attitude destroys his chance for a realization of its social value. As the boy in school contracted the habit of doing his work in certain hours and taking his pleasure in certain other hours, so in the factory he earns his money by ten hours of dull work and spends it in three hours of lurid and unprofitable pleasure in the evening. Both in the school and in the factory, in proportion as his work grows dull and monotonous, his recreation must become more exciting and stimulating. The hopelessness of adding evening classes and social entertainments as a mere frill to a day filled with monotonous and deadening drudgery constantly becomes more apparent to those who are endeavoring to bring a fuller life to the industrial members of the community, and who are looking forward to a time when work shall cease to be senseless drudgery with no self-expression on the part of the worker. It sometimes seems that the public schools should contribute much more than they do to the consummation of this time. If the army of school children who enter the factories every year possessed thoroughly vitalized faculties, they might do much to lighten this incubus of dull factory work which presses so heavily upon so large a number of our fellow-citizens. Has our commercialism been so strong that our schools have become insensibly commercialized, whereas we supposed that our industrial life was receiving the broadening and illuminating effects of the schools? The training of these children, so far as it has been vocational at all, has been in the direction of clerical work. It is possible that the business men, whom we in America so tremendously admire, have really been dictating the curriculum of our public schools, in spite of the conventions of educators and the suggestions of university professors. The business man, of course, has not said, "I will have the public schools train office boys and clerks so that I may have them easily and cheaply," but he has sometimes said, "Teach the children to write legibly and to figure accurately and quickly; to acquire habits of punctuality and order; to be prompt to obey; and you will fit them to make their way in the world as I have made mine." Has the workingman been silent as to what he desires for his children, and allowed the business man to decide for him there, as he has allowed the politician to manage his municipal affairs, or has the workingman so far shared our universal optimism that he has really believed that his children would never need to go into industrial life at all, but that all of his sons would become bankers and merchants?

Certain it is that no sufficient study has been made of the child who enters into industrial life early and stays there permanently, to give him some offset to its monotony and dullness, some historic significance of the part he is taking in the life of the community.

It is at last on behalf of the average workingmen that our increasing democracy impels us to make a new demand upon the educator. As the political expression of democracy has claimed for the workingman the free right of citizenship, so a code of social ethics is now insisting that he shall be a conscious member of society, having some notion of his social and industrial value.

The early ideal of a city that it was a market-place in which to exchange produce, and a mere trading-post for merchants, apparently still survives in our minds and is constantly reflected in our schools. We have either failed to realize that cities have become great centres of production and manufacture in which a huge population is engaged, or we have lacked sufficient presence of mind to adjust ourselves to the change. We admire much more the men who accumulate riches, and who gather to themselves the results of industry, than the men who actually carry forward industrial processes; and, as has been pointed out, our schools still prepare children almost exclusively for commercial and professional life.

Quite as the country boy dreams of leaving the farm for life in town and begins early to imitate the travelling salesman in dress and manner, so the school boy within the town hopes to be an office boy, and later a clerk or salesman, and looks upon work in the factory as the occupation of ignorant and unsuccessful men. The schools do so little really to interest the child in the life of production, or to excite his ambition in the line of industrial occupation, that the ideal of life, almost from the very beginning, becomes not an absorbing interest in one's work and a consciousness of its value and social relation, but a desire for money with which unmeaning purchases may be made and an unmeaning social standing obtained.

The son of a workingman who is successful in commercial life, impresses his family and neighbors quite as does the prominent city man when he comes back to dazzle his native town. The children of the working people learn many useful things in the public schools, but the commercial arithmetic, and many other studies, are founded on the tacit assumption that a boy rises in life by getting away from manual labor, – that every promising boy goes into business or a profession. The children destined for factory life are furnished with what would be most useful under other conditions, quite as the prosperous farmer's wife buys a folding-bed for her huge four-cornered "spare room," because her sister, who has married a city man, is obliged to have a folding-bed in the cramped limits of her flat. Partly because so little is done for him educationally, and partly because he must live narrowly and dress meanly, the life of the average laborer tends to become flat and monotonous, with nothing in his work to feed his mind or hold his interest. Theoretically, we would all admit that the man at the bottom, who performs the meanest and humblest work, so long as the work is necessary, performs a useful function; but we do not live up to our theories, and in addition to his hard and uninteresting work he is covered with a suit of contempt, and unless he falls into illness or trouble, he receives little sympathy or attention. Certainly no serious effort is made to give him a participation in the social and industrial life with which he comes in contact, nor any insight and inspiration regarding it.

Apparently we have not yet recovered manual labor from the deep distrust which centuries of slavery and the feudal system have cast upon it. To get away from menial work, to do obviously little with one's hands,

is still the desirable status. This may readily be seen all along the line. A workingman's family will make every effort and sacrifice that the brightest daughter be sent to the high school and through the normal school, quite as much because a teacher in the family raises the general social standing and sense of family consequence, as that the returns are superior to factory or even office work. "Teacher" in the vocabulary of many children is a synonym for women-folk gentry, and the name is indiscriminately applied to women of certain dress and manner. The same desire for social advancement is expressed by the purchasing of a piano, or the fact that the son is an office boy, and not a factory hand. The overcrowding of the professions by poorly equipped men arises from much the same source, and from the conviction that, "an education" is wasted if a boy goes into a factory or shop. . . .

Quite in line with this commercial ideal are the night schools and institutions of learning most accessible to working people. First among them is the business college which teaches largely the mechanism of type-writing and book-keeping, and lays all stress upon commerce and methods of distribution. Commodities are treated as exports and imports, or solely in regard to their commercial value, and not, of course, in relation to their historic development or the manufacturing processes to which they have been subjected. These schools do not in the least minister to the needs of the actual factory employee, who is in the shop and not in the office. We assume that all men are searching for "puddings and power," to use Carlyle's phrase, and furnish only the schools which help them to those ends.

The business college man, or even the man who goes through an academic course in order to prepare for a profession, comes to look on learning too much as an investment from which he will later reap the benefits in earning money. He does not connect learning with industrial pursuits, nor does he in the least lighten or illuminate those pursuits for those of his friends who have not risen in life. "It is as though nets were laid at the entrance to education, in which those who by some means or other escape from the masses bowed down by labor, are inevitably caught and held from substantial service to their fellows." The academic teaching which is accessible to workingmen through University Extension lectures and classes at settlements, is usually bookish and remote, and concerning subjects completely divorced from their actual experiences. The men come to think of learning as something to be added to the end of a hard day's work, and to be gained at the cost of toilsome mental exertion. There are, of course, exceptions, but many men who persist in attending classes and lectures year after year find themselves possessed of a mass of inert knowledge which nothing in their experience fuses into availability or realization.

Among the many disappointments which the settlement experiment has brought to its promoters, perhaps none is keener than the fact that they have as yet failed to work out methods of education, specialized and adapted to the needs of adult working people in contra-distinction to those employed in schools and colleges, or those used in teaching children. There are many

excellent reasons and explanations for this failure. In the first place, the residents themselves are for the most part imbued with academic methods and ideals, which it is most difficult to modify. To quote from a late settlement report, "The most vaunted educational work in settlements amounts often to the stimulation mentally of a select few who are, in a sense, of the academic type of mind, and who easily and quickly respond to the academic methods employed." These classes may be valuable, but they leave quite untouched the great mass of the factory population, the ordinary workingman of the ordinary workingman's street, whose attitude is best described as that of "acquiescence," who lives through the aimless passage of the years without incentive "to imagine, to design, or to aspire." These men are totally untouched by all the educational and philanthropic machinery which is designed for the young and the helpless who live on the same streets with them. They do not often drink to excess, they regularly give all their wages to their wives, they have a vague pride in their superior children; but they grow prematurely old and stiff in all their muscles, and become more and more taciturn, their entire energies consumed in "holding a job."

Various attempts have been made to break through the inadequate educational facilities supplied by commercialism and scholarship, both of which have followed their own ideals and have failed to look at the situation as it actually presents itself. The most noteworthy attempt has been the movement toward industrial education, the agitation for which has been ably seconded by manufacturers of a practical type, who have from time to time founded and endowed technical schools, designed for workingmen's sons. The early schools of this type inevitably reflected the ideal of the self-made man. They succeeded in transferring a few skilled workers into the upper class of trained engineers, and a few less skilled workers into the class of trained mechanics, but did not aim to educate the many who are doomed to the unskilled work which the permanent specialization of the division of labor demands.

The Peter Coopers and other good men honestly believed that if intelligence could be added to industry, each workingman who faithfully attended these schools could walk into increased skill and wages, and in time even become an employer himself. Such schools are useful beyond doubt; but so far as educating workingmen is concerned or in any measure satisfying the democratic ideal, they plainly beg the question.

Almost every large city has two or three polytechnic institutions founded by rich men, anxious to help "poor boys." These have been captured by conventional educators for the purpose of fitting young men for the colleges and universities. They have compromised by merely adding to the usual academic course manual work, applied mathematics, mechanical drawing and engineering. Two schools in Chicago, plainly founded for the sons of workingmen, afford an illustration of this tendency and result. On the other hand, so far as schools of this type have been captured by commercialism,

they turn out trained engineers, professional chemists, and electricians. They are polytechnics of a high order, but do not even pretend to admit the workingman with his meagre intellectual equipment. They graduate machine builders, but not educated machine tenders. Even the textile schools are largely seized by young men who expect to be superintendents of factories, designers, or manufacturers themselves, and the textile worker who actually "holds the thread" is seldom seen in them; indeed, in one of the largest schools women are not allowed, in spite of the fact that spinning and weaving have traditionally been woman's work, and that thousands of women are at present employed in the textile mills.

It is much easier to go over the old paths of education with "manual training" thrown in, as it were; it is much simpler to appeal to the old ambitions of "getting on in life," or of "preparing for a profession," or "for a commercial career," than to work out new methods on democratic lines. These schools gradually drop back into the conventional courses, modified in some slight degree, while the adaptation to workingmen's needs is never made, nor, indeed, vigorously attempted. In the meantime, the manufacturers continually protest that engineers, especially trained for devising machines, are not satisfactory. Three generations of workers have invented, but we are told that invention no longer goes on in the workshop, even when it is artificially stimulated by the offer of prizes, and that the inventions of the last quarter of the nineteenth century have by no means fulfilled the promise of the earlier three-quarters.

Every foreman in a large factory has had experience with two classes of men: first with those who become rigid and tolerate no change in their work, partly because they make more money "working by the piece," when they stick to that work which they have learned to do rapidly, and partly because the entire muscular and nervous system has become by daily use adapted to particular motions and resents change. Secondly, there are the men who float in and out of the factory, in a constantly changing stream. They "quit work" for the slightest reason or none at all, and never become skilled at anything. Some of them are men of low intelligence, but many of them are merely too nervous and restless, too impatient, too easily "driven to drink," to be of any use in a modern factory. They are the men for whom the demanded adaptation is impossible.

The individual from whom the industrial order demands ever larger drafts of time and energy, should be nourished and enriched from social sources, in proportion as he is drained. He, more than other men, needs the conception of historic continuity in order to reveal to him the purpose and utility of his work, and he can only be stimulated and dignified as he obtains a conception of his proper relation to society. Scholarship is evidently unable to do this for him; for, unfortunately, the same tendency to division of labor has also produced over-specialization in scholarship, with the sad result that when the scholar attempts to minister to a worker, he gives him the result of more

specialization rather than an offset from it. He cannot bring healing and solace because he himself is suffering from the same disease. There is indeed a deplorable lack of perception and adaptation on the part of educators all along the line.

It will certainly be embarrassing to have our age written down triumphant in the matter of inventions, in that our factories were filled with intricate machines, the result of advancing mathematical and mechanical knowledge in relation to manufacturing processes, but defeated in that it lost its head over the achievement and forgot the men. The accusation would stand, that the age failed to perform a like service in the extension of history and art to the factory employees who ran the machines; that the machine tenders, heavy and almost dehumanized by monotonous toil, walked about in the same streets with us, and sat in the same cars; but that we were absolutely indifferent and made no genuine effort to supply to them the artist's perception or student's insight, which alone could fuse them into social consciousness. It would further stand that the scholars among us continued with yet more research, that the educators were concerned only with the young and the promising, and the philanthropists with the criminals and helpless.

There is a pitiful failure to recognize the situation in which the majority of working people are placed, a tendency to ignore their real experiences and needs, and, most stupid of all, we leave quite untouched affections and memories which would afford a tremendous dynamic if they were utilized.

We constantly hear it said in educational circles, that a child learns only by "doing," and that education must proceed "through the eyes and hands to the brain"; and yet for the vast number of people all around us who do not need to have activities artificially provided, and who use their hands and eyes all the time, we do not seem able to reverse the process. We quote the dictum, "What is learned in the schoolroom must be applied in the workshop," and yet the skill and handicraft constantly used in the workshop have no relevance or meaning given to them by the school; and when we do try to help the workingman in an educational way, we completely ignore his everyday occupation. Yet the task is merely one of adaptation. It is to take actual conditions and to make them the basis for a large and generous method of education, to perform a difficult idealization doubtless, but not an impossible one.

We apparently believe that the workingman has no chance to realize life through his vocation. We easily recognize the historic association in regard to ancient buildings. We say that "generation after generation have stamped their mark upon them, have recorded their thoughts in them, until they have become the property of all." And yet this is even more true of the instruments of labor, which have constantly been held in human hands. A machine really represents the "seasoned life of man" preserved and treasured up within itself, quite as much as an ancient building does. At present, workmen are brought in contact with the machinery with which they work as abruptly

as if the present set of industrial implements had been newly created. They handle the machinery day by day, without any notion of its gradual evolution and growth. Few of the men who perform the mechanical work in the great factories have any comprehension of the fact that the inventions upon which the factory depends, the instruments which they use, have been slowly worked out, each generation using the gifts of the last and transmitting the inheritance until it has become a social possession. This can only be understood by a man who has obtained some idea of social progress. We are still childishly pleased when we see the further subdivision of labor going on, because the quantity of the output is increased thereby, and we apparently are unable to take our attention away from the product long enough to really focus it upon the producer. Theoretically, "the division of labor" makes men more interdependent and human by drawing them together into a unity of purpose. "If a number of people decide to build a road, and one digs, and one brings stones, and another breaks them, they are quite inevitably united by their interest in the road. But this naturally presupposes that they know where the road is going to, that they have some curiosity and interest about it, and perhaps a chance to travel upon it." If the division of labor robs them of interest in any part of it, the mere mechanical fact of interdependence amounts to nothing.

The man in the factory, as well as the man with the hoe, has a grievance beyond being overworked and disinherited, in that he does not know what it is all about. We may well regret the passing of the time when the variety of work performed in the unspecialized workshop naturally stimulated the intelligence of the workingmen and brought them into contact both with the raw material and the finished product. But the problem of education, as any advanced educator will tell us, is to supply the essentials of experience by a short cut, as it were. If the shop constantly tends to make the workman a specialist, then the problem of the educator in regard to him is quite clear: it is to give him what may be an offset from the over-specialization of his daily work, to supply him with general information and to insist that he shall be a cultivated member of society with a consciousness of his industrial and social value.

As sad a sight as an old hand-loom worker in a factory attempting to make his clumsy machine compete with the flying shuttles about him, is a workingman equipped with knowledge so meagre that he can get no meaning into his life nor sequence between his acts and the far-off results.

Manufacturers, as a whole, however, when they attempt educational institutions in connection with their factories, are prone to follow conventional lines, and to exhibit the weakness of imitation. We find, indeed, that the middle-class educator constantly makes the mistakes of the middle-class moralist when he attempts to aid working people. The latter has constantly and traditionally urged upon the workingman the specialized virtues of thrift, industry, and sobriety – all virtues pertaining to the individual. When each

man had his own shop, it was perhaps wise to lay almost exclusive stress upon the industrial virtues of diligence and thrift; but as industry has become more highly organized, life becomes incredibly complex and interdependent. If a workingman is to have a conception of his value at all, he must see industry in its unity and entirety; he must have a conception that will include not only himself and his immediate family and community, but the industrial organization as a whole. It is doubtless true that dexterity of hand becomes less and less imperative as the invention of machinery and subdivision of labor proceeds; but it becomes all the more necessary, if the workman is to save his life at all, that he should get a sense of his individual relation to the system. Feeding a machine with a material of which he has no knowledge, producing a product, totally unrelated to the rest of his life, without in the least knowing what becomes of it, or its connection with the community, is, of course, unquestionably deadening to his intellectual and moral life. To make the moral connection it would be necessary to give him a social consciousness of the value of his work, and at least a sense of participation and a certain joy in its ultimate use; to make the intellectual connection it would be essential to create in him some historic conception of the development of industry and the relation of his individual work to it.

Workingmen themselves have made attempts in both directions, which it would be well for moralists and educators to study. It is a striking fact that when workingmen formulate their own moral code, and try to inspire and encourage each other, it is always a large and general doctrine which they preach. They were the first class of men to organize an international association, and the constant talk at a modern labor meeting is of solidarity and of the identity of the interests of workingmen the world over. It is difficult to secure a successful organization of men into the simplest trades organization without an appeal to the most abstract principles of justice and brotherhood. As they have formulated their own morals by laying the greatest stress upon the largest morality, so if they could found their own schools, it is doubtful whether they would be of the mechanic institute type. Courses of study arranged by a group of workingmen are most naive in their breadth and generality. They will select the history of the world in preference to that of any period or nation. The "wonders of science" or "the story of evolution" will attract workingmen to a lecture when zoology or chemistry will drive them away. The "outlines of literature" or "the best in literature" will draw an audience when a lecturer in English poetry will be solitary. This results partly from a wholesome desire to have general knowledge before special knowledge, and is partly a rebound from the specialization of labor to which the workingman is subjected. When he is free from work and can direct his own mind, he tends to roam, to dwell upon large themes. Much the same tendency is found in programmes of study arranged by Woman's Clubs in country places. The untrained mind, wearied with meaningless detail, when it gets an opportunity to make its demand heard, asks for general philosophy and background.

In a certain sense commercialism itself, at least in its larger aspect, tends to educate the workingman better than organized education does. Its interests are certainly world-wide and democratic, while it is absolutely undiscriminating as to country and creed, coming into contact with all climes and races. If this aspect of commercialism were utilized, it would in a measure counterbalance the tendency which results from the subdivision of labor.

The most noteworthy attempt to utilize this democracy of commerce in relation to manufacturing is found at Dayton, Ohio, in the yearly gatherings held in a large factory there. Once a year the entire force is gathered together to hear the returns of the business, not so much in respect to the profits, as in regard to its extension. At these meetings, the travelling salesmen from various parts of the world – from Constantinople, from Berlin, from Rome, from Hong Kong – report upon the sales they have made, and the methods of advertisement and promotion adapted to the various countries.

Stereopticon lectures are given upon each new country as soon as it has been successfully invaded by the product of the factory. The foremen in the various departments of the factory give accounts of the increased efficiency and the larger output over former years. Any man who has made an invention in connection with the machinery of the factory, at this time publicly receives a prize, and suggestions are approved that tend to increase the comfort and social facilities of the employees. At least for the moment there is a complete esprit de corps, and the youngest and least skilled employee sees himself in connection with the interests of the firm, and the spread of an invention. It is a crude example of what might be done in the way of giving a large framework of meaning to factory labor, and of putting it into a sentient background, at least on the commercial side.

It is easy to indict the educator, to say that he has gotten entangled in his own material, and has fallen a victim to his own methods; but granting this, what has the artist done about it – he who is supposed to have a more intimate insight into the needs of his contemporaries, and to minister to them as none other can?

It is quite true that a few writers are insisting that the growing desire for labor, on the part of many people of leisure, has its counterpart in the increasing desire for general knowledge on the part of many laborers. They point to the fact that the same duality of conscience which seems to stifle the noblest effort in the individual because his intellectual conception and his achievement are so difficult to bring together, is found on a large scale in society itself, when we have the separation of the people who think from those who work. And yet, since Ruskin ceased, no one has really formulated this in a convincing form. And even Ruskin's famous dictum, that labor without art brutalizes, has always been interpreted as if art could only be a sense of beauty or joy in one's own work, and not a sense of companionship with all other workers. The situation demands the consciousness of participation and well-being which comes to the individual when he is able to see himself "in connection and cooperation with the whole"; it needs the solace of collective art inherent in collective labor.

As the poet bathes the outer world for us in the hues of human feeling, so the workman needs some one to bathe his surroundings with a human significance – some one who shall teach him to find that which will give a potency to his life. His education, however simple, should tend to make him widely at home in the world, and to give him a sense of simplicity and peace in the midst of the triviality and noise to which he is constantly subjected. He, like other men, can learn to be content to see but a part, although it must be a part of something.

It is because of a lack of democracy that we do not really incorporate him in the hopes and advantages of society, and give him the place which is his by simple right. We have learned to say that the good must be extended to all of society before it can be held secure by any one person or any one class; but we have not yet learned to add to that statement, that unless all men and all classes contribute to a good, we cannot even be sure that it is worth having. In spite of many attempts we do not really act upon either statement.

28

On Education and Society

Émile Durkheim

Educational transformations are always the result and the symptom of the social transformations in terms of which they are to be explained. For a people to feel at any given moment the need to change its educational system, it is necessary that new ideas and needs have emerged for which the old system is no longer adequate. But these needs and ideas do not arise spontaneously; if they suddenly come to the forefront of human consciousness after having been ignored for centuries, it is necessarily the case that in the intervening period there has been a change and that it is this change of which they are an expression. Thus, in order to understand the educational achievement of the sixteenth century, we need as a preliminary to know in a general way what constituted the great social movement that historians call the Renaissance and of which a new educational theory was but one manifestation.

The essence of the Renaissance has often been identified with a return to the spirit of classical times; and indeed this is precisely the meaning of the word normally used to designate this period of European history. The sixteenth century is supposed to have been a period when man, abandoning the gloomy ideals of the Middle Ages, reverted to the gayer and more self-confident view of life which prevailed in the ancient pagan world. As to the cause of this change of direction, it allegedly consisted in the rediscovery of classical literature, the principal masterpieces of which were rescued during this period from the oblivion in which they had languished for centuries. On this view it was the discovery of the great works of classical literature that brought about this new change of outlook in the western European mind. But to speak of the Renaissance in this way is only to point in the most superficial way to its façade. If it were indeed true that the sixteenth century simply took up the classical tradition at the point it had reached when the Dark Ages

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arrived and temporarily blotted it out, the Renaissance would emerge as a movement of moral and intellectual reaction that would be hard to account for. We would have to assume that humanity had strayed from its natural path for fifteen centuries, since it had to retrace its steps back over a period of such length in order to embark upon a whole new stage in its career. Certainly progress does not proceed in a straight line; it makes turnings and detours; advances are followed by recessions; but that such an aberration should be prolonged over a period of fifteen hundred years is historically incredible. It is true that this view of the Renaissance accords with the way in which the eighteenth-century writers spoke of it. But just because they felt a kind of admiration for the simple life of primitive societies, are we to say that their social philosophy was an attempt to restore prehistoric civilization? Because the men of the Revolution thought that they were imitating the actions of the ancient Romans, are we to view the society that resulted from the Revolution as an imitation of the ancient city? People involved in action are the least well placed to see the causes that underlie their actions, and the way in which they represent to themselves the social movement of which they are a part should always be regarded as suspect and should by no means be thought of as having any special claim to credibility.

Besides, it is simply not true that classical literature was unknown during the centuries we have just been considering, that it was only discovered towards the beginning of the sixteenth century, and that it was this revelation that suddenly expanded the intellectual horizons of Europe. The fact is that there was not a single period during the whole of the Middle Ages when these literary masterpieces were not known; in every generation we find a few people sufficiently intelligent and sensitive to be able to appreciate their worth. Abélard, the hero of dialectic, was at the same time a literary scholar; Virgil, Seneca, Cicero, and Ovid were just as familiar to him as were Boethius and Augustine. During the twelfth century there was a famous school at Chartres which, inspired by its founder, Bernard de Chartres, offered a classical education similar to what would later be offered by the Jesuits. One could multiply examples of this type. It is true that these attempts to introduce classical literature into education remained isolated cases; they never succeeded in capturing the imagination of the Scholastics, who cast them back into obscurity. But they are nonetheless real, and they are sufficient to prove that if classical literature was not appreciated in the Middle Ages, it it played no part in education, this was not because people did not know of its existence. In short, the Middle Ages knew about all the main aspects of classical civilization, but it only retained what it regarded as important, what answered to its own needs. Its entire attention was caught by logic, and this eclipsed everything else. Thus, if everything changed in the sixteenth century, if suddenly Greek and Roman art and literature were recognized as being of incomparable educational value, this clearly must have been because at that moment in history, as a consequence of a change that had taken place in the public mind, logic lost its former prestige – while by contrast an urgent

need was felt for the first time for a kind of culture that would be more refined, more elegant or literary. People did not acquire this taste because they had just discovered classical antiquity; rather, they demanded from the antiquity they already knew the means of satisfying the new taste they had just acquired. What we must seek, therefore, is an account of this change of direction in the intellectual and moral outlook of the European peoples, if we wish to understand the nature of the Renaissance insofar as it affected educational thought no less than scientific and literary thought. A people only modifies its mental outlook to such an enormous extent when very fundamental features of social life have themselves been modified. We can therefore be certain in advance that the Renaissance derives, not, I repeat, from the fortuitous fact that certain classical works were exhumed at this time, but rather from profound changes in the organization of European societies. I cannot, of course, attempt here to paint a complete and detailed picture of these transformations, but I should like at least to point out the most important of them so as to be able to relate the educational movement we shall be exploring to its social roots.

In the first place, there was a group of interrelated changes in the economic sphere. People had finally got away from the paltry life-style of the Middle Ages, when the general insecurity of relations paralyzed the spirit of enterprise, when the limited number of markets stifled great ambition, when only the extreme simplicity of their tastes and needs enabled men to live in harmony with their environment. Gradually order had been established; better government and more efficient administration had rallied people's confidence. Towns had proliferated and become more populous. Most important of all, the discovery of America and the trade route via the Indies had galvanized economic activity by opening up new worlds in which it could operate. Consequently, the general welfare had been increased; vast fortunes had been amassed; and the acquisition of wealth stimulated and developed a taste for the easy, elegant life of luxury. . . .

However, if this transformation had been limited to the world of the aristocracy, it probably would not have had such extensive social consequences. But one of the effects of accrued wealth was to produce at the same time a narrowing of the gaps between social classes. Up till then the bourgeoisie had not even dared raise its eyes to look at the aristocracy across what it felt to be a great fixed gulf. And it found it natural to lead quite a different existence. But now that the bourgeoisie had become richer and consequently more powerful, it also became more ambitious and sought to narrow the gap. Its expectations had increased with its resources, making the life it had led up till then appear intolerable. It was no longer afraid to cast its gaze upwards and it wanted as well to live the life of the nobles, to imitate their style, their manners, their luxury. As one writer puts it: "Pride was reaching ever higher peaks in every section of the community. The bourgeoisie in the towns have started wanting to dress in the same way as the aristocracy . . . and the people from the villages in the same way as the bourgeoisie in the towns." According to another author, the bourgeois ladies grew bored with

their life of obscurity; they now wanted to copy the great ladies. "One can scarcely distinguish any longer between a noble lady and a plebeian . . . one sees women who are worse than plebeian dressing in flowing robes embroidered in gold and silver . . . their fingers are loaded with emeralds and other precious stones . . . in the old days the practice of kissing a lady's hand in greeting was restricted to aristocrats, and noble ladies did not offer their hand to the first comer, let alone to anyone at all. Today men smelling of leather rush to kiss the hand of a woman whose escutcheon is exclusively aristocratic. Patrician ladies marry plebeian men, plebeian women marry patrician men; thus we are breeding hybrid creatures." It is easy to guess that so considerable a change in the way life was understood would inevitably be accompanied by a change in the way education was understood, and that instruction designed to produce a good bachelor of arts, versed in all the secrets of syllogism and argument, would be quite unsuited to the enterprise of producing an elegant and fluent nobleman able to hold his own in a salon and possessing all the social graces.

However, in addition to this transformation, there was another one, no less important, which took place in the world of ideas.

By the sixteenth century, the great nation states of Europe had been in large measure established. Whereas in the Middle Ages there had been but one Europe, one Christendom, which was united and homogeneous, there now existed great individual collectivities with their own intellectual and moral characters. England found its identity and its unity with the Tudors, Spain with Ferdinand of Castile and his successors, Germany with the Hapsburgs (albeit more vaguely), and France did so before any of the others under the Capetians. The old unity of Christendom had thus been definitively shattered. However much people continued to profess respect for the fundamental doctrines, which still appeared highly abstract, each of the groups which had thus been formed had its own special mode of thought and feeling, its own national temperament whose particular emphasis tended to affect the systems of belief that had been accepted until that time by the vast majority of the faithful. And since the great moral figures that had arisen could only develop their individual natures, since they could not organize their thoughts and beliefs according to their own lights unless they were granted the right to deviate from accepted beliefs, they claimed this right and in claiming it they proclaimed it; that is to say they claimed the rights of schism and of free inquiry – albeit only to a limited extent, and not as absolute rights, since such a thing would have been inconceivable at the time. It is here that we find the root cause of the Reformation, that other aspect of the Renaissance that was the natural result of the movement towards individualization and differentiation taking place at that time within the homogeneous mass of Europe. In one sense, of course, Scholasticism had paved the way for it. Scholasticism had taught reason to be more self-confident by confronting it with monumental questions and equipping it with a rigorous logical training so that it might make fresh conquests. However, between the audacities of Scholasticism, especially at the end of the fifteenth century, which were always relatively

moderate – between the more or less bold claims made by a few thinkers whose voices were scarcely heard outside the schools, and the sudden explosion that was the Reformation and that shook the whole of Europe, there is clearly a radical break, which bears witness to the fact that new forces had come into play.

Here we have a new causal factor, which was to bring about a change in the theory and practice of education. The Christian faith had played too large a part in medieval education for the educational system not to be affected by the upheavals that faith was undergoing. Moreover, there were other ways in which the economic factor exercised a parallel influence. It is clear, in fact, that the aesthetic ideal of the Middle Ages was quite unsuited for pupils who had acquired a taste for luxury and the life of leisure. And since this aesthetic ideal was the ideal of Christianity, Christianity itself was affected by the same phenomenon. For it was not possible that the aversion felt henceforth for the old view of life should not be extended to the whole system of beliefs upon which that view of life was grounded. If, as we have argued, Christianity was accepted so readily by the barbarians, this was precisely because of its starkness, its indifference towards the products of civilization, its' disdain for the joys of existence. But the same reasons that accounted for its triumph then were now to diminish its authority over people's minds. Societies that had learned to savor the joy of living could no longer put up with a doctrine that rendered sacrifice, self-denial, abstinence, and suffering in general the supreme objects of desire.

Individuals, sensing that this system ran counter to their deepest feelings and opposed the satisfaction of needs they regarded as quite natural, could only be disposed to cast doubt upon it, or at least to cast doubt upon the way it had been interpreted up to that time; for it is impossible to accept uncritically, unreservedly, and without sufficient reason a doctrine that in certain respects seems to go against nature. Without renouncing it completely, people came to feel the need to revise it, to interpret it afresh, in such a way that it would harmonize with the aspirations of the age. Now, any such revision and reinterpretation presuppose the right to revise, to inspect, and to interpret, in some sense the right to examine, which, however one looks at it, implies a diminution of faith. . . .

Now, it is clear that there is nothing in Scholasticism that could have satisfied these new tastes: on the contrary, it was bound to be hostile to them. Since it attached no importance to form, it did not hesitate to twist language savagely in order to satisfy all the needs of thought, without regard to considerations of purity or harmony. As a result of the very great place it accorded to debate, it developed a taste not for ideas that were delicate, subtle, measured, but rather for opinions that were dogmatic and clear-cut and whose features stood out in such a way that conflicting opinions could be clearly contrasted. Moreover, the violent arguments that were born of these contrasts could only encourage a coarseness in manners comparable

to what had been upheld for so long by the noble knights in their tourneys and similar practices. The student of the Middle Ages was primarily concerned with crushing his opponent beneath the weight of his arguments and did not care in the least whether his presentation was attractive. His unkempt appearance and his rustic deportment and manners were expressions of this same state of mind.

Here we have the explanation of why the men of the new generation were quite literally horrified by Scholasticism and its methods. The extreme virulence of their polemics seems at first sight to be out of place in a purely educational quarrel. But the fact is that the issue was really more wide-ranging. The sixteenth century did not accuse Scholasticism simply of having engaged in certain debatable or regrettable academic practices but rather of having constituted a school of barbarousness and coarseness. Hence the frequency with which the words *barbarus, stolulitas, rusticitas* recur in the writings of Erasmus. To these refined minds a Scholastic is quite literally a barbarian (remember the title of Erasmus's book *Antibarbarus*), who speaks a language scarcely human, crude-sounding, formally inelegant; who delights only in arguments, in deafening yells, in verbal and other battles; who is ignorant, in sum, of all the benefits of civilization, of everything that contributes to the charm of life. We can readily conceive of the feeling such an educational system would be capable of arousing in men whose aim was to render humanity more tender, more elegant, more cultivated.

The only way to succeed in ridding the human intellect of its coarseness, to polish and refine it, was to introduce it to and make it intimate with an elegant and refined civilization, so that it might become imbued with its spirit. Now, the only civilization that could satisfy this condition at that time was that of the classical peoples as it had been expressed and preserved in the works of their great writers, poets, and orators. It was thus quite natural that these should be seen as providing the schoolteachers needed by the young. "What then," says Erasmus, "what then could have guided these coarse men of the Stone Age towards a more human life, towards being more gentle of character and more civilized in morals? Was it not literature? It is literature that molds the mind, that mollifies passions, that checks the untamed outbursts of natural temperament." For this purpose there existed no other established and developed literatures apart from those of Rome and Greece.

With this in view, the moral milieu in which the child was to be molded had to be made up of all the extant elements of these literatures. Hence the enormous attention accorded by the public at this time to the masterpieces of Greco-Roman civilization. If people esteemed and admired them, if they sought to imitate them, this is not because they were exhumed at this moment in history and, by being discovered, suddenly inculcated in people a taste for literature. Quite the reverse: it was because a taste for literature, a taste for a new kind of civilization, had just been acquired that they suddenly became objects of enthusiastic veneration; for they appeared, and quite rightly so,

as the only means available of satisfying this new need. If this vast body of literature had hitherto been neglected, this was not because nothing was known of it (we have already seen that the major works were known); rather, its virtues were not appreciated because they did not meet any contemporary need. If, by contrast, they were then regarded in the eyes of public opinion, or at least of a certain section of it, as being of incomparable value, this was because a new attitude of mind was in the process of developing and could only be fully realized in the school of the classics. And one may even wonder whether the greater frequency of the finds and exhumations that occurred at this period was not a result of the fact that since, henceforth, the value of these discoveries was fully appreciated people devoted more of their ingenuity to making them. To find, one must seek, and one only seeks in earnest when one attaches importance to what one hopes to find.

Thus the educational ideas of the humanists' were not the result of simple accidents. They derived, rather, from a fact whose influence on the moral history of our country it is difficult to exaggerate: I refer to the establishment of polite society. If France did indeed become from the sixteenth century onwards a center of literary life and intellectual activity, this was because, at this same period, there had developed among us a select society, a society of intellectually cultivated people to whom our writers addressed themselves. It was the ideas and the tastes of this society that they communicated; it was for this society that they wrote and for it that they thought. It was here in this particular environment that the driving force of our civilization from the sixteenth century to the middle of the eighteenth century arose. And the object of education as Erasmus conceived of it was to prepare man for this special and restricted society.

Here too we can see the essential character and at the same time the radical flaw of this educational theory, it is the fact that it is essentially aristocratic in nature. The kind of society that it seeks to fashion is always centered around a court, and its members are always drawn from the ranks of the aristocracy or at least from the leisured classes. And it was indeed here and here alone that that fine flowering of elegance and culture could take place, the nurturing and development of which were regarded as more important than anything else. Neither Erasmus nor Vivès had any awareness that beyond this small world, which for all its brilliance was very limited, there were vast masses who should not have been neglected and for whom education could have brought about higher intellectual and moral standards and an improved material condition.

When such a thought did occur to them it disappeared again very quickly without their thinking it necessary to examine it at length. Since he realizes that this expensive education is not suitable for everyone, Erasmus wonders what the poor will do; his answer to this objection is utterly simple. "You ask," he says, "what the poor will be able to do. How will those who can scarcely feed their children be able to give them over a sustained period of time the right kind of education? To this I can only reply by quoting the

words of the comic writer: 'You can't ask that what we are capable of achieving should be as great as what we would like to achieve.' We are expounding the best way of bringing up a child, we cannot produce the means of realizing this ideal." He restricts himself to expressing the wish that the rich will come to the help of those who are well-endowed intellectually but who would be prevented by poverty from developing their aptitudes. But he seems not to realize that even if this education were made available to everybody the difficulty would not be resolved, for this generalized education would not meet the needs of the majority. Indeed, for the majority the supreme need is survival, and what is needed in order to survive is not the art of subtle speech, it is the art of sound thinking, so that one knows how to act. In order to struggle effectively in the world of persons and the world of things more substantial weapons are needed than those glittering decorations with which the humanist educationalists were concerned to adorn the mind to the exclusion of anything else.

Think now how much Scholasticism, for all its abstractness, was imbued with a more practical, more realistic, and more social spirit. The fact is that dialectic answered real needs. Intellectual conflict, competition between ideas, constitutes a genuinely important part of life. Moreover, the strength and virility of thought which were acquired as a result of such arduous mental gymnastics could be used in the service of socially useful ends. Thus we must beware of thinking that the medieval schools served only to produce dreamers, seekers after quintessences, and useless pettifogging quibblers. The truth is quite the opposite. It was there that the statesmen, the ecclesiastical dignitaries, and the administrators of the day were brought up. This training, which has been so denigrated, created men of action. It was the education recommended by Erasmus that forms a totally inadequate preparation for life. In it rhetoric supplants dialectic. Now, if rhetoric had good reason for featuring in the education of the classical world, where the practice of eloquence constituted not only a career but the most important career, this was by no means the case in the sixteenth century, when it played only a very small part in the serious business of life. A theory of education that made rhetoric the principal academic discipline could thus only develop qualities related to the luxuries of existence and not at all to its necessities. . . .

In order to know what became of the educational theories of the Renaissance when they were translated into practice, it would thus seem that we have only to investigate how the University understood them and applied them. But what makes such a procedure impossible, what makes the whole question more complicated, is the great change that took place at this very moment in our academic organization. Up till that time the University had a complete monopoly on and sole responsibility for education, and consequently the future of any educational reforms was dependent upon the University and upon the University alone. However, towards the middle of the sixteenth century, over and against the University corporation there was established a new teaching corporation, which was to break the University's

monopoly and which was even to achieve with quite remarkable rapidity a kind of hegemony in academic life. This was the corporation of the Jesuits.

The Jesuit order arose from the need felt by the Catholic Church to check the increasingly threatening progress of Protestantism. With extraordinary speed the doctrines of Luther and Calvin had won over England, almost the whole of Germany, Switzerland, the Low Countries, Sweden, and considerable part of France. In spite of all the rigorous measures taken, the Church felt itself impotent and began to fear that its dominion in the world would collapse completely. It was then that Ignatius Loyola had the idea of raising a wholly new kind of religious militia the better to combat, and if possible to crush, heresy. He realized that the days were over when people's souls could be governed from the depths of a cloister. Now that people, carried by their own momentum, were tending to elude the Church, it was essential that the Church move closer to them so as to be able to influence them. Now that particular personalities were beginning to stand out from the homogeneous moral and intellectual mass that had been the rule in preceding centuries, it was essential for the Church to be close to individuals, to accommodate its influence over them to intellectual and temperamental diversities. In short, the vast monastic masses familiar to the Middle Ages, which, stationary at their post, had restricted themselves to repulsing such attacks as occurred, without, however, knowing how to take the offensive themselves, had to be replaced. An army of light troops would be established that would be in constant contact with the enemy and consequently well-informed about all his movements, but at the same time sufficiently alert and mobile to be able to go at the slightest signal wherever there was danger, and yet sufficiently flexible to be able to vary its tactics in accordance with the diversity of people and circumstances; its troops would do all this while always and everywhere pursuing the same goal and cooperating in the same grand design. This army was the Company of Jesus.

What was distinctive about it was that it was able to contain within itself two characteristics, which the Middle Ages had adjudged irreconcilable and contradictory. On the one hand, the Jesuits belong to a religious order in the same way as the Dominicans or the Franciscans; they have a head, they are all subject to one and the same rule, to a communal discipline; indeed passive obedience and unity of thought and action have never been carried to such an extreme degree in any militia whether secular or religious. The Jesuit is thus a regular priest. But, on the other hand, he simultaneously possesses all the characteristics of the secular priest; he wears his habit; he fulfills his functions, he preaches, he hears confessions, he catechizes; he does not live in the shadow of a monastery, he rather mingles in the life of the world. For him duty consists not in the mortification of the flesh, in fasting, in abstinence, but in action, in the realization of the goal of the Society. "Let us leave the religious orders," Ignatius Loyola used to say, "to outdo us in fasts, in watches, in the austerity of the régime and habit that, out of piety, they impose

upon themselves." "I believe that it is more valuable, for the glory of Our Lord, to preserve and to fortify the stomach and the other natural faculties rather than enfeebling them . . . you should not assault your own physical nature, because if you exhaust it your intellectual nature will no longer be able to act with the same energy."

Not only must the Jesuit mingle with the world, he must also open himself up to the ideas that are dominant within it. The better to guide his age he must speak its language, he must assimilate its spirit. Ignatius Loyola sensed that a profound change had taken place in manners and that there was no going back on this, that a taste for well-being, for a less harsh, easier, sunnier existence had been acquired that could not conceivably be stifled or fobbed off; that man had developed a greater degree of pity for his own sufferings and for those of his fellowmen, that he was more sparing of pain, and consequently that the old ideal of absolute renunciation was finished. To prevent the faithful from drifting away from religion the Jesuits devoted their ingenuity to divesting religion of its former austerity; they made it pleasant and devised all kinds of accommodating arrangements to make it easy to observe. It is true that in order to remain faithful to the mission they had assigned themselves, to avoid seeming to encourage the innovators against whom they were struggling by their own example, they had at the same time to stick to the letter of immutable dogma. It is well known how they extricated themselves from this difficulty and were able to reconcile these conflicting demands thanks to their casuistry, whose excessive flexibility and over-ingenious refinements have frequently been pointed out. While maintaining in their sacred form the traditional prescriptions of Roman Catholicism, they were still able to place these within the scope not only of human weakness in general – there is no religion that has ever managed to escape this necessity – but of the elegant frivolousness of the leisured classes of the sixteenth century in particular; it was these leisured classes that it was so important to keep free from heresy and to preserve in the faith. And this is how, while they became essentially men of the past, defenders of the Catholic tradition, the Jesuits were able to exhibit towards the ideas, the tastes, and even the defects of the time an attitude of indulgence for which they have often, and not without reason, been reproached. They thus had a dual identity as conservatives, even as reactionaries, on the one hand, and as liberals on the other: a complex policy the nature and origins of which we needed to show here, for we shall encounter it again in the foundations of their educational theory.

But they very quickly came to realize that in order to achieve their end it was not enough to preach, to hear confession, to catechize: the really important instrument in the struggle for mastery of the human soul was the education of the young. Thus they resolved to seize hold of it. One fact in particular made them acutely aware of the urgent need for this: one would have had to be blind to all the evidence not to see that the new methods talking root in the schools could only have the effect of opening up the road to heresy.

Indeed, the greatest minds of the time, the most illustrious of the humanists, had openly been converted to the new religion; this was the case with Dolet, with Ramus, with Mathurin Cordier, with the majority of the teachers in the Collège de France, recently founded by François I. Thus humanism by its very nature constituted a threat to the faith. And indeed it is clear that an inordinate taste for paganism was bound to cause people's minds to dwell in a moral environment with absolutely nothing Christian about it. Accordingly, if the evil was to be attacked at its source, it would be necessary, instead of abandoning the humanist movement to its own devices, to gain control of it and to direct it. . . .

The aim of the Jesuits thus had nothing to do with getting the pupil acquainted with and able to understand classical civilizations; it was exclusively concerned with teaching them to speak and write in Greek and Latin. This explains the importance attributed to written assignments and the nature of these assignments. This is why in the grammar classes prose composition prevailed and was far more important than translation from Latin, which was scarcely practiced at all. This is why stylistic exercises were so numerous and so varied. This attitude even influenced the way the expositions were carried out. Father Jouvency has left us model expositions of Latin authors; one has only to read them to see that their main aim is to get the pupils to appreciate the author's Latin and his literary style, and to encourage them to imitate these same qualities.

Far from seeking to get their pupils to think again the thoughts of antiquity, far from wishing to steep them in the spirit of classical times, the Jesuits had precisely the opposite aim. Indeed, this was because they could see no other way of extricating themselves from the contradictory situation in which they had quite deliberately placed themselves. Because the fashion was for humanism, because classical letters were the object of a veritable cult, the Jesuits, always sensitive to the spirit of their age, professed, as we have just seen, a form of humanism – even quite an uncompromising one, since Greek and Latin alone were permitted entry into their colleges. But from another point of view, as we have said, they realized full well that humanism constituted a threat, that there was a real danger in wishing to fashion Christian souls in the school of paganism. How could these two contradictory needs be reconciled? How could the faith be defended and safeguarded as was required by the self-imposed mission of the Jesuits, while they simultaneously made themselves the apologists and exegetes of pagan literature?

There was only one way of resolving this antinomy: this was, in the very words used by Father Jouvency, to expound the classical authors in such a way "that they became, although pagan and profane, the eulogists of the faith." To make paganism serve the glorification and the propagation of the Christian ethic was a daring undertaking and, it would appear, remarkably difficult; and yet, the Jesuits had enough confidence in their ability to attempt it and to succeed in it. But in order to do this they had deliberately to denature the ancient world; they had to show the authors of antiquity, the men they were

and the men they portray for us, in such a way as to leave in the shadows everything that was genuinely pagan about them, everything that makes them men of a particular city at a particular time, in order to highlight only those respects in which they are simply men, men as they are at all times and in all places. All the legends, all the traditions, all the religious ideas of Rome and Greece were interpreted in this spirit so as to give them a meaning any good Christian could accept.

Thus the Greco-Roman environment in which they made their pupils live was emptied of everything specifically Greek or Roman, so that, it became a kind of unreal, idealized environment peopled by personalities who had no doubt historically existed but who were presented in such a way that they had, so to speak, nothing historical about them. They were now simply figures betokening certain virtues and vices and all the great passions of humanity. Achilles is courage; Ulysses is wily prudence; Numa is the archetype of the pious king; Caesar, the man of ambition; Augustus, the powerful monarch and lover of learning; etc. Such general and unspecific types could easily be used to exemplify the precepts of Christian morality.

Such disinheriting of antiquity was made easier for the Jesuits by the fact that, at least for a long time, all teaching of history was almost completely absent from their colleges. Even literary history was unknown. A writer's works were expounded without anyone's bothering to notice the physiognomy of the author, his manner, the way he related it to his age, to his environment, to his predecessors. His historical personality mattered so little that it was normal to study not an author, not even a work, but selected passages and extracts. How was it possible to form a picture of a specific man out of such sparse and disjointed fragments, among which his individuality was dispersed and dissolved? Each of these pieces could scarcely appear to be anything other than an isolated model of literary style, a sort of fair copy of exceptional authoritativeness.

We can now understand better how it came about that the Jesuits, and perhaps to a lesser extent so many other educators, tended to attribute to the past and especially to the distant past an educational value greater than that which they attributed to the present. This was because the past, at least at a time when the historical sciences have not advanced sufficiently to render it almost as precise and specific as the present – the past, because we see it from afar, naturally appears to us in vague, fluid, unstable forms, which are consequently all the easier to mold according to our will. It constitutes a more malleable and plastic substance that we can transform and present according to our fancy. It is thus easier to lend it for educational purposes. These people, these things from former times, we embellish without realizing we are deceiving ourselves in order to turn them into models for youth to imitate. The present, because it is before our very eyes, forces itself upon our attention and does not lend itself to this kind of reworking; it is virtually impossible for us to see it other than as it is with its ugliness, its mediocrity, its vices, and its

failings; and this is why it seems to us ill-adapted to serve our educational ends. It was in this way that antiquity in the hands of the Jesuits could become an instrument for Christian education, whereas they would not have been able to utilize literature of their own age in the same way, imbued as it was with the spirit of rebellion against the church. In their desire to attain their goal, they had a powerful vested interest in fleeing from the moderns and taking refuge in antiquity. . . .

But so far we have only studied the Jesuits' teaching. We must now consider their disciplinary structures. It is perhaps in this area that they showed the most art and originality and it is their superiority in this respect that best explains their success.

Their entire discipline was founded upon two principles.

The first was that there can be no good education without contact at once continuous and personal between the pupil and the educator – and this principle served a dual purpose. First, it ensured that the pupil was never left to his own devices. To be properly molded he had to be subjected to pressure that never let up or flagged; for the spirit of evil is constantly watchful. This is why the Jesuits' pupil was never alone. "A supervisor would follow him everywhere, to church, to class, to the refectory, to his recreation; in the living quarters and sleeping quarters he was always there examining everything." But this supervision was not intended only to prevent misconduct. It was also to enable the Jesuit to study at his ease "character and habits so that he might manage to discover the most suitable method of directing each individual child." In other words, this direct and constant intercourse was supposed not only to render the educational process more sustained in its effect but also to make it more personal and better suited to the personality of each pupil. Father Jouvency never stops recommending that a teacher not limit himself to exerting a general and impersonal influence on the anonymous crowd of pupils but rather graduate his influence and vary it according to age, intelligence, and situation. If he is conversing with a child in private, "let him examine the child's character so that he can mold what he says in accordance with it and, as they say, 'hook' his interlocutor with the appropriate bait." And the better to get the pupils to open their minds to him, he will need to make them open their hearts by endearing himself. Indeed there can be no doubt that in the course of the relationships thus cemented between teachers and pupils bonds of friendship were frequently formed that survived school life. Thus Descartes remained very sincerely attached to his former teachers at La Flèche.

One can readily imagine how effective this system of continuous immersion must have been. The child's moral environment followed him wherever he went; all around him he heard the same ideas and the same sentiments being expressed with the same authority. He could never lose sight of them. He knew of no others. And in addition to the fact that this influence never ceased to make itself felt, it was also all the more powerful because it knew how best to adapt to the diversity of individual personalities, because it was

most familiar with the openings through which it could slip and insinuate itself in the pupil's heart. By comparison with the style of discipline that had been practiced in the Middle Ages this represented a major revolution. The medieval teacher addressed himself to large and impersonal audiences, among which each individual, that is to say each student, was lost, drowned, and consequently abandoned to his own devices. Now, education is essentially an individual matter, and as long as the medieval teacher was dealing with vast masses he could obtain only very crude results. Hence the rowdy indiscipline of the students of the Middle Ages, which the establishment of the fully residential colleges was an attempt – never fully successful – to counter. For the colleges did not have at their disposal a staff of teachers and supervisors sufficiently numerous or perhaps sufficiently committed to the task of supervision to be able to exercise the necessary control and influence over each individual.

But in order to train pupils in intensive formal work, which was moreover pretty lacking in substance, it was not enough to surround them, to envelop them at close quarters with solicitude and vigilance; it was not enough to be constantly concerned to contain and sustain them; it was also necessary to stimulate them. The goad which the Jesuits employed consisted exclusively of competition. Not only were they the first to organize the competitive system in the colleges, they also developed it to a greater intensity than it has ever subsequently known.

Although today in our classrooms this system still has considerable importance, nevertheless it no longer functions without interruption. It is fair to say that with the Jesuits it was never suspended for a single moment. The entire class was organized to promote this end. The pupils were divided into two camps, the Romans on the one hand and the Carthaginians on the other, who lived, so to speak, on the brink of war, each striving to outstrip the other. Each camp had its own dignitaries. At the head of the camp there was an imperator, also known as dictator or consul, then came a praetor, a tribune, and some senators. These honors, which were naturally coveted and contested, were distributed as the outcome of a competition, which was held monthly. From another point of view, each camp was divided into groups consisting of ten pupils each ("decuries"), commanded by a captain (called the "decurion") who was selected from among the worthies we have just mentioned. These groups were not recruited at random. There was a hierarchy among them: the first groups were composed of the best pupils, the last groups of the weakest and least industrious of the scholars. Thus just as the camp as a whole was in competition with the opposite camp, so in each camp each group had its own immediate rival in the other camp at the equivalent level. Finally, individuals themselves were matched and each soldier in a group had his opposite number in the opposing group. Thus academic work involved a kind of perpetual hand-to-hand combat. Camp challenged camp; group struggled with group; pupils supervised one another, corrected one another, and took one another to task. On some occasions the teacher was

not supposed to be afraid of pitting together two pupils of unequal ability. For example, an able pupil would have his work corrected by a less able pupil, says Father Jouvency, "so that those who have made mistakes may be the more ashamed and the more mortified by them." It was even possible for any pupil to do battle with a pupil from a higher group and, if victorious, to take his place.

It is interesting to note that these various ennoblements carried with them not only honorific titles but also active functions; and indeed it was these that constituted the prize. The captain enjoyed extensive powers. Seated opposite his group he was responsible for maintaining silence and attentiveness among his ten scholars, noting down absences, making the scholars recite their lessons, ensuring that assignments had been done with care and completed. The consuls exercised the same authority over the captains in their camp that these did over their own group members. Everyone was thus kept constantly in suspense. Never has the idea that the classroom is a small organized society been realized so systematically. It was a city-state where every pupil was a functionary. Moreover, it was thanks to this division of labor erween the teacher and the pupils that one teacher was able without too much difficulty to run classes that sometimes numbered as many as two or three hundred pupils.

In addition to such regularly recurring competitions there were intermittent competitions too numerous to list. From time to time the best pieces of work were affixed to the classroom doors; the most noteworthy were read publicly in either the refectory or the Hall of Acts. Aside from the annual prizegiving, which took place solemnly to the sound of trumpets, prizes were given out spasmodically in the course of the year for a good piece of declamation, for a meritorious literary work, for a well executed dance, etc. From the second form onwards there was in each grade an Academy to which only the best pupils belonged. Then there were all kinds of public meetings in which the most brilliant pupils appeared and to which the families came to hear and applaud them. Thus an infinite wealth of devices maintained the self-esteem of the pupils in a constant state of extreme excitation.

Here again the Jesuits were effecting a revolution compared with what had gone before. We have seen that in the University and the colleges of the Middle Ages the system of competition was completely unknown; there were no rewards to recompense merit and induce effort, and exams were organized in such a way that for conscientious pupils they were little more than a formality. And here we have, quite suddenly, a totally different system, which not only establishes itself but which instantaneously develops to the point of superabundance. It is easier to understand now how the training given by the Jesuits managed to acquire the intensive character which we were recently remarking upon. Their entire system of discipline was organized towards this goal. The state of constant competition in which the pupils lived incited them to strain all the resources of their intelligence and will-power and indeed rendered this essential. At the same time the careful supervision

to which they were subjected diminished the possibility of lapses. They felt themselves guided, sustained, encouraged. Thus everything induced them to exert themselves. As a result, within the colleges there was genuinely intense activity, no doubt flawed by being expended on the superficial rather than on the profound, but whose existence was incontestable.

However, now that we have noted the transformations that the Jesuits initiated in the realm of school discipline, we must seek their causes. Where did these two new principles come from? Did they derive exclusively from the particular aim the Jesuits were pursuing, from the very nature of their institution, from the mission they had assigned themselves, or were they not, by contrast, rather the effect of more general causes, were they not a response to some change that had occurred in public thought and ethics?

What must immediately rule out the first hypothesis is the fact that if the Jesuits were the first to realize these principles in academic practice, they had nevertheless been recognized and proclaimed already by the educational thinkers of the Renaissance. We remember Montaigne's protests against teachers unintelligent enough to wish to regiment the minds of all individuals in identical fashion. He too wants teachers to study the temperament of the pupil, to test him in order to understand him better, to make him, as he says, "run in front of himself" in order to be able to guide him in an enlightened way. And from another point of view, we have seen that the love of glory, the thirst for praise, and the sentiment of honor were for Rabelais and for Erasmus, as for the major thinkers of the sixteenth century, the essential motives for all intellectual activity and consequently for all academic activity. The Jesuits were thus on these two points, at least in principle, in agreement with their time. It is interesting to note that we know of at least one college where, before the time of the Jesuits, the competitive system was organized and practiced, moreover, in a form that in more than one respect resembled the one we have just described. This is the college at Guyenne, where Montaigne spent several years. The pupils in any one class were divided according to ability into sections that bore considerable resemblance to the Jesuits' groups of ten. Examinations took place frequently in which the pupils of one class were questioned by the pupils from a higher class or section. And here again we encounter competitions in public speaking, which took place before the assembly of all the classes.

It was the fact that a great change had taken place in the moral constitution of society that made this double change in the system of academic discipline necessary. In the seventeenth century the individual played a much greater part in social life than that which had hitherto been accorded to him. If, in the Middle Ages, teaching was impersonal, if it could be addressed diffusely to the indistinct crowd of pupils without any disadvantage, this was because at that time the notion of individual personality was still relatively undeveloped. The movements that occurred in the Middle Ages were mass movements carrying along large groups of human beings in the same direction, in the midst of which individuals became lost. It was Europe in its

entirety that rose up at the time of the Crusades; it was the whole of cultivated European society that soon afterwards, under the influence of a veritable collective urge, flooded towards Paris to receive instruction. The didactic style of the time was thus in accord with the moral condition of society.

With the Renaissance, by contrast, the individual began to acquire self-consciousness; he was no longer, at least in enlightened circles, merely an undifferentiated fraction of the whole; in a sense, he was himself already a whole, he was a person with his own physiognomy who had and who experienced at least the need to fashion for himself his own way of thinking and feeling. We know that at this period there occurred, as it were, a sudden blossoming of great personalities. Now, it is quite clear that in proportion as people's consciousness becomes individualized, education itself must become individualized. From the moment it is required to exert its influence on distinct and heterogeneous individuals it cannot continue to develop in blanket fashion, homogeneously and uniformly. Thus education had to be diversified, and this was only possible if the educator, instead of remaining distant from the pupil, came close to him to get to know him better and to be able to vary his actions according to his individual nature.

But from another point of view, it is equally clear that an individual possessed of self-awareness, with his own set of beliefs and interests, cannot be motivated or trained to act by the methods applicable to an amorphous crowd. For the latter methods mighty shakings of the foundations are needed, powerful collective impressions of a rather vague and general kind, like those that sent tremors through the multitudes gathered around Abélard on the Montagne Sainte-Genevieve. By contrast, in proportion as each individual has his own particular moral life he must be moved by considerations specifically appropriate to him. Thus one must indeed appeal to self-esteem, to the sense of personal dignity, to what the Germans call *Selbstgefühl*. It is no accident that competition becomes more lively and plays a more substantial role in society as the movement towards individualization becomes more advanced. And so, since the moral organization of the school must reflect that of civil society, since the methods that are applied to the child cannot differ in essence from those that later on will be applied to the man, it is clear that the processes of the medieval disciplinary system could not survive; it is clear that discipline had to become more personal, to take greater account of individual feelings, and consequently to allow for a degree of competitiveness.

There was thus nothing intrinsically arbitrary about the two innovations the Jesuits introduced into the disciplinary system: the principle underlying them, at least, was well-grounded in the nature of things, that is to say in the condition of society in the sixteenth century. But if the principle was right, if it was to be retained, if it deserved to survive, the Jesuits applied it in the spirit of extremism that is one feature of their academic policy and, simply by doing this, they denatured it. It was good to keep close to the child in order to be able to guide him confidently; the Jesuits came so close to him that they inhibited all his freedom of movement. And in this way the method worked

against the end it was meant to serve. It was wise to get to know the child well in order to be able to help in the development of his nascent personality. The Jesuits, however, studied him in order to stifle more effectively his sense of self – and this was a potential source of schism. At least, once they had recognized the value of rivalry and competitiveness, they made such immoderate use of them that the pupils were virtually at war with one another. How can we fail to consider immoral an academic organization that appealed only to egotistical sentiments? Was there then no means of keeping the pupils active other than by tempting them with such paltry bait?

Note

Excerpted from *L'évolution pédagogique en France* (Paris: Presses Universitaires de France, 1969), pp. 194–197, 198–201, 236–239, 266–269, 286–288, and 296–303. This translation was undertaken by Peter Collins. A translation of the full volume (under the title *The Evolution of Educational Thought*) is forthcoming from Routledge and Kegan Paul, Ltd.

29

Industrial Education for the Negro

Booker T. Washington

One of the most fundamental and far-reaching deeds that has been accomplished during the last quarter of a century has been that by which the Negro has been helped to find himself and to learn the secrets of civilization – to learn that there are a few simple, cardinal principles upon which a race must start its upward course, unless it would fail, and its last estate be worse than its first.

It has been necessary for the Negro to learn the difference between being worked and working – to learn that being worked meant degradation, while working means civilization; that all forms of labor are honorable, and all forms of idleness disgraceful. It has been necessary for him to learn that all races that have got upon their feet have done so largely by laying an economic foundation, and, in general, by beginning in a proper cultivation and ownership of the soil.

Forty years ago my race emerged from slavery into freedom. If, in too many cases, the Negro race began development at the wrong end, it was largely because neither white nor black properly understood the case. Nor is it any wonder that this was so, for never before in the history of the world had just such a problem been presented as that of the two races at the coming of freedom in this country.

For two hundred and fifty years, I believe the way for the redemption of the Negro was being prepared through industrial development. Through all those years the Southern white man did business with the Negro in a way that no one else has done business with him. In most cases if a Southern white man wanted a house built he consulted a Negro mechanic about the plan and about the actual building of the structure. If he wanted a suit of clothes made he went to a Negro tailor, and for shoes he went to a shoemaker of the same race. In a certain way every slave plantation in the South was an industrial school. On these plantations young colored men and women were

Source: Booker T. Washington, *The Negro Problem: A Series of Articles by Representative American Negroes Today* (New York: James Pott and Co., 1903).

constantly being trained not only as farmers but as carpenters, blacksmiths, wheelwrights, brick masons, engineers, cooks, laundresses, sewing women and housekeepers.

I do not mean in any way to apologize for the curse of slavery, which was a curse to both races, but in what I say about industrial training in slavery I am simply stating facts. This training was crude, and was given for selfish purposes. It did not answer the highest ends, because there was an absence of mental training in connection with the training of the hand. To a large degree, though, this business contact with the Southern white man, and the industrial training on the plantations, left the Negro at the close of the war in possession of nearly all the common and skilled labor in the South. The industries that gave the South its power, prominence and wealth prior to the Civil War were mainly the raising of cotton, sugar cane, rice and tobacco. Before the way could be prepared for the proper growing and marketing of these crops forests had to be cleared, houses to be built, public roads and railroads constructed. In all these works the Negro did most of the heavy work. In the planting, cultivating and marketing of the crops not only was the Negro the chief dependence, but in the manufacture of tobacco he became a skilled and proficient workman, and in this, up to the present time, in the South, holds the lead in the large tobacco manufactories.

In most of the industries, though, what happened? For nearly twenty years after the war, except in a few instances, the value of the industrial training given by the plantations was overlooked. Negro men and women were educated in literature, in mathematics and in the sciences, with little thought of what had been taking place during the preceding two hundred and fifty years, except, perhaps, as something to be escaped, to be got as far away from as possible. As a generation began to pass, those who had been trained as mechanics in slavery began to disappear by death, and gradually it began to be realized that there were few to take their places. There were young men educated in foreign tongues, but few in carpentry or in mechanical or architectural drawing. Many were trained in Latin, but few as engineers and blacksmiths. Too many were taken from the farm and educated, but educated in everything but farming. For this reason they had no interest in farming and did not return to it. And yet eighty-five cent of the Negro population of the Southern states lives and for a considerable time will continue to live in the country districts. The charge is often brought against the members of my race – and too often justly, I confess – that they are found leaving the country districts and flocking into the great cities where temptations are more frequent and harder to resist, and where the Negro people too often become demoralized. Think, though, how frequently it is the case that from the first day that a pupil begins to go to school his books teach him much about the cities of the world and city life, and almost nothing about the country. How natural it is, then, that when he has the ordering of his life he wants to live it in the city.

Only a short time before his death the late Mr. C. P. Huntington, to whose memory a magnificent library has just been given by his widow to the Hampton Institute for Negroes, in Virginia, said in a public address some words which seem to me so wise that I want to quote them here:

> "Our schools teach everybody a little of almost everything, but, in my opinion, they teach very few children just what they ought to know in order to make their way successfully in life. They do not put into their hands the tools they are best fitted to use, and hence so many failures. Many a mother and sister have worked and slaved, living upon scanty food, in order to give a son and brother a 'liberal education,' and in doing this have built up a barrier between the boy and the work he was fitted to do. Let me say to you that all honest work is honorable work. If the labor is manual, and seems common, you will have all the more chance to be thinking of other things, or of work that is higher and brings better pay, and to work out in your minds better and higher duties and responsibilities for yourselves, and for thinking of ways by which you can help others as well as yourselves, and bring them up to your own higher level."

Some years ago, when we decided to make tailoring a part of our training at the Tuskegee Institute, I was amazed to find that it was almost impossible to find in the whole country an educated colored man who could teach the making of clothing. We could find numbers of them who could teach astronomy, theology, Latin or grammar, but almost none who could instruct in the making of clothing, something that has to be used by every one of us every day in the year. How often have I been discouraged as I have gone through the South, and into the homes of the people of my race, and have found women who could converse intelligently upon abstruse subjects, and yet could not tell how to improve the condition of the poorly cooked and still more poorly served bread and meat which they and their families were eating three times a day. It is discouraging to find a girl who can tell you the geographical location of any country on the globe and who does not know where to place the dishes upon a common dinner table. It is discouraging to find a woman who knows much about theoretical chemistry, and who cannot properly wash and iron a shirt.

In what I say here I would not by any means have it understood that I would limit or circumscribe the mental development of the Negro student. No race can be lifted until its mind is awakened and strengthened. By the side of industrial training should always go mental and moral training, but the pushing of mere abstract knowledge into the head means little. We want more than the mere performance of mental gymnastics. Our knowledge must be harnessed to the things of real life. I would encourage the Negro to secure all the mental strength, all the mental culture – whether gleaned from science, mathematics, history, language or literature that his circumstances will allow, but I believe most earnestly that for years to come the education of the people of my race should be so directed that the greatest proportion of

the mental strength of the masses will be brought to bear upon the everyday practical things of life, upon something that is needed to be done, and something which they will be permitted to do in the community in which they reside. And just the same with the professional class which the race needs and must have, I would say give the men and women of that class, too, the training which will best fit them to perform in the most successful manner the service which the race demands.

I would not confine the race to industrial life, not even to agriculture, for example, although I believe that by far the greater part of the Negro race is best off in the country districts and must and should continue to live there, but I would teach the race that in industry the foundation must be laid – that the very best service which any one can render to what is called the higher education is to teach the present generation to provide a material or industrial foundation. On such a foundation as this will grow habits of thrift, a love of work, economy, ownership of property, bank accounts. Out of it in the future will grow practical education, professional education, positions of public responsibility. Out of it will grow moral and religious strength. Out of it will grow wealth from which alone can come leisure and the opportunity for the enjoyment of literature and the fine arts.

In the words of the late beloved Frederick Douglass:

> "Every blow of the sledge hammer wielded by a sable arm is a powerful blow in support of our cause. Every colored mechanic is by virtue of circumstances an elevator of his race. Every house built by a black man is a strong tower against the allied hosts of prejudice. It is impossible for us to attach too much importance to this aspect of the subject. Without industrial development there can be no wealth; without wealth there can be no leisure; without leisure no opportunity for thoughtful reflection and the cultivation of the higher arts."

I would set no limits to the attainments of the Negro in arts, in letters or statesmanship, but I believe the surest way to reach those ends is by laying the foundation in the little things of life that lie immediately about one's door. I plead for industrial education and development for the Negro not because I want to cramp him, but because I want to free him. I want to see him enter the all-powerful business and commercial world.

It was such combined mental, moral and industrial education which the late General Armstrong set out to give at the Hampton Institute when he established that school thirty years ago. The Hampton Institute has continued along the lines laid down by its great founder, and now each year an increasing number of similar schools are being established in the South, for the people of both races.

Early in the history of the Tuskegee Institute we began to combine industrial training with mental and moral culture. Our first efforts were in the direction of agriculture, and we began teaching this with no appliances except one hoe and a blind mule From this small beginning we have grown

until now the Institute owns two thousand acres of land, eight hundred of which are cultivated each year by the young men of the school. We began teaching wheelwrighting and blacksmithing in a small way to the men, and laundry work, cooking and sewing and housekeeping to the young women. The fourteen hundred and over young men and women who attended the school during the last school year received instruction – in addition to academic and religious training – in thirty – three trades and industries including carpentry, blacksmithing, printing, wheelwrighting, harnessmaking, painting, machinery, founding, shoemaking, brickmasonry and brickmaking, plastering, sawmilling, tinsmithing, tailoring, mechanical and architectural drawing, electrical and steam engineering, canning, sewing, dressmaking, millinery, cooking, laundering, housekeeping, mattress making, basketry, nursing, agriculture, dairying and stock raising, and horticulture.

Not only do the students receive instruction in these trades, but they do actual work, by means of which more than half of them pay some part or all of their expenses while remaining at the school. Of the sixty buildings belonging to the school all but four were almost wholly erected by the students as a part of their industrial education. Even the bricks which go into the walls are made by students in the school's brick yard, in which, last year, they manufactured two million bricks.

When we first began this work at Tuskegee, and the idea got spread among the people of my race that the students who came to the Tuskegee school were to be taught industries in connection with their academic studies, were, in other words, to be taught to work, I received a great many verbal messages and letters from parents informing me that they wanted their children taught books, but not how to work. This protest went on for three or four years, but I am glad to be able to say now that our people have very generally been educated to a point where they see their own needs and conditions so clearly that it has been several years since we have had a single protest from parents against the teaching of industries, and there is now a positive enthusiasm for it. In fact, public sentiment among the students at Tuskegee is now so strong for industrial training that it would hardly permit a student to remain on the grounds who was unwilling to labor.

It seems to me that too often mere book education leaves the Negro young man or woman in a weak position. For example, I have seen a Negro girl taught by her mother to help her in doing laundry work at home. Later, when this same girl was graduated from the public schools or a high school and returned home she finds herself educated out of sympathy with laundry work, and yet not able to find anything to do which seems in keeping with the cost and character of her education. Under these circumstances we cannot be surprised if she does not fulfill the expectations made for her. What should have been done for her, it seems to me, was to give her along with her academic education thorough training in the latest and best methods of laundry work, so that she could have put so much skill and intelligence into it that the work would have been lifted out from the plane of drudgery. The home which she would then have been able to find by the results of her work

would have enabled her to help her children to take a still more responsible position in life.

Almost from the first Tuskegee has kept in mind – and this I think should be the policy of all industrial schools – fitting students for occupations which would be open to them in their home communities. Some years ago we noted the fact that there was beginning to be a demand in the South for men to operate dairies in a skilful, modern manner. We opened a dairy department in connection with the school, where a number of young men could have instruction in the latest and most scientific methods of dairy work. At present we have calls – mainly from Southern white men – for twice as many dairymen as we are able to supply. What is equally satisfactory, the reports which come to us indicate that our young men are giving the highest satisfaction and are fast changing and improving the dairy product in the communities into which they go. I use the dairy here as an example. What I have said of this is equally true of many of the other industries which we teach. Aside from the economic value of this work I cannot but believe, and my observation confirms me in my belief, that as we continue to place Negro men and women of intelligence, religion, modesty, conscience and skill in every community in the South, who will prove by actual results their value to the community, I cannot but believe, I say, that this will constitute a solution to many of the present political and social difficulties.

Many seem to think that industrial education is meant to make the Negro work as he worked in the days of slavery. This is far from my conception of industrial education. If this training is worth anything to the Negro, it consists in teaching him how not to work, but how to make the forces of nature – air, steam, water, horse – power and electricity – work for him. If it has any value it is in lifting labor up out of toil and drudgery into the plane of the dignified and the beautiful. The Negro in the South works and works hard; but too often his ignorance and lack of skill causes him to do his work in the most costly and shiftless manner, and this keeps him near the bottom of the ladder in the economic world.

I have not emphasized particularly in these pages the great need of training the Negro in agriculture, but I believe that this branch of industrial education does need very great emphasis. In this connection I want to quote some words which Mr. Edgar Gardner Murphy, of Montgomery, Alabama, has recently written upon this subject:

"We must incorporate into our public school system a larger recognition of the practical and industrial elements in educational training. Ours is an agricultural population. The school must be brought more closely to the soil. The teaching of history, for example, is all very well, but nobody can really know anything of history unless he has been taught to see things grow – has so seen things not only with the outward eye, but with the eyes of his intelligence and conscience. The actual things of the present are more important, however, than the institutions of the past. Even to young children can be shown the simpler conditions and processes of growth – how corn is put into the ground – how cotton and potatoes should be planted – how

to choose the soil best adapted to a particular plant, how to improve that soil, how to care for the plant while it grows, how to get the most value out of it, how to use the elements of waste for the fertilization of other crops; how, through the alternation of crops, the land may be made to increase the annual value of its products – these things, upon their elementary side are absolutely vital to the worth and success of hundreds of thousands of these people of the Negro race, and yet our whole educational system has practically ignored them.

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"Such work will mean not only an education in agriculture, but an education through agriculture and education, through natural symbols and practical forms, which will educate as deeply, as broadly and as truly as any other system which the world has known. Such changes will bring far larger results than the mere improvement of our Negroes. They will give us an agricultural class, a class of tenants or small land owners, trained not away from the soil, but in relation to the soil and in intelligent dependence upon its resources."

I close, then, as I began, by saying that as a slave the Negro was worked, and that as a freeman he must learn to work. There is still doubt in many quarters as to the ability of the Negro unguided, unsupported, to hew his own path and put into visible, tangible, indisputable form, products and signs of civilization. This doubt cannot be much affected by abstract arguments, no matter how delicately and convincingly woven together. Patiently, quietly, doggedly, persistently, through summer and winter, sunshine and shadow, by self – sacrifice, by foresight, by honesty and industry, we must re – enforce argument with results. One farm bought, one house built, one home sweetly and intelligently kept, one man who is the largest tax payer or has the largest bank account, one school or church maintained, one factory running successfully, one truck garden profitably cultivated, one patient cured by a Negro doctor, one sermon well preached, one office well filled, one life cleanly lived – these will tell more in our favor than all the abstract eloquence that can be summoned to plead our cause. Our pathway must be up through the soil, up through swamps, up through forests, up through the streams, the rocks, through commerce, education, and religion.

30

The Talented Tenth

W.E.B. Du Bois

The Negro race, like all races, is going to be saved by its exceptional men. The problem of education, then, among Negroes must first of all deal with the Talented Tenth; it is the problem of developing the Best of this race that they may guide the Mass away from the contamination and death of the Worst, in their own and other races. Now the training of men is a difficult and intricate task. Its technique is a matter for educational experts, but its object is for the vision of seers. If we make money the object of man-training, we shall develop money-makers but not necessarily men; if we make technical skill the object of education, we may possess artisans but not, in nature, men. Men we shall have only as we make manhood the object of the work of the schools – intelligence, broad sympathy, knowledge of the world that was and is, and of the relation of men to it – this is the curriculum of that Higher Education which must underlie true life. On this foundation we may build bread winning, skill of hand and quickness of brain, with never a fear lest the child and man mistake the means of living for the object of life.

If this be true – and who can deny it – three tasks lay before me; first to show from the past that the Talented Tenth as they have risen among American Negroes have been worthy of leadership; secondly to show how these men may be educated and developed; and thirdly to show their relation to the Negro problem.

You misjudge us because you do not know us. From the very first it has been the educated and intelligent of the Negro people that have led and elevated the mass, and the sole obstacles that nullified and retarded their efforts were slavery and race prejudice; for what is slavery but the legalized survival of the unfit and the nullification of the work of natural internal leadership? Negro leadership therefore sought from the first to rid the race of this awful incubus that it might make way for natural selection and the survival of the fittest. In colonial days came Phillis Wheatley and Paul Cuffe striving against the bars of prejudice; and Benjamin Banneker, the almanac

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Source: W.E.B. Du Bois, *The Negro Problems: A Series of Articles by Representative American Negroes Today* (New York: James Pott and Co., 1903).

maker, voiced their longings when he said to Thomas Jefferson, "I freely and cheerfully acknowledge that I am of the African race and in colour which is natural to them, of the deepest dye; and it is under a sense of the most profound gratitude to the Supreme Ruler of the Universe, that I now confess to you that I am not under that state of tyrannical thraldom and inhuman captivity to which too many of my brethren are doomed, but that I have abundantly tasted of the fruition of those blessings which proceed from that free and unequalled liberty with which you are favored, and which I hope you will willingly allow, you have mercifully received from the immediate hand of that Being from whom proceedeth every good and perfect gift.

"Suffer me to recall to your mind that time, in which the arms of the British crown were exerted with every powerful effort, in order to reduce you to a state of servitude; look back, I entreat you, on the variety of dangers to which you were exposed; reflect on that period in which every human aid appeared unavailable, and in which even hope and fortitude wore the aspect of inability to the conflict, and you cannot but be led to a serious and grateful sense of your miraculous and providential preservation, you cannot but acknowledge, that the present freedom and tranquility which you enjoy, you have mercifully received, and that a peculiar blessing of heaven.

"This, sir, was a time when you clearly saw into the injustice of a state of Slavery, and in which you had just apprehensions of the horrors of its condition. It was then that your abhorrence thereof was so excited, that you publicly held forth this true and invaluable doctrine, which is worthy to be recorded and remembered in all succeeding ages: 'We hold these truths to be self evident, that all men are created equal; that they are endowed with certain inalienable rights, and that among these are life, liberty and the pursuit of happiness.'"

Then came Dr. James Derham, who could tell even the learned Dr. Rush something of medicine, and Lemuel Haynes, to whom Middlebury College gave an honorary A.M. in 1804. These and others we may call the Revolutionary group of distinguished Negroes – they were persons of marked ability, leaders of a Talented Tenth, standing conspicuously among the best of their time. They strove by word and deed to save the color line from becoming the line between the bond and free, but all they could do was nullified by Eli Whitney and the Curse of Gold. So they passed into forgetfulness.

But their spirit did not wholly die; here and there in the early part of the century came other exceptional men. Some were natural sons of unnatural fathers and were given often a liberal training and thus a race of educated mulattoes sprang up to plead for black men's rights. There was Ira Aldridge, whom all Europe loved to honor; there was that Voice crying in the Wilderness, David Walker, and saying:

> "I declare it does appear to me as though some nations think God is asleep, or that he made the Africans for nothing else but to dig their mines and work their farms, or they cannot believe history sacred or profane. I ask

> every man who has a heart, and is blessed with the privilege of believing – Is not God a God of justice to all his creatures? Do you say he is? Then if he gives peace and tranquility to tyrants and permits them to keep our fathers, our mothers, ourselves and our children in eternal ignorance and wretchedness to support them and their families, would he be to us a God of Justice? I ask, O, ye Christians, who hold us and our children in the most abject ignorance and degradation that ever a people were afflicted with since the world began – I say if God gives you peace and tranquility, and suffers you thus to go on afflicting us, and our children, who have never given you the least provocation – would He be to us a God of Justice? If you will allow that we are men, who feel for each other, does not the blood of our fathers and of us, their children, cry aloud to the Lord of Sabaoth against you for the cruelties and murders with which you have and do continue to afflict us?"

This was the wild voice that first aroused Southern legislators in 1829 to the terrors of abolitionism.

In 1831 there met that first Negro convention in Philadelphia, at which the world gaped curiously but which bravely attacked the problems of race and slavery, crying out against persecution and declaring that "Laws as cruel in themselves as they were unconstitutional and unjust, have in many places been enacted against our poor, unfriended and unoffending brethren (without a shadow of provocation on our part), at whose bare recital the very savage draws himself up for fear of contagion – looks noble and prides himself because he bears not the name of Christian." Side by side this free Negro movement, and the movement for abolition, strove until they merged in to one strong stream. Too little notice has been taken of the work which the Talented Tenth among Negroes took in the great abolition crusade. From the very day that a Philadelphia colored man became the first subscriber to Garrison's "Liberator," to the day when Negro soldiers made the Emancipation Proclamation possible, black leaders worked shoulder to shoulder with white men in a movement, the success of which would have been impossible without them. There was Purvis and Remond, Pennington and Highland Garnett, Sojourner Truth and Alexander Crummel, and above all, Frederick Douglass – what would the abolition movement have been without them? They stood as living examples of the possibilities of the Negro race, their own hard experiences and well wrought culture said silently more than all the drawn periods of orators – they were the men who made American slavery impossible. As Maria Weston Chapman once said, from the school of anti-slavery agitation, "a throng of authors, editors, lawyers, orators and accomplished gentlemen of color have taken their degree! It has equally implanted hopes and aspirations, noble thoughts, and sublime purposes, in the hearts of both races. It has prepared the white man for the freedom of the black man, and it has made the black man scorn the thought of enslavement, as does a white man, as far as its influence has extended. Strengthen that noble influence! Before its organization, the country only saw here and there in slavery some faithful Cudjoe or Dinah, whose strong natures blossomed even

in bondage, like a fine plant beneath a heavy stone. Now, under the elevating and cherishing influence of the American Anti-Slavery Society, the colored race, like the white, furnishes Corinthian capitals for the noblest temples."

Where were these black abolitionists trained? Some, like Frederick Douglass, were self-trained, but yet trained liberally; others, like Alexander Crummell and McCune Smith, graduated from famous foreign universities. Most of them rose up through the colored schools of New York and Philadelphia and Boston, taught by college-bred men like Russworm, of Dartmouth, and college-bred white men like Neau and Benezet.

After emancipation came a new group of educated and gifted leaders: Langston, Bruce and Elliot, Greener, Williams and Payne. Through political organization, historical and polemic writing and moral regeneration, these men strove to uplift their people. It is the fashion of today to sneer at them and to say that with freedom Negro leadership should have begun at the plow and not in the Senate – a foolish and mischievous lie: two hundred and fifty years that black serf toiled at the plow and yet that toiling was in vain till the Senate passed the war amendments; and two hundred and fifty years more the half-free serf of today may toil at his plow, but unless he have political rights and righteously guarded civic status, he will still remain the poverty-stricken and ignorant plaything of rascals, that he now is. This all sane men know even if they dare not say it.

And so we come to the present – a day of cowardice and vacillation, of strident wide-voiced wrong and faint-hearted compromise; of double-faced dallying with Truth and Right. Who are today guiding the work of the Negro people? The "exceptions" of course. And yet so sure as this Talented Tenth is pointed out, the blind worshippers of the Average cry out in alarm: "These are exceptions, look here at death, disease and crime – these are the happy rule." Of course they are the rule, because a silly nation made them the rule: Because for three long centuries this people lynched Negroes who dared to be brave, raped black women who dared to be virtuous, crushed dark-hued youth who dared to be ambitious, and encouraged and made to flourish servility and lewdness and apathy. But not even this was able to crush all manhood and chastity and aspiration from black folk. A saving remnant continually survives and persists, continually aspires, continually shows itself in thrift and ability and character. Exceptional it is to be sure, but this is its chiefest promise; it shows the capability of Negro blood, the promise of black men. Do Americans ever stop to reflect that there are in this land a million men of Negro blood, well-educated, owners of homes, against the honor of whose womanhood no breath was ever raised, whose men occupy positions of trust and usefulness, and who, judged by any standard, have reached the full measure of the best type of modern European culture? Is it fair, is it decent, is it Christian to ignore these facts of the Negro problem, to belittle such aspiration, to nullify such leadership and seek to crush these people back into the mass out of which by toil and travail, they and their fathers have raised themselves?

Can the masses of the Negro people be in any possible way more quickly raised than by the effort and example of this aristocracy of talent and character? Was there ever a nation on God's fair earth civilized from the bottom upward? Never; it is, ever was and ever will be from the top downward that culture filters. The Talented Tenth rises and pulls all that are worth the saving up to their vantage ground. This is the history of human progress; and the two historic mistakes which have hindered that progress were the thinking first that no more could ever rise save the few already risen; or second, that it would better the uprisen to pull the risen down.

How then shall the leaders of a struggling people be trained and the hands of the risen few strengthened? There can be but one answer: The best and most capable of their youth must be schooled in the colleges and universities of the land. We will not quarrel as to just what the university of the Negro should teach or how it should teach it – I willingly admit that each soul and each race-soul needs its own peculiar curriculum. But this is true: A university is a human invention for the transmission of knowledge and culture from generation to generation, through the training of quick minds and pure hearts, and for this work no other human invention will suffice, not even trade and industrial schools.

All men cannot go to college but some men must; every isolated group or nation must have its yeast, must have for the talented few centers of training where men are not so mystified and befuddled by the hard and necessary toil of earning a living, as to have no aims higher than their bellies, and no God greater than Gold. This is true training, and thus in the beginning were the favored sons of the freedmen trained. Out of the colleges of the North came, after the blood of war, Ware, Cravath, Chase, Andrews, Bumstead and Spence to build the foundations of knowledge and civilization in the black South. Where ought they to have begun to build? At the bottom, of course, quibbles the mole with his eyes in the earth. Aye! truly at the bottom, at the very bottom; at the bottom of knowledge, down in the very depths of knowledge there where the roots of justice strike into the lowest soil of Truth. And so they did begin; they founded colleges, and up from the colleges shot normal schools, and out from the normal schools went teachers, and around the normal teachers clustered other teachers to teach the public schools, the college trained in Greek and Latin and mathematics, 2,000 men; and these men trained full 50,000 others in morals and manners, and they in turn taught thrift and the alphabet to nine millions of men, who today hold $300,000,000 of property. It was a miracle – the most wonderful peace-battle of the 19th century, and yet today men smile at it, and in fine superiority tell us that it was all a strange mistake; that a proper way to found a system of education is first to gather the children and buy them spelling books and hoes; afterward men may look about for teachers, if happily they may find them; or again they would teach men Work, but as for Life – why, what has Work to do with Life, they ask vacantly.

Was the work of these college founders successful; did it stand the test of time? Did the college graduates, with all their fine theories of life, really live? Are they useful men helping to civilize and elevate their less fortunate fellows? Let us see. Omitting all institutions which have not actually graduated students from a college course, there are today in the United States thirty-four institutions giving something above high school training to Negroes and designed especially for this race.

Three of these were established in border States before the War; thirteen were planted by the Freedmen's Bureau in the years 1864–1869; nine were established between 1870 and 1880 by various church bodies; five were established after 1881 by Negro churches, and four are state institutions supported by United States' agricultural funds. In most cases the college departments are small adjuncts to high and common schoolwork. As a matter of fact six institutions – Atlanta, Fisk, Howard, Shaw, Wilberforce and Leland, are the important Negro colleges so far as actual work and number of students are concerned. In all these institutions, seven hundred and fifty Negro college students are enrolled. In grade the best of these colleges are about a year behind the smaller New England colleges and a typical curriculum is that of Atlanta University. Here students from the grammar grades, after a three years' high school course, take a college course of 136 weeks. One-fourth of this time is given to Latin and Greek; one-fifth, to English and modern languages; one-sixth, to history and social science; one-seventh, to natural science; one-eighth to mathematics, and one-eighth to philosophy and pedagogy.

In addition to these students in the South, Negroes have attended Northern colleges for many years. As early as 1826 one was graduated from Bowdoin College, and from that time till today nearly every year has seen elsewhere, other such graduates. They have, of course, met much color prejudice. Fifty years ago very few colleges would admit them at all. Even today no Negro has ever been admitted to Princeton, and at some other leading institutions they are rather endured than encouraged. Oberlin was the great pioneer in the work of blotting out the color line in colleges, and has more Negro graduates by far than any other Northern college.

The total number of Negro college graduates up to 1899 (several of the graduates of that year not being reported) was as follows:

	Negro Colleges	*White Colleges*
Before 1876	137	75
1875–80	143	22
1880–85	250	31
1885–90	413	43
1890–95	465	66
1895–99	475	88
Class Unknown	64	57
Total	1,914	390

Of these graduates 2,079, were men and 252 were women; 50 per cent of Northern-born college men come South to work among the masses of their people, at a sacrifice which few people realize; nearly 90 per cent of the Southern-born graduates instead of seeking that personal freedom and broader intellectual atmosphere which their training has led them, in some degree, to conceive, stay and labor and wait in the midst of their black neighbors and relatives.

The most interesting question, and in many respects the crucial question, to be asked concerning college-bred Negroes, is: Do they earn a living? It has been intimated more than once that the higher training of Negroes has resulted in sending into the world of work, men who could find nothing to do suitable to their talents. Now and then there comes a rumor of a colored college man working at menial service, etc. Fortunately, returns as to occupations of college-bred Negroes, gathered by the Atlanta conference, are quite full – nearly sixty per cent of the total number of graduates.

This enables us to reach fairly certain conclusions as to the occupations of all college-bred Negroes. Of 1,312 persons reported, there were:

Teachers,	53.4%
Clergymen,	16.8%
Physicians, etc.,	6.3%
Students,	5.6%
Lawyers,	4.7%
In Govt. Service,	4.0%
In Business,	3.6%
Farmers and Artisans,	2.7%
Editors, Secretaries and Clerks,	2.4%
Miscellaneous,	.5%

Over half are teachers, a sixth are preachers, another sixth are students and professional men; over 6 per cent are farmers, artisans and merchants, and 4 per cent are in government service. In detail the occupations are as follows:

Occupations of College-Bred Men

701 Teachers:
- Presidents and Deans, 19
- Teacher of Music, 7
- Professors, Principals and Teachers, 675

221 Clergymen:
- Bishop, 1
- Chaplains U.S. Army, 2
- Missionaries, 9
- Presiding Elders, 12
- Preachers, 197

83 Physicians:
- Doctors of Medicine, 76

Druggists, 4
Dentists, 3
74 Students
62 Lawyers
53 in Civil Service:
Minister Plenipotentiary, 1
U.S. Consul, 1
U.S. Deputy Collector, 1
U.S. Gauger, 1
U.S. Postmasters, 2
U.S. Clerks, 44
State Civil Service, 2
City Civil Service, 1
47 Business Men:
Merchants, etc., 30
Managers, 13
Real Estate Dealers, 4
26 Farmers
22 Clerks and Secretaries:
Secretary of National Societies, 7
Clerks, etc., 15
9 Artisans
9 Editors
8 Miscellaneous

These figures illustrate vividly the function of the college-bred Negro. He is, as he ought to be, the group leader, the man who sets the ideals of the community where he lives, directs its thoughts and heads its social movements. It need hardly be argued that the Negro people need social leadership more than most groups: that they have no traditions to fall back upon, no long established customs, no strong family ties, no well defined social classes. All these things must be slowly and painfully evolved. The preacher was, even before the war, the group leader of the Negroes, and the church their greatest social institution. Naturally this preacher was ignorant and often immoral, and the problem of replacing the older type by better educated men has been a difficult one. Both by direct work and by direct influence on other preachers, and on congregations, the college-bred preacher has an opportunity for reformatory work and moral inspiration, the value of which cannot be overestimated.

It has, however, been in the furnishing of teachers that the Negro college has found its peculiar function. Few persons realize how vast a work, how mighty a revolution has been thus accomplished. To furnish five millions and more of ignorant people with teachers of their own race and blood, in one generation, was not only a very difficult undertaking, but a very important one, in that it placed before the eyes of almost every Negro child an attainable ideal. It brought the masses of the blacks in contact with modern civilization,

made black men the leaders of their communities and trainers of the new generation. In this work college-bred Negroes were first teachers, and then teachers of teachers. And here it is that the broad culture of college work has been of peculiar value. Knowledge of life and its wider meaning, has been the point of the Negro's deepest ignorance, and the sending out of teachers whose training has not been simply for bread winning, but also for human culture, has been of inestimable value in the training of these men.

In earlier years the two occupations of preacher and teacher were practically the only ones open to the black college graduate. Of later years a larger diversity of life among his people, has opened new avenues of employment. Nor have these college men been paupers and spendthrifts; 557 college-bred Negroes owned in 1899, $1,342,862.50 worth of real estate (assessed value), or $2,411 per family. The real value of the total accumulations of the whole group is perhaps about $10,000,000, or $5,000 a piece. Pitiful is it not beside the fortunes of oil kings and steel trusts, but after all is the fortune of the millionaire the only stamp of true and successful living? Alas! it is, with many and there's the rub.

The problem of training the Negro is today immensely complicated by the fact that the whole question of the efficiency and appropriateness of our present systems of education, for any kind of child, is a matter of active debate, in which final settlement seems still afar off. Consequently it often happens that persons arguing for or against certain systems of education for Negroes, have these controversies in mind and miss the real question at issue. The main question, so far as the Southern Negro is concerned, is: What under the present circumstance, must a system of education do in order to raise the Negro as quickly as possible in the scale of civilization? The answer to this question seems to me clear: It must strengthen the Negro's character, increase his knowledge and teach him to earn a living. Now it goes without saying that it is hard to do all these things simultaneously or suddenly and that at the same time it will not do to give all the attention to one and neglect the others; we could give black boys trades, but that alone will not civilize a race of ex-slaves; we might simply increase their knowledge of the world, but this would not necessarily make them wish to use this knowledge honestly; we might seek to strengthen character and purpose, but to what end if this people have nothing to eat or to wear? A system of education is not one thing, nor does it have a single definite object, nor is it a mere matter of schools. Education is that whole system of human training within and without the school house walls, which molds and develops men. If then we start out to train an ignorant and unskilled people with a heritage of bad habits, our system of training must set before itself two great aims – the one dealing with knowledge and character, the other part seeking to give the child the technical knowledge necessary for him to earn a living under the present circumstances. These objects are accomplished in part by the opening of the common schools on the one, and of the industrial schools on the other. But only in part, for there must also be trained those who are to teach these schools – men and women

of knowledge and culture and technical skill who understand modern civilization, and have the training and aptitude to impart it to the children under them. There must be teachers, and teachers of teachers, and to attempt to establish any sort of a system of common and industrial school training, without *first* (and I say *first* advisedly) without *first* providing for the higher training of the very best teachers, is simply throwing your money to the winds. School houses do not teach themselves – piles of brick and mortar and machinery do not send out *men*. It is the trained, living human soul, cultivated and strengthened by long study and thought, that breathes the real breath of life into boys and girls and makes them human, whether they be black or white, Greek, Russian or American. Nothing, in these latter days, has so dampened the faith of thinking Negroes in recent educational movements, as the fact that such movements have been accompanied by ridicule and denouncement and decrying of those very institutions of higher training which made the Negro public school possible, and make Negro industrial schools thinkable. It was: Fisk, Atlanta, Howard and Straight, those colleges born of the faith and sacrifice of the abolitionists, that placed in the black schools of the South the 30,000 teachers and more, which some, who depreciate the work of these higher schools, are using to teach their own new experiments. If Hampton, Tuskegee and the hundred other industrial schools prove in the future to be as successful as they deserve to be, then their success in training black artisans for the South, will be due primarily to the white colleges of the North and the black colleges of the South, which trained the teachers who today conduct these institutions. There was a time when the American people believed pretty devoutly that a log of wood with a boy at one end and Mark Hopkins at the other, represented the highest ideal of human training. But in these eager days it would seem that we have changed all that and think it necessary to add a couple of saw-mills and a hammer to this outfit, and, at a pinch, to dispense with the services of Mark Hopkins. I would not deny, or for a moment seem to deny, the paramount necessity of teaching the Negro to work, and to work steadily and skillfully; or seem to depreciate in the slightest degree the important part industrial schools must play in the accomplishment of these ends, but I *do* say, and insist upon it, that it is industrialism drunk with its vision of success, to imagine that its own work can be accomplished without providing for the training of broadly cultured men and women to teach its own teachers, and to teach the teachers of the public schools.

But I have already said that human education is not simply a matter of schools; it is much more a matter of family and group life – the training of one's home, of one's daily companions, of one's social class. Now the black boy of the South moves in a black world – a world with its own leaders, its own thoughts, its own ideals. In this world he gets by far the larger part of his life training, and through the eyes of this dark world he peers into the veiled world beyond. Who guides and determines the education which he receives in his world? His teachers here are the group-leaders of the Negro people – the physicians and clergymen, the trained fathers and mothers, the influential and

forceful men about him of all kinds; here it is, if at all, that the culture of the surrounding world trickles through and is handed on by the graduates of the higher schools. Can such culture training of group leaders be neglected? Can we afford to ignore it? Do you think that if the leaders of thought among Negroes are not trained and educated thinkers, that they will have no leaders? On the contrary a hundred half-trained demagogues will still hold the places they so largely occupy now, and hundreds of vociferous busy-bodies will multiply. You have no choice; either you must help furnish this race from within its own ranks with thoughtful men of trained leadership, or you must suffer the evil consequences of a headless misguided rabble.

I am an earnest advocate of manual training and trade teaching for black boys, and for white boys, too. I believe that next to the founding of Negro colleges the most valuable addition to Negro education since the war has been industrial training for black boys. Nevertheless, I insist that the object of all true education is not to make men carpenters, it is to make carpenters men; there are two means of making the carpenter a man, each equally important: the first is to give the group and community in which he works, liberally trained teachers and leaders to teach him and his family what life means; the second is to give him sufficient intelligence and technical skill to make him an efficient workman; the first object demands the Negro college and college-bred men – not a quantity of such colleges, but a few of excellent quality; not too many college bred men, but enough to leaven the lump, to inspire the masses, to raise the Talented Tenth to leadership; the second object demands a good system of common schools, well-taught, conveniently located and properly equipped.

The Sixth Atlanta Conference truly said in 1901:

> "We call the attention of the Nation to the fact that less than one million of the three million Negro children of school age, are at present regularly attending school, and these attend a session which lasts only a few months.
>
> "We are today deliberately rearing millions of our citizens in ignorance, and at the same time limiting the rights of citizenship by educational qualifications. This is unjust. Half the black youth of the land have no opportunities open to them for learning to read, write and cipher. In the discussion as to the proper training of Negro children after they leave the public schools, we have forgotten that they are not yet decently provided with public schools.
>
> "Propositions are beginning to be made in the South to reduce the already meagre school facilities of Negroes. We congratulate the South on resisting, as much as it has, this pressure, and on the many millions it has spent on Negro education. But it is only fair to point out that Negro taxes and the Negroes' share of the income from indirect taxes and endowments have fully repaid this expenditure, so that the Negro public school system has not in all probability cost the white taxpayers a single cent since the war.
>
> "This is not fair. Negro schools should be a public burden, since they are a public benefit. The Negro has a right to demand good common school training at the hands of the States and the Nation; since by their fault he is not in position to pay for this himself."

What is the chief need for the building up of the Negro public school in the South? The Negro race in the South needs teachers today above all else. This is the concurrent testimony of all who know the situation. For the supply of this great demand two things are needed – institutions of higher education and money for school houses and salaries. It is usually assumed that a hundred or more institutions for Negro training are today turning out so many teachers and college-bred men that the race is threatened with an over-supply. This is sheer nonsense. There are today less than 3,000 living Negro college graduates in the United States, and less than 1,000 Negroes in college. Moreover, in the 164 schools for Negroes, 95 per cent of their students are doing elementary and secondary work, work which should be done in the public schools. Over half the remaining 2,157 students are taking high school studies. The mass of so-called "normal" schools for the Negro, are simply doing elementary common schoolwork, or, at most, high school work, with a little instruction in methods. The Negro colleges and the post-graduate courses at other institutions are the only agencies for the broader and more careful training of teachers. The work of these institutions is hampered for lack of funds. It is getting increasingly difficult to get funds for training teachers in the best modern methods, and yet all over the South, from State Superintendents, county officials, city boards and school principals comes the wail, "We need TEACHERS!" and teachers must be trained. As the fairest minded of all white Southerners, Atticus G. Haygood, once said: "The defects of colored teachers are so great as to create an urgent necessity for training better ones. Their excellencies and their successes are sufficient to justify the best hopes of success in the effort, and to vindicate the judgment of those who make large investments of money and service, to give to colored students opportunity for thoroughly preparing themselves for the work of teaching children of their people."

The truth of this has been strikingly shown in the marked improvement of white teachers in the South. Twenty years ago the rank and file of white public school teachers were not as good as the Negro teachers. But they, by scholarships and good salaries, have been encouraged to thorough normal and collegiate preparation, while the Negro teachers have been discouraged by starvation wages and the idea that any training will do for a black teacher. If carpenters are needed it is well and good to train men as carpenters. But to train men as carpenters, and then set them to teaching is wasteful and criminal; and to train men as teachers and then refuse them living wages, unless they become carpenters, is rank nonsense.

The United States Commissioner of Education says in his report for 1900:

> "For comparison between the white and colored enrollment in secondary and higher education, I have added together the enrollment in high schools and secondary schools, with the attendance on colleges and universities, not being sure of the actual grade of work done in the colleges and universities. The work done in the secondary schools is reported in such detail in this office, that there can be no doubt of its grade."

He then makes the following comparisons of persons in every million enrolled in secondary and higher education:

	Whole country	*Negroes*
1880	4,362	1,289
1900	10,743	2,061

And he concludes: "While the number in colored high schools and colleges had increased somewhat faster than the population, it had not kept pace with the average of the whole country, for it had fallen from 30 per cent to 24 per cent of the average quota. Of all colored pupils, one [1] in one hundred was engaged in secondary and higher work, and that ratio has continued substantially for the past twenty years. If the ratio of colored population in secondary and higher education is to be equal to the average for the whole country, it must be increased to five times its present average." And if this be true of the secondary and higher education, it is safe to say that the Negro has not one-tenth his quota in college studies. How baseless, therefore, is the charge of too much training! We need Negro teachers for the Negro common schools, and we need first-class normal schools and colleges to train them. This is the work of higher Negro education and it must be done.

Further than this, after being provided with group leaders of civilization, and a foundation of intelligence in the public schools, the carpenter, in order to be a man, needs technical skill. This calls for trade schools. Now trade schools are not nearly such simple things as people once thought. The original idea was that the "Industrial" school was to furnish education, practically free, to those willing to work for it; it was to "do" things – i.e.: become a center of productive industry, it was to be partially, if not wholly, self-supporting, and it was to teach trades. Admirable as were some of the ideas underlying this scheme, the whole thing simply would not work in practice; it was found that if you were to use time and material to teach trades thoroughly, you could not at the same time keep the industries on a commercial basis and make them pay. Many schools started out to do this on a large scale and went into virtual bankruptcy. Moreover, it was found also that it was possible to teach a boy a trade mechanically, without giving him the full educative benefit of the process, and, vice versa, that there was a distinctive educative value in teaching a boy to use his hands and eyes in carrying out certain physical processes, even though he did not actually learn a trade. It has happened, therefore, in the last decade, that a noticeable change has come over the industrial schools. In the first place the idea of commercially remunerative industry in a school is being pushed rapidly to the background. There are still schools with shops and farms that bring an income, and schools that use student labor partially for the erection of their buildings and the furnishing of equipment. It is coming to be seen, however, in the education of the Negro, as clearly as it has been seen in the education of the youths the world over, that it is the *boy* and not the material product, that is the true object of education.

Consequently the object of the industrial school came to be the thorough training of boys regardless of the cost of the training, so long as it was thoroughly well done.

Even at this point, however, the difficulties were not surmounted. In the first place modern industry has taken great strides since the war, and the teaching of trades is no longer a simple matter. Machinery and long processes of work have greatly changed the work of the carpenter, the ironworker and the shoemaker. A really efficient workman must be today an intelligent man who has had good technical training in addition to thorough common school, and perhaps even higher training. To meet this situation the industrial schools began a further development; they established distinct Trade Schools for the thorough training of better class artisans, and at the same time they sought to preserve for the purposes of general education, such of the simpler processes of elementary trade learning as were best suited therefor. In this differentiation of the Trade School and manual training, the best of the industrial schools simply followed the plain trend of the present educational epoch. A prominent educator tells us that, in Sweden, "In the beginning the economic conception was generally adopted, and everywhere manual training was looked upon as a means of preparing the children of the common people to earn their living. But gradually it came to be recognized that manual training has a more elevated purpose, and one, indeed, more useful in the deeper meaning of the term. It came to be considered as an educative process for the complete moral, physical and intellectual development of the child."

Thus, again, in the manning of trade schools and manual training schools we are thrown back upon the higher training as its source and chief support. There was a time when any aged and worn-out carpenter could teach in a trade school. But not so today. Indeed the demand for college-bred men by a school like Tuskegee, ought to make Mr. Booker T. Washington the firmest friend of higher training. Here he has as helpers the son of a Negro senator, trained in Greek and the humanities, and graduated at Harvard; the son of a Negro congressman and lawyer, trained in Latin and mathematics, and graduated at Oberlin; he has as his wife, a woman who read Virgil and Homer in the same class room with me; he has as college chaplain, a classical graduate of Atlanta University; as teacher of science, a graduate of Fisk; as teacher of history, a graduate of Smith, – indeed some thirty of his chief teachers are college graduates, and instead of studying French grammars in the midst of weeds, or buying pianos for dirty cabins, they are at Mr. Washington's right hand helping him in a noble work. And yet one of the effects of Mr. Washington's propaganda has been to throw doubt upon the expediency of such training for Negroes, as these persons have had.

Men of America, the problem is plain before you. Here is a race transplanted through the criminal foolishness of your fathers. Whether you like it or not the millions are here, and here they will remain. If you do not lift them up, they will pull you down. Education and work are the levers to uplift a people. Work alone will not do it unless inspired by the right ideals and guided

by intelligence. Education must not simply teach work – it must teach Life. The Talented Tenth of the Negro race must be made leaders of thought and missionaries of culture among their people. No others can do this work and Negro colleges must train men for it. The Negro race, like all other races, is going to be saved by its exceptional men.

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The School and Social Progress

John Dewey

We are apt to look at the school from an individualistic standpoint, as something between teacher and pupil, or between teacher and parent. That which interests us most is naturally the progress made by the individual child of our acquaintance, his normal physical development, his advance in ability to read, write, and figure, his growth in the knowledge of geography and history, improvement in manners, habits of promptness, order, and industry – it is from such standards as these that we judge the work of the school. And rightly so. Yet the range of the outlook needs to be enlarged. What the best and wisest parent wants for his own child, that must the community want for all of its children. Any other ideal for our schools is narrow and unlovely; acted upon, it destroys our democracy. All that society has accomplished for itself is put, through the agency of the school, at the disposal of its future members. All its better thoughts of itself it hopes to realize through the new possibilities thus opened to its future self. Here individualism and socialism are at one. Only by being true to the full growth of all the individuals who make it up, can society by any chance be true to itself. And in the self-direction thus given, nothing counts as much as the school, for, as Horace Mann said, "Where anything is growing, one former is worth a thousand re-formers."

Whenever we have in mind the discussion of a new movement in education, it is especially necessary to take the broader, or social view. Otherwise, changes in the school institution and tradition will be looked at as the arbitrary inventions of particular teachers; at the worst transitory fads, and at the best merely improvements in certain details – and this is the plane upon which it is too customary to consider school changes. It is as rational to conceive of the locomotive or the telegraph as personal devices. The modification going on in the method and curriculum of education is as much a product of the changed social situation, and as much an effort to meet the needs of the new society that is forming, as are changes in modes of industry and commerce.

Source: John Dewey, *The School and Society* (Chicago: University of Chicago Press, 1907), pp. 19–44.

It is to this, then, that I especially ask your attention: the effort to conceive what roughly may be termed the "New Education" in the light of larger changes in society. Can we connect this "New Education" with the general march of events? If we can, it will lose its isolated character, and will cease to be an affair which proceeds only from the over-ingenious minds of pedagogues dealing with particular pupils. It will appear as part and parcel of the whole social evolution, and, in its more general features at least, as inevitable. Let us then ask after the main aspects of the social movement; and afterwards turn to the school to find what witness it gives of effort to put itself in line. And since it is quite impossible to cover the whole ground, I shall for the most part confine myself to one typical thing in the modern school movement – that which passes under the name of manual training, hoping if the relation of that to changed social conditions appears, we shall be ready to concede the point as well regarding other educational innovations.

I make no apology for not dwelling at length upon the social changes in question. Those I shall mention are writ so large that he who runs may read. The change that comes first to mind, the one that overshadows and even controls all others, is the industrial one – the application of science resulting in the great inventions that have utilized the forces of nature on a vast and inexpensive scale: the growth of a world-wide market as the object of production, of vast manufacturing centers to supply this market, of cheap and rapid means of communication and distribution between all its parts. Even as to its feebler beginnings, this change is not much more than a century old; in many of its most important aspects it falls within the short span of those now living. One can hardly believe there has been a revolution in all history so rapid, so extensive, so complete. Through it, the face of the earth is making over, even as to its physical forms; political boundaries are wiped out and moved about, as if they were indeed only lines on a paper map; population is hurriedly gathered into cities from the ends of the earth; habits of living are altered with startling abruptness and thoroughness; the search for the truths of nature is infinitely stimulated and facilitated and their application to life made not only practicable, but commercially necessary. Even our moral and religious ideas and interests, the most conservative because the deepest-lying things in our nature, are profoundly affected. That this revolution should not affect education in other than formal and superficial fashion is inconceivable.

Back of the factory system lies the household and neighborhood system. Those of us who are here today need go back only one, two, or at most three generations, to find a time when the household was practically the center in which were carried on, or about which were clustered, all the typical forms of industrial occupation. The clothing worn was for the most part not only made in the house, but the members of the household were usually familiar with the shearing of the sheep, the carding and spinning of the wool, and the plying of the loom. Instead of pressing a button and flooding the house with electric light, the whole process of getting illumination was followed in its toilsome length, from the killing of the animal and the trying of fat, to the

making of wicks and dipping of candles. The supply of flour, of lumber, of foods, of building materials, of household furniture, even of metal ware, of nails, hinges, hammers, etc., was in the immediate neighborhood, in shops which were constantly open to inspection and often centers of neighborhood congregation. The entire industrial process stood revealed, from the production on the farm of the raw materials, till the finished article was actually put to use. Not only this, but practically every member of the household had his own share in the work. The children, as they gained in strength and capacity, were gradually initiated into the mysteries of the several processes. It was a matter of immediate and personal concern, even to the point of actual participation.

We cannot overlook the factors of discipline and of character-building involved in this: training in habits of order and of industry, and in idea of responsibility, of obligation to do something, to produce something, in the world. There was always something which really needed to be done, and a real necessity that each member of the household should do his own part faithfully and in cooperation with others. Personalities which became effective in action were bred and tested in the medium of action. Again, we cannot overlook the importance for educational purposes of the close and intimate acquaintance got with nature at first hand, with real things and materials, with the actual processes of their manipulation, and the knowledge of their social necessities and uses. In all this, there was continual training of observation, of ingenuity, constructive imagination, of logical thought, and of the sense of reality acquired through first-hand contact with actualities. The educative forces of the domestic spinning and weaving, of the saw-mill, the grist-mill, the cooper shop, and the blacksmith forge, were continuously operative.

No number of object-lessons, got up as object-lessons for the sake of giving information, can afford even the shadow of a substitute for acquaintance with the plants and animals of the farm and garden, acquired through actual living among them and caring for them. No training of sense-organs in school, introduced for the sake of training, can begin to compete with the alertness and fullness of sense-life that comes through daily intimacy and interest in familiar occupations. Verbal memory can be trained in committing tasks, a certain discipline of the reasoning powers can be acquired through lessons in science and mathematics; but, after all, this is somewhat remote and shadowy compared with the training of attention and of judgment that is acquired in having to do things with a real motive behind and a real outcome ahead. At present, concentration of industry and division of labor have practically eliminated household and neighborhood occupations – at least for educational purposes. But it is useless to bemoan the departure of the good old days of children's modesty, reverence, and implicit obedience, if we expect merely by bemoaning and by exhortation to bring them back. It is radical conditions which have changed, and only an equally radical change in education suffices. We must recognize our compensations – the increase *in toleration, in breadth of social judgment, the larger acquaintance with*

human nature, the sharpened alertness in reading signs of character and interpreting social situations, greater accuracy of adaptation to differing personalities, contact with greater commercial activities. These considerations mean much to the city-bred child of today. Yet there is a real problem: how shall we retain these advantages, and yet introduce into the school something representing the other side of life – occupations which exact personal responsibilities and which train the child with relation to the physical realities of life?

When we turn to the school, we find that one of the most striking tendencies at present is toward the introduction of so-called manual training, shop-work, and the household arts – sewing and cooking.

This has not been done "on purpose," with a full consciousness that the school must now supply that factor of training formerly taken care of in the home, but rather by instinct, by experimenting and finding that such work takes a vital hold of pupils and gives them something which was not to be got in any other way. Consciousness of its real import is still so weak that the work is often done in a half-hearted, confused, and unrelated way. The reasons assigned to justify it are painfully inadequate or sometimes even positively wrong.

If we were to cross-examine even those who are most favorably disposed to the introduction of this work into our school system, we should, I imagine, generally find the main reasons to be that such work engages the full spontaneous interest and attention of the children. It keeps them alert and active, instead of passive and receptive, it makes them more useful, more capable, and hence more inclined to be helpful at home; it prepares them to some extent for the practical duties of later life – the girls to be more efficient house managers, if not actually cooks and seamstresses; the boys (were our educational system only adequately rounded out into trade schools) for their future vocations. I do not underestimate the worth of these reasons. Of those indicated by the changed attitude of the children I shall indeed have something to say in my next talk, when speaking directly of the relationship of the school to the child. But the point of view is, upon the whole, unnecessarily narrow. We must conceive of work in wood and metal, of weaving, sewing, and cooking, as methods of life not as distinct studies. We must conceive of them in their social significance, as types of the processes by which society keeps itself going, as agencies for bringing home to the child some of the primal necessities of community life, and as ways in which these needs have been met by the growing insight and ingenuity of man; in short, as instrumentalities through which the school itself shall be made a genuine form of active community life, instead of a place set apart in which to learn lessons.

A society is a number of people held together because they are working along common lines, in a common spirit, and with reference to common aims. The common needs and aims demand a growing interchange of thought and growing unity of sympathetic feeling. The radical reason that the present school

cannot organize itself as a natural social unit is because just this element of common and productive activity is absent. Upon the playground, in game and sport, social organization takes place spontaneously and inevitably. There is something to do, some activity to be carried on, requiring natural divisions of labor, selection of leaders and followers, mutual cooperation and emulation. In the schoolroom the motive and the cement of social organization are alike wanting. Upon the ethical side, the tragic weakness of the present school is that it endeavors to prepare future members of the social order in a medium in which the conditions of the social spirit are eminently wanting.

The difference that appears when occupations are made the articulating centers of school life is not easy to describe in words; it is a difference in motive, of spirit and atmosphere. As one enters a busy kitchen in which a group of children are actively engaged in the preparation of food, the psychological difference, the change from more or less passive and inert recipiency and restraint to one of buoyant outgoing energy, is so obvious as fairly to strike one in the face. Indeed, to those whose image of the school is rigidly set the change is sure to give a shock. But the change in the social attitude is equally marked. The mere absorption of facts and truths is so exclusively individual an affair that it tends very naturally to pass into selfishness. There is no obvious social motive for the acquirement of mere learning, there is no clear social gain in success therein. Indeed, almost the only measure for success is a competitive one, in the bad sense of that term – a comparison of results in the recitation or in the examination to see which child has succeeded in getting ahead of others in storing up, in accumulating the maximum of information. So thoroughly is this the prevalent atmosphere that for one child to help another in his task has become a school crime. Where the school work consists in simply learning lessons, mutual assistance, instead of being the most natural form of cooperation and association, becomes a clandestine effort to relieve one's neighbor of his proper duties. Where active work is going on all this is changed. Helping others, instead of being a form of charity which impoverishes the recipient, is simply an aid in setting free the powers and furthering the impulse of the one helped. A spirit of free communication, of interchange of ideas, suggestions, results, both successes and failures of previous experiences, becomes the dominating note of the recitation. So far as emulation enters in, it is in the comparison of individuals, not with regard to the quantity of information personally absorbed, but with reference to the quality of work done – the genuine community standard of value. In an informal but all the more pervasive way, the school life organizes itself on a social basis.

Within this organization is found the principle of school discipline or order. Of course, order is simply a thing which is relative to an end. If you have the end in view of forty or fifty children learning certain set lessons, to be recited to a teacher, your discipline must be devoted to securing that result. But if the end in view is the development of a spirit of social cooperation and community life, discipline must grow out of and be relative to this. There is

little order of one sort where things are in process of construction; there is a certain disorder in any busy workshop; there is not silence; persons are not engaged in maintaining certain fixed physical postures; their arms are not folded; they are not holding their books thus and so. They are doing a variety of things, and there is the confusion, the bustle, that results from activity. But out of occupation, out of doing things that are to produce results, and out of doing these in a social and cooperative way, there is born a discipline of its own kind and per Our whole conception of school discipline changes when we get this point of view. In critical moments we all realize that the only discipline that stands by us, the only training that becomes intuition, is that got through life itself. That we learn from experience, and from books or the sayings of others only as they are related to experience, are not mere phrases. But the school has been so set apart, so isolated from the ordinary conditions and motives of life' that the place where children are sent for discipline is the one place in the world where it is most difficult to get experience – the mother of all discipline worth the name. It is only where a narrow and fixed image of traditional school discipline dominates, that one is in any danger of overlooking that deeper and infinitely wider discipline that comes from having a part to do in constructive work, in contributing to a result which, social in spirit, is none the less obvious and tangible in form – and hence in a form with reference to which responsibility may be exacted and accurate judgment passed.

The great thing to keep in mind, then, regarding the introduction into the school of various forms of active occupation, is that through them the entire spirit of the school is renewed. It has a chance to affiliate itself with life, to become the child's habitat, where he learns through directed living; instead of being only a place to learn lessons having an abstract and remote reference to some possible living to be done in the future. It gets a chance to be a miniature community, an embryonic society. This is the fundamental fact, and from this arise continuous and orderly sources of instruction. Under the industrial regime described, the child, after all, shared in the work, not for the sake of the sharing, but for the sake of the product. The educational results secured were real, yet incidental and dependent. But in the school the typical occupations followed are freed from all economic stress. The aim is not the economic value of the products, but the development of social power and insight. It is this liberation from narrow utilities, this openness to the possibilities of the human spirit that makes these practical activities in the school allies of art and centers of science and history.

The unity of all the sciences is found in geography. The significance of geography is that it presents the earth as the enduring home of the occupations of man. The world without its relationship to human activity is less than a world. Human industry and achievement, apart from their roots in the earth, are not even a sentiment, hardly a name. The earth is the final source of all man's food. It is his continual shelter and protection, the raw material

of all his activities, and the home to whose humanizing and idealizing all his achievement returns. It is the great field, the great mine, the great source of the energies of heat, light, and electricity; the great scene of ocean, stream, mountain, and plain, of which all our agriculture and mining and lumbering, all our manufacturing and distributing agencies, are but the partial elements and factors. It is through occupations determined by this environment that mankind has made its historical and political progress. It is through these occupations that the intellectual and emotional interpretation of nature has been developed. It is through what we do in and with the world that we read its meaning and measure its value. In educational terms, this means that these occupations in the school shall not be mere practical devices or modes of routine employment, the gaining of better technical skill as cooks, sempstresses, or carpenters, but active centers of, scientific insight into natural materials and processes, points of departure whence children shall be led out into a realization of the historic development of man. The actual significance of this can be told better through one illustration taken from actual school work than by general discourse.

There is nothing which strikes more oddly upon the average intelligent visitor than to see boys as well as girls of ten, twelve, and thirteen years of age engaged in sewing and weaving. If we look at this from the standpoint of preparation of the boys for sewing on buttons and making patches, we get a narrow and utilitarian conception – a basis that hardly justifies giving prominence to this sort of work in the school. But if we look at it from another side, we find that this work gives the point of departure from which the child can trace and follow the progress of mankind in history, getting an insight also into the materials used and the mechanical principles involved. In connection with these occupations, the historic development of man is recapitulated for example, the children are first given the raw material – the flax, the cotton plant, the wool as it comes from the back of the sheep (if we could take them to the place where the sheep are sheared, so much the better). Then a study is made of these materials from the standpoint of their adaptation to the uses to which they may be put. For instance, a comparison of the cotton fiber with wool fiber is made. I did not know until the children told me, that the reason for the late development of the cotton industry as compared with the woolen is, that the cotton fiber is so very difficult to free by hand from the seeds. The children in one group worked thirty minutes freeing cotton fibers from the boll and seeds, and succeeded in getting out less than one ounce. They could easily believe that one person could only gin one pound a day by hand, and could understand why their ancestors wore woolen instead of cotton clothing. Among other things discovered as affecting their relative utilities, was the shortness of the cotton fiber as compared with that of wool, the former being one-tenth of an inch in length, while that of the latter is an inch in length; also that the fibers of cotton are smooth and do not cling together, while the wool has a certain roughness which makes the fibers stick, thus assisting the spinning. The children worked this out for themselves with the actual material, aided by questions and suggestions from the teacher.

They then followed the processes necessary for working the fibers up into cloth. They re-invented the first frame for carding the wool – a couple of boards with sharp pins in them for scratching it out. They re-devised the simplest process for spinning the wool – a pierced stone or some other weight through which the wool is passed, and which as it is twirled draws out the fiber; next the top, which was spun on the floor, while the children kept the wool in their hands until it was gradually drawn out and wound upon it. Then the children are introduced to the invention next in historic order, working it out experimentally, thus seeing its necessity, and tracing its effects, not only upon that particular industry, but upon modes of social life – in this way passing in review the entire process up to the present complete loom, and all that goes with the application of science in the use of our present available powers. I need not speak of the science involved in this – the study of the fibers, of geographical features, the conditions under which raw materials are grown, the great centers of manufacture and distribution, the physics involved in the machinery of production; nor, again, of the historical side – the influence which these inventions have had upon humanity. You can concentrate the history of all mankind into the evolution of the flax, cotton, and wool fibers into clothing. I do not mean that this is the only, or the best, center. But it is true that certain very real and important avenues to the consideration of the history of the race are thus opened – that the mind is introduced to much more fundamental and controlling influences than usually appear in the political and chronological records that pass for history.

Now, what is true of this one instance of fibers used in fabrics (and, of course, I have only spoken of one or two elementary phases of that) is true in its measure of every material used in every occupation, and of the processes employed.

The occupation supplies the child with a genuine motive; it gives him experience at first hand; it brings him into contact with realities. It does all this, but in addition it is liberalized throughout by translation into its historic values and scientific equivalencies. With the growth of the child's mind in power and knowledge it ceases to be a pleasant occupation merely, and becomes more and more a medium, an instrument, an organ – and is thereby transformed.

This, in turn, has its bearing upon the teaching of science. Under present conditions, all activity, to be successful, has to be directed somewhere and somehow by the scientific expert – it is a case of applied science. This connection should determine its place in education. It is not only that the occupations, the so-called manual or industrial work in the school, give the opportunity for the introduction of science which illuminates them, which makes them material, freighted with meaning, instead of being mere devices of hand and eye; but that the scientific insight thus gained becomes an indispensable instrument of free and active participation in modern social life. Plato somewhere speaks of the slave as one who in his actions does not express his own ideas, but those of some other man. It is our social problem now, even more

urgent than in the time of Plato, that method, purpose, understanding, shall exist in the consciousness of the one who does the work, that his activity shall have meaning to himself.

When occupations in the school are conceived in this broad and generous way, I can only stand lost in wonder at the objections so often heard, that such occupations are out of place in the school because they are materialistic, utilitarian, or even menial in their tendency. It sometimes seems to me that those who make these objections must live in quite another world. The world in which most of us live is a world in which everyone has a calling and occupation, something to do. Some are managers and others are subordinates. But the great thing for one as for the other is that each shall have had the education which enables him to see within his daily work all there is in it of large and human significance. How many of the employed are today mere appendages to the machines which they operate! This may be due in part to the machine itself, or to the regime which lays so much stress upon the products of the machine; but it is certainly due in large part to the fact that the worker has had no opportunity to develop his imagination and his sympathetic insight as to the social and scientific values found in his work. At present, the impulses which lie at the basis of the industrial system are either practically neglected or positively distorted during the school period. Until the instincts of construction and production are systematically laid hold of in the years of childhood and youth, until they are trained in social directions, enriched by historical interpretation, controlled and illuminated by scientific methods, we certainly are in no position even to locate the source of our economic evils, much less to deal with them effectively.

If we go back a few centuries, we find a practical monopoly of learning. The term possession of learning as, indeed, a happy one. Learning was a class matter. This was a necessary result of social conditions. There were not in existence any means by which the multitude could possibly have access to intellectual resources. These were stored up and hidden away in manuscripts. Of these there were at best only a few, and it required long and toilsome preparation to be able to do anything with them. A high-priesthood of learning, which guarded the treasury of truth and which doled it out to the masses under severe restrictions, was the inevitable expression of these conditions. But, as a direct result of the industrial revolution of which we have been speaking, this has been changed. Printing was invented; it was made commercial. Books, magazines, papers were multiplied and cheapened. As a result of the locomotive and telegraph, frequent, rapid, and cheap intercommunication by mails and electricity was called into being. Travel has been rendered easy; freedom of movement, with its accompanying exchange of ideas, indefinitely facilitated. The result has been an intellectual revolution. Learning has been put into circulation. While there still is, and probably always will be, a particular class having the special business of inquiry in hand, a distinctively learned class is henceforth out of the question. It is an anachronism. Knowledge is no longer an immobile solid; it has been liquefied. It is actively moving in all the currents of society itself.

It is easy to see that this revolution, as regards the materials of knowledge, carries with it a marked change in the attitude of the individual. Stimuli of an intellectual sort pour in upon us in all kinds of ways. The merely intellectual life, the life of scholarship and of learning, thus gets a very altered value. Academic and scholastic, instead of being titles of honor, are becoming terms of reproach.

But all this means a necessary change in the attitude of the school, one of which we are as yet far from realizing the full force. Our school methods, and to a very considerable extent our curriculum, are inherited from the period when learning and command of certain symbols, affording as they did the only access to learning, were all-important. The ideals of this period are still largely in control, even where the outward methods and studies have been changed. We sometimes hear the introduction of manual training, art and science into the elementary, and even the secondary schools, deprecated on the ground that they tend toward the production of specialists – that they detract from our present scheme of generous, liberal culture. The point of this objection would be ludicrous if it were not often so effective as to make it tragic. It is our present education which is highly specialized, one-sided and narrow. It is an education dominated almost entirely by the mediaeval conception of learning. It is something which appeals for the most part simply to the intellectual aspect of our natures, our desire to learn, to accumulate information, and to get control of the symbols of learning; not to our impulses and tendencies to make, to do, to create, to produce, whether in the form of utility or of art. The very fact that manual training, art and science are objected to as technical, as tending toward mere specialism, is of itself as good testimony as could be offered to the specialized aim which controls current education. Unless education had been virtually identified with the exclusively intellectual pursuits, with learning as such, all these materials and methods would be welcome, would be greeted with the utmost hospitality.

While training for the profession of learning is regarded as the type of culture, as a liberal education, that of a mechanic, a musician, a lawyer, a doctor, a farmer, a merchant, or a railroad manager is regarded as purely technical and professional. The result is that which we see about us everywhere – the division into "cultured" people and "workers," the separation of theory and practice. Hardly one per cent of the entire school population ever attains to what we call higher education; only five per cent to the grade of our high school; while much more than half leave on or before the completion of the fifth year of the elementary grade. The simple facts of the case are that in the great majority of human beings the distinctively intellectual interest is not dominant. They have the so-called practical impulse and disposition. In many of those in whom by nature intellectual interest is strong, social conditions prevent its adequate realization. Consequently by far the larger number of pupils leave school as soon as they have acquired the rudiments of learning, as soon as they have enough of the symbols of reading, writing, and calculating to be of practical use to them in getting a living. While our

educational leaders are talking of culture, the development of personality, etc., as the end and aim of education, the great majority of those who pass under the tuition of the school regard it only as a narrowly practical tool with which to get bread and butter enough to eke out a restricted life. If we were to conceive our educational end and aim in a less exclusive way, if we were to introduce into educational processes the activities which appeal to those whose dominant interest is to do and to make, we should find the hold of the school upon its members to be more vital, more prolonged, containing more of culture.

But why should I make this labored presentation? The obvious fact is that our social life has undergone a thorough and radical change. If our education is to have any meaning for life, it must pass through an equally complete transformation. This transformation is not something to appear suddenly, to be executed in a day by conscious purpose. It is already in progress. Those modifications of our school system which often appear (even to those most actively concerned with them, to say nothing of their spectators) to be mere changes of detail, mere improvement within the school mechanism, are in reality signs and evidences of evolution. The introduction of active occupations, of nature study, of elementary science, of art, of history; the relegation of the merely symbolic and formal to a secondary position; the change in the moral school atmosphere, in the relation of pupils and teachers – of discipline; the introduction of more active, expressive, and self-directing factors – all these are not mere accidents, they are necessities of the larger social evolution. It remains but to organize all these factors, to appreciate them in their fullness of meaning, and to put the ideas and ideals involved into complete, uncompromising possession of our school system. To do this means to make each one of our schools an embryonic community life, active with types of occupations that reflect the life of the larger society, and permeated throughout with the spirit of art, history, and science. Then the school introduces and trains each child of society into membership within such a little community, saturating him with the spirit of service, and providing him with the instruments of effective self-direction, we shall have the deepest and best guarantee of a larger society which is worthy, lovely, and harmonious.

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The Contribution of Psychology to Education

Edward L. Thorndike

Psychology is the science of the intellects, characters and behavior of animals including man. Human education is concerned with certain changes in the intellects, characters and behavior of men, its problems being roughly included under these four topics: Aims, materials, means and methods.

Psychology contributes to a better understanding of the aims of education by defining them, making them clearer; by limiting them, showing us what can be done and what can not; and by suggesting new features that should be made parts of them.

Psychology makes ideas of educational aims clearer. When one says that the aim of education is culture, or discipline, or efficiency, or happiness, or utility, or knowledge, or skill, or the perfection of all one's powers, or development, one's statements and probably one's thoughts, need definition. Different people, even amongst the clearest-headed of them, do not agree concerning just what culture is, or just what is useful. Psychology helps here by requiring us to put our notions of the aims of education into terms of the exact changes that education is to make, and by describing for us the changes which do actually occur in human beings.

Psychology helps to measure the probability that an aim is attainable. For example, certain writers about education state or imply that the knowledge and skill and habits of behavior which are taught to the children of today are of service not only to this generation and to later generations through the work this generation does, but also to later generations forever through the inheritance of increased capacity for knowledge and skill and morals. But if the mental and moral changes made in one generation are not transmitted by heredity to the next generation, the improvement of the race by direct transfer of acquisitions is a foolish, because futile aim.

Source: *The Journal of Educational Psychology*, 1 (1910): 5–12.

Psychology enlarges and refines the aim of education. Certain features of human nature may be and have been thought to be unimportant or even quite valueless because of ignorance of psychology. Thus for hundreds of years in the history of certain races even the most gifted thinkers of the race have considered it beneath the dignity of education to make physical health an important aim. Bodily welfare was even thought of as a barrier to spiritual growth, an undesirable interferer with its proper master. Education aimed to teach it its proper place, to treat it as a stupid and brutish slave. It is partly because psychology has shown the world that the mind is the servant and co-worker as well as the master of the body, that the welfare of our minds and morals is intimately bound up with the welfare of our bodies, particularly of our central nervous systems, that today we can all see the eminence of bodily health as an aim of education.

To an understanding of the material of education, psychology is the chief contributor. Psychology shares with anatomy, physiology, sociology, anthropology, history and the other sciences that concern changes in man's bodily or mental nature the work of providing thinkers and workers in the field of education with knowledge of the material with which they work. Just as the science and art of agriculture depend upon chemistry and botany, so the art of education depends upon physiology and psychology.

A complete science of psychology would tell every fact about every one's intellect and character and behavior, would tell the cause of every change in human nature, would tell the result which every educational force – every act of every person that changed any other or the agent himself – would have. It would aid us to use human beings for the world's welfare with the same surety of the result that we now have when we use falling bodies or chemical elements. In proportion as we get such a science we shall become masters of our own souls as we now are masters of heat and light. Progress toward such a science is being made.

Psychology contributes to understanding of the means of education, first, because the intellects and characters of any one's parents, teachers and friends are very important means of educating him, and, second, because the influence of any other means, such as books, maps or apparatus, cannot be usefully studied apart from the human nature which they are to act upon.

Psychology contributes to knowledge of methods of teaching in three ways. First, methods may be deduced outright from the laws of human nature. For instance, we may infer from psychology that the difficulty pupils have in learning to divide by a fraction is due in large measure to the habit established by all the thousands of previous divisions which they have done or seen, the habit, that is, of "division – decrease" or "number divided – result smaller than the number." We may then devise or select such a method as will reduce this interference from the old habits to a minimum without weakening the old habits in their proper functioning.

Second, methods may be chosen from actual working experience, regardless of psychology, as a starting point. Thus it is believed that in the elementary school a class of fifteen pupils for one teacher gives better results than either a class of three or a class of thirty. Thus, also, it is believed that family life is better than institutional life in its effects upon character and enterprise. Thus, also, it is believed that in learning a foreign language the reading of simple discussions of simple topics is better than the translation of difficult literary masterpieces that treat subtle and complex topics. Even in such cases psychology may help by explaining *why* one method does succeed better and so leading the way to new insights regarding other questions not yet settled by experience.

Third, in all cases psychology, by its methods of measuring knowledge and skill, may suggest means to test and verify or refute the claims of any method. For instance, there has been a failure on the part of teachers to decide from their classroom experience whether it is better to teach the spelling of a pair of homonyms together or apart in time. But all that is required to decide the question for any given pair is for enough teachers to use both methods with enough different classes, keeping everything else except the method constant, and to measure the errors in spelling the words thereafter in the two cases. Psychology, which teaches us how to measure changes in human nature, teaches us how to decide just what the results of any method of teaching are.

So far I have outlined the contribution of psychology to education from the point of view of the latter's problems. I shall now outline very briefly the work being done by psychologists which is of special significance to the theory and practice of education and which may be expected to result in the largest and most frequent contributions.

It will, of course, be understood that directly or indirectly, soon or late, every advance in the sciences of human nature will contribute to our success in controlling human nature and changing it to the advantage of the common weal. If certain lines of work by psychologists are selected for mention here, it is only because they are the more obvious, more direct and, so far as can now be seen, greater aids to correct thinking about education.

The first line of work concerns the discovery and improvement of means of measurement of intellectual functions. (The study of means of measuring moral functions such as prudence, readiness to sacrifice an immediate for a later good, sympathy, and the like, has only barely begun.) Beginning with easy cases such as the discrimination of sensory differences, psychology has progressed to measuring memory and accuracy of movement, fatigue, improvement with practice, power of observing small details, the quantity, rapidity and usefulness of associations, and even to measuring so complex a function as general intelligence and so subtle a one as suggestibility.

The task of students of physical science in discovering the thermometer, galvanometer and spectroscope, and in defining the volt, calorie erg, and ampère, is being attempted by psychologists in the sphere of human nature

and behavior. How important such work is to education should be obvious. At least three-fourths of the problems of educational practice are problems whose solution depends upon the *amount* of some change in boys and girls. Of two methods, which gives the *greater* skill? Is the gain in general ability from a "disciplinary" study so great as to outweigh the loss in specially useful habits? Just how much more does a boy learn when thirty dollars a year is spent for his teaching than when only twenty dollars is spent? Units in which to measure the changes wrought by education are essential to an adequate science of education. And, though the students of education may establish these units by their own investigations, they can use and will need all the experience of psychologists in the search for similar units.

The second line of work concerns race, sex, age and individual differences in all the many elements of intellect and character and behavior.

How do the Igorottes, Ainus, Japanese and Esquimaux differ in their efficiency in learning to operate certain mechanical contrivances? Is the male sex more variable than the female in mental functions? What happens to keenness of sensory discrimination with age? How do individuals of the same race, sex and age differ in efficiency in perceiving small visual details or in accuracy in equaling a given length, or in the rapidity of movement? These are samples of many questions which psychologists have tried to answer by appropriate measurements. Such knowledge of the differences which exist amongst men for whatever reason is of service to the thinker about the particular differences which education aims to produce between a man and his former self.

These studies of individual differences or variability are being supplemented by studies of correlations. How far does superior vividness and fidelity in imagery from one sense go with inferiority in other sorts of imagery? To what extent is motor ability a symptom of intellectual ability? Does the quick learner soon forget? What are the mental types that result from the individual variations in mental functions and their inter-correlations? Psychology has already determined with more or less surety the answers to a number of such questions instructive in their bearing upon both scientific insight into human nature and practical arrangements for controlling it.

The extent to which the intellectual and moral differences found in human beings are consequences of their original nature and determined by the ancestry from which they spring, is a matter of fundamental importance for education. So also is the manner in which ancestral influence operates. Whether such qualities as leadership, the artistic temperament, originality, persistence, mathematical ability, or motor skill are represented in the germs each by one or a few unit characters so that they "Mendelize" in inheritance, or whether they are represented each by the coöperation of so many unit characters that the laws of their inheritance are those of "blending" is a question whose answer will decide in great measure the means to be employed for racial improvement. Obviously both the amount and the mode of operation of ancestral influence upon intellect and character are questions which psychology should and does investigate.

The results and methods of action of the many forces which operate in childhood and throughout life to change a man's original nature are subjects for study equally appropriate to the work of a psychologist, a sociologist or a student of education, but the last two will naturally avail themselves of all that the first achieves. Although as yet the studies of such problems are crude, speculative and often misguided, we may hope that the influence of climate, food, city life, the specialization of industry, the various forms of the family and of the state, the different "studies" of the schools, and the like will come to be studied by as careful psychologists and with as much care as is now the case with color-vision or the perception of distance. The foundation upon which education builds is the equipment of instincts and capacity given by nature apart from training. Just as knowledge of the peculiar inheritance characteristic of any individual is necessary to efficient treatment of him, so knowledge of the unlearned tendencies of man as a species is necessary to efficient planning for education in general. Partly in conscious response to this demand and partly as a result of growing interest in comparative and genetic psychology, there have been in the last two decades many studies by psychologists of both the general laws of instinct and their particular natures, dates of appearance and disappearance, and conditions of modifiability. The instincts of attitude – of interest and aversion – are of course to be included here, as well as the tendencies to more obviously effective responses.

It is unfortunately true that the unlearned tendencies to respond of ants and chickens have been studied with more care than those of men, and also that the extreme complexity and intimate mixture with habits in the case of human instincts prevent studies of them, even when made with great care, from giving entirely unambiguous and elegant results. But the educational theorist or practitioner who should conclude that his casual observations of children in homes and schools needs no reinforcement from the researches of psychologists would be making the same sort of, though not so great, an error as the pathologist or physician who should neglect the scientific studies of bacteria and protozoa. Also the psychologist who condemns these studies *in toto* because they lack the precision and surety of his own studies of sensations and perceptual judgments is equally narrow, though from a better motive.

The modifications of instincts and capacities into habits and powers and the development of the latter are the subjects of researches in dynamic psychology which are replacing the vague verbal and trite maxims of what used to be called "applied psychology" by definite insights into reality far in advance of those which common-sense sagacity alone can make. We are finding out when and why "practice makes perfect" and when and why it does not; wherein the reinforcement of a connection between situation and response by resulting satisfaction is better than the inhibition of alternative connections by discomfort and wherein it is not; what the law of diminishing returns from equal amounts of practice is, what it implies, and how it is itself

limited; how far the feelings of achievement, of failure and of fatigue are symptomatic of progress, retardation and unfitness for work. Such a list of topics could be much extended even now and is being increased rapidly as more psychologists and more gifted psychologists come to share in the study of the learning process.

Only twenty years ago a student could do little more than add to his own common-sense deductions from the common facts of life the ordered series of similar deductions by the sagacious Bain. Bain utilized all the psychology of his day as well as the common fund of school-room experience, but today his book is hopelessly outgrown. Although it was the source of the minor books on the topic during the eighties and nineties, no one would now think of presenting the facts of the science of education by a revised edition of Bain.

Other lines of psychological work deserve more than mention. Incidental contributions from studies of sensory and perceptual processes, imagery and memory, attention and distraction, facilitation, inhibition and fatigue, imitation and suggestion, the rate and accuracy of movement and other topics – even from studies made with little or no concern about the practical control of human nature – sum up to a body of facts which do extend and economize that control. The special psychology of babies, children and adolescents is obviously important to education. False infant psychology or false child psychology is harmful, not because it is infant psychology, but because it is false.

I give only mention to these so as to save space in which to call attention to another relation between psychology and education which is not sufficiently known. The science of education can and will itself contribute abundantly to psychology. Not only do the laws derived by psychology from simple, specially arranged experiments help us to interpret and control mental action under the conditions of school-room life. School-room life itself is a vast laboratory in which are made thousands of experiments of the utmost interest to "pure" psychology. Not only does psychology help us to understand the mistakes made by children in arithmetic. These mistakes afford most desirable material for studies of the action of the laws of association, analysis and selective thinking. Experts in education studying the responses to school situations for the sake of practical control will advance knowledge not only of the mind as a learner under school conditions but also of the mind for every point of view.

Indeed I venture to predict that this journal will before many years contain a notable proportion of articles reporting answers to psychological questions got from the facts of educational experience, in addition to its list of papers reporting answers to educational questions got from the experiments of the laboratory.

All that is here written may seem very obvious and needless, and meet the tragic fate of being agreed with by every one who reads it. I hope that it is obvious and needless, and that the relation between psychology and education is not, in the mind of any competent thinker, in any way an exception to the general case that action in the world should be guided by the truth about the world; and that any truth about it will directly or indirectly, soon or late, benefit action.

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History of Methods

Maria Montessori

If we are to develop a system of scientific pedagogy, we must, then, proceed along lines very different from those which have been followed up to the present time. The transformation of the school must be contemporaneous with the preparation of the teacher. For if we make of the teacher an observer, familiar with the experimental methods, then we must make it possible for her to observe and to experiment in the school. The fundamental principle of scientific pedagogy must be, indeed, the *liberty of the pupil*; – such liberty as shall permit a development of individual, spontaneous manifestations of the child's nature. If a new and scientific pedagogy is to arise from the *study of the individual*, such study must occupy itself with the observation of *free* children. In vain should we await a practical renewing of pedagogical methods from methodical examinations of pupils made under the guidance offered to-day by pedagogy, anthropology, and experimental psychology.

Every branch of experimental science has grown out of the application of a method peculiar to itself. Bacteriology owes its scientific content to the method of isolation and culture of microbes. Criminal, medical, and pedagogical anthropology owe their progress to the application of anthropological methods to individuals of various classes, such as criminals, the insane, the sick of the clinics, scholars. So experimental psychology needs as its starting point an exact definition of the technique to be used in making the experiment.

To put it broadly, it is important to define *the method*, *the technique*, and from its application to *await* the definite result, which must be gathered entirely from actual experience. One of the characteristics of experimental sciences is to proceed to the making of an experiment *without preconceptions of any sort* as to the final result of the experiment itself. For example, should we wish to make scientific observations concerning the development of the head as related to varying degrees of intelligence, one of the conditions of such an experiment would be to ignore, in the taking of the measurements, which were the most intelligent and which the most backward among the

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Source: Maria Montessori, *The Montessori Methods*. Translated by Anne Everett George (New York: Frederick A. Stokes Company, 1912), pp. 28–47.

scholars examined. And this because the preconceived idea that the most intelligent should have the head more fully developed will inevitably alter the results of the research. He who experiments must, while doing so, divest himself of every preconception. It is clear then that if we wish to make use of a method of experimental psychology, the first thing necessary is to renounce all former creeds and to proceed by means of the *method* in the search for truth.

We must not start, for example, from any dogmatic ideas which we may happen to have held upon the subject of child psychology. Instead, we must proceed by a method which shall tend to make possible to the child complete liberty. This we must do if we are to draw from the observation of his spontaneous manifestations conclusions which shall lead to the establishment of a truly scientific child psychology. It may be that such a method holds for us great surprises, unexpected possibilities. Child psychology and pedagogy must establish their content by successive conquests arrived at through the method of experimentation.

Our problem then, is thise to establish the *method peculiar* to experimental pedagogy. It cannot be that used in other experimental sciences. It is true that scientific pedagogy is rounded out by hygiene, anthropology, and psychology, and adopts in part the technical method characteristic of all three, although limiting itself to a special study of the individual to be educated. But in pedagogy this study of the individual, though it must accompany the very different work of *education*, is a limited and secondary part of the science as a whole.

This present study deals in part with the *method* used in experimental pedagogy, and is the result of my experiences during two years in the "Children's Houses." I offer only a beginning of the method, which I have applied to children between the ages of three and six. But I believe that these tentative experiments, because of the surprising results which they have given, will be the means of inspiring a continuation of the work thus undertaken. Indeed, although our educational system, which experience has demonsrrated to be excellent, is not yet entirely completed, it nevertheless constitutes a system well enough established to be practical in all institutions where young children are cared for, and in the first elementary classes.

Perhaps I am not exact when I say that the present work springs from two years of experience. I do not believe that these later attempts of mine could alone have rendered possible all that I set forth in this book. The origin of the educational system in use in the "Children's Houses" is much more remote, and if this experience with normal children seems indeed rather brief, it should be remembered that it sprang from preceding pedagogical experiences with abnormal children, and that considered in this way, it represents a long and thoughtful endeavour. About fifteen years ago, being assistant doctor at the Psychiatric Clinic of the University of Rome, I had occasion to frequent the insane asylums to study the sick and to select subjects for the clinics. In this way I became interested in the idiot children who were at that time housed in the general insane asylums. In those days thyroid organotherapy was in full

development, and this drew the attention of physicians to deficient children. I myself, having completed my regular hospital services, had already turned my attention to the study of children's diseases.

It was thus that, being interested in the idiot children, I became conversant with the special method of education devised for these unhappy little ones by Edward Ségun, and was led to study thoroughly the idea, then beginning to be prevalent among the physicians, of the efficacy of "pedagogical treatment" for various morbid forms of disease such as deafness, paralysis, idiocy, rickets, etc. The fact that pedagogy must join with medicine in the treatment of disease was the practical outcome of the thought of the time. And because of this tendency the method of treating disease by gymnastics became widely popular. I, however, differed from my colleagues in that I felt that mental deficiency presented chiefly a pedagogical, rather than mainly a medical, problem.

Much was said in the medical congresses of the medico-pedagogic method for the treatment and education of the feeble minded, and I expressed my differing opinion in an address on *Moral Education* at the Pedagogical Congress of Turin in 1898. I believe that I touched a chord already vibrant, because the idea, making its way among the physicians and elementary teachers, spread in a flash as presenting a question of lively interest to the school. In fact I was called upon by my master, Guido Baccelli, the great Minister of Education, to deliver to the teachers of Rome a course of lectures on the education of feeble-minded children. This course soon developed into the State Orthophrenic School, which I directed for more than two years. In this school we had an all-day class of children composed of those who in the elementary schools were considered hopelessly deficient. Later on, through the help of a philanthropic organisation, there was founded a Medical Pedagogic Institute where, besides the children from the public schools, we brought together all of the idiot children from the insane asylums in Rome.

I spent these two years with the help of my colleagues in preparing the teachers of Rome for a special method of observation and education of feeble-minded children. Not only did I train teachers, but what was much more important, after I had been in London and Paris for the purpose of studying in a practical way the education of deficients, I gave myself over completely to the actual teaching of the children, directing at the same time the work of the other teachers in our institute. I was more than an elementary teacher, for I was present, or directly taught the children, from eight in the morning to seven in the evening without interruption. These two years of practice are my first and indeed my true degree in pedagogy. From the very beginning of my work with deficient children (1898 to 1900) I felt that the methods which I used had in them nothing peculiarly limited to the instruction of idiots. I believed that they contained educational principles *more rational* than those in use, so much more so, indeed, that through their means an inferior mentality would be able to grow and develop. This feeling, so deep as to be in the nature of an intuition, became my controlling idea after I had left the school for deficients, and, little by little, I became convinced that similar methods

applied to normal children would develop or set free their personality in a marvellous and surprising way.

It was then that I began a genuine and thorough study of what is known as remedial pedagogy, and, then, wishing to undertake the study of normal pedagogy and of the principles upon which it is based, I registered as a student of philosophy at the University. A great faith animated me, and although I did not know that I should ever be able to test the truth of my idea, I gave up every other occupation to deepen and broaden its conception. It was almost as if I prepared myself for an unknown mission. The methods for the education of deficients had their origin at the time of the French Revolution in the work of a physician whose achievements occupy a prominent place in the history of medicine, as he was the founder of that branch of medical science which to-day is known as Otiatria (diseases of the ear). He was the first to attempt a methodical education of the sense of hearing. He made these experiments in the institute for deaf mutes founded in Paris by Pereire, and actually succeeded in making the semi-deaf hear clearly. Later on, having in charge for eight years the idiot boy known as "the wild boy of Aveyron," he extended to the treatment of all the senses those educational methods which had already given such excellent results in the treatment of the sense of hearing. A student of Pinel, Itard was the first educator to practise *the observation* of the pupil in the way in which the sick are observed in the hospitals, especially those suffering from diseases of the nervous system.

The pedagogic writings of Itard are most interesting and minute descriptions of educational efforts and experiences, and anyone reading them to-day must admit that they were practically the first attempts at experimental psychology. But the merit of having completed a genuine educational system for deficient children was due to Edward Séguin, first a teacher and then a physician. He took the experiences of Itard as his starting point, applying these methods, modifying and completing them during a period of ten years' experience with children taken from the insane asylums and placed in a little school in Rue Pigalle in Paris. This method was described for the first time in a volume of more than six hundred pages, published in Paris in 1846, with the title: "Traitement Moral, Hygiène et Education des Idiots." Later Séguin emigrated to the United States of America where he founded many institutions for deficients, and where, after another twenty years of experience, he published the second edition of his method, under a very different title: "Idiocy and its Treatment by the Physiological Method." This volume was published in New York in 1866, and in it Séguin had carefully defined his method of education, calling it the *physiological method*. He no longer referred in the title to a method for the "education of idiots" as if the method were special to them, but spoke now of idiocy treated by a physiological method. If we consider that pedagogy always had psychology as its base, and that Wundt defines a "physiological psychology," the coincidence of these ideas must strike us, and lead us to suspect in the physiological method some connection with physiological psychology.

While I was assistant at the Psychiatric Clinic, I had read Edward Séguin's French book, with great interest. But the English book which was published in New York twenty years later, although it was quoted in the works about special education by Bourneville, was not to be found in any library. I made a vain quest for it, going from house to house of nearly all the English physicians, who were known to be specially interested in deficient children, or who were superintendents of special schools. The fact that this book was unknown in England, although it had been published in the English language, made me think that the Séguin system had never been understood. In fact, although Séguin was constantly quoted in all the publications dealing with institutions for deficients, the educational *applications* described, were quite different from the applications of Séguin's system.

Almost everywhere the methods applied to deficients are more or less the same as those in use for normal children. In Germany, especially, a friend who had gone there in order to help me in my researches, noticed that although special materials existed here and there in the pedagogical museums of the schools for deficients, these materials were rarely used. Indeed, the German educators hold the principle that it is well to adapt to the teaching of backward children, the same method used for normal ones; but these methods are much more objective in Germany than with us.

At the Bicêtre, where I spent some time, I saw that it was the didactic apparatus of Séguin far more than his *method* which was being used, although the French text was in the hands of the educators. The teaching there was purely mechanical, each teacher following the rules according to the letter. I found, however, wherever I went, in London as well as in Paris, a desire for fresh counsel and for new experiences, since far too often Séguin's claim that with his methods the education of idiots was actually possible, had proved only a delusion. After this study of the methods in use throughout Europe I concluded my experiments upon the deficients of Rome, and taught them throughout two years. I followed Séguin's book, and also derived much help from the remarkable experiments of Itard.

Guided by the work of these two men, I had manufactured a great variety of didactic material. These materials, which I have never seen complete in any institution, became in the hands of those who knew how to apply them, a most remarkable and efficient means, but unless rightly presented, they failed to attract the attention of the deficients. I felt that I understood the discouragement of those working with feebleminded children, and could see why they had, in so many cases, abandoned the method. The prejudice that the educator must place himself on a level with the one to be educated, sinks the teacher of deficients into a species of apathy. He accepts the fact that he is educating an inferior personality, and for that very reason he does not succeed. Even so those who teach little children too often have the idea that they are educating babies and seek to place themselves on the child's level by approaching him with games, and often with foolish stories. Instead of all this, we must know how to call to the *man* which lies dormant

within the soul of the child. I felt this, intuitively, and believed that not the didactic material, but my voice which called to them, *awakened* the children, and encouraged them to use the didactic material, and through it, to educate themselves. I was guided in my work by the deep respect which I felt for their misfortune, and by the love which these unhappy children know how to awaken in those who are near them.

Séguin, too, expressed himself in the same way on this subject. Reading his patient attempts, I understand clearly that the first didactic material used by him was *spiritual*. Indeed, at the close of the French volume, the author, giving a résumé of his work, concludes by saying rather sadly, that all he has established will be lost or useless, if the *teachers* are not prepared for their work. He holds rather original views concerning the preparation of teachers of deficients. He would have them good to look upon, pleasant-voiced, careful in every detail of their personal appearance, doing everything possible to make themselves attractive. They must, he says, render themselves attractive in voice and manner, since it is their task to awaken souls which are frail and weary, and to lead them forth to lay hold upon the beauty and strength of life.

This belief that we must act upon the spirit, served as a sort of *secret key*, opening to me the long series of didactic experiments so wonderfully analysed by Edward Séguin, – experiments which, properly understood, are really most efficacious in the education of idiots. I myself obtained most surprising results through their application, but I must confess that, while my efforts showed themselves in the intellectual progress of my pupils, a peculiar form of exhaustion prostrated me. It was as if I gave to them some vital force from within me. Those things which we call encouragement, comfort, love, respect, are drawn from the soul of man, and the more freely we give of them, the more do we renew and reinvigorate the life about us.

Without such inspiration the most perfect *external stimulus* may pass unobserved. Thus the blind Saul, before the glory of the sun, exclaimed, "This? – It is the dense fog!"

Thus prepared, I was able to proceed to new experiments on my own account. This is not the place for a report of these experiments, and I will only note that at this time I attempted an original method for the teaching of reading and writing, a part of the education of the child which was most imperfectly treated in the works of both Itard and Séguin.

I succeeded in teaching a number of the idiots from the asylums both to read and to write so well that I was able to present them at a public school for an examination together with normal children. And they passed the examination successfully. These results seemed almost miraculous to those who saw them. To me, however, the boys from the asylums had been able to compete with the normal children only because they had been taught in a different way. They had been helped in their psychic development, and the normal children had, instead, been suffocated, held back. I found myself thinking

that if, some day, the special education which had developed these idiot children in such a marvellous fashion, could be applied to the development of normal children, the "miracle" of which my friends talked would no longer be possible. The abyss between the inferior mentality of the idiot and that of the normal brain can never be bridged if the normal child has reached his full development. While everyone was admiring the progress of my idiots, I was searching for the reasons which could keep the happy healthy children of the common schools on so low a plane that they could be equalled in tests of intelligence by my unfortunate pupils!

One day, a directress in the Institute for Deficients, asked me to read one of the prophecies of Ezekiel which had made a profound impression upon her, as it seemed to prophesy the education of deficients.

"The hand of the Lord was upon me, and carried me out in the spirit of the Lord, and set me down in the midst of the valley which was full of bones,

"And caused me to pass by them round about: and, behold, there were very many in the open valley; and, lo, they were very dry.

"And he said unto me, Son of man, can these bones live? And I answered, O Lord God, thou knowest.

"Again he said unto me, Prophesy upon these bones, and say unto them, O ye dry bones, hear the word of the Lord.

"Thus saith the Lord God unto these bones: Behold, I will cause breath to enter into you, and ye shall live:

"And I will lay sinews upon you, and will bring up flesh upon you, and cover you with skin, and put breath in you, and ye shall live; and ye shall know that I am the Lord.

"So I prophesied as I was commanded: and as I prophesied, there was a noise, and behold a shaking, and the bones came together, bone to his bone.

"And when I beheld, lo, the sinews and the flesh came up upon them, and the skin covered them above: but there was no breath in them.

"Then said he unto me, Prophesy unto the wind, prophesy, son of man, and say to the wind, Thus saith the Lord God; Come from the four winds, O breath, and breathe upon these slain, that they may live.

"So I prophesied as He commanded me, and the breath came into them, and they lived, and stood up upon their feet, an exceeding great army.

"Then he said unto me, Son of man, these bones are the whole house of Israel: behold, they say, Our bones are dried, and our hope is lost: we are cut off for our parts."

In fact, the words – "I will cause breath to enter into you, and ye shall live," seem to me to refer to the direct individual work of the master who encourages, calls to, and helps his pupil, preparing him for education. And the remainder – "I will lay sinews upon you, and will bring up flesh upon you," recalled the fundamental phrase which sums up Seguin's whole method, – "to lead the child, as it were, by the hand, from the education of the muscular system, to that of the nervous system, and of the senses." It was thus that

Séguin taught the idiots how to walk, how to maintain their equilibrium in the most difficult movements of the body – such as going up stairs, jumping, etc., and finally, to feel, beginning the education of the muscular sensations by touching, and reading the difference of temperature, and ending with the education of the particular senses.

But if the training goes no further than this, we have only led these children to adapt themselves to a low order of life (almost a vegetable existence). "Call to the Spirit," says the prophecy, and the spirit shall enter into them, and they shall have life. Séguin, indeed, led the idiot from the vegetative to the intellectual life, "from the education of the senses to general notions, from general notions to abstract thought, from abstract thought to morality." But when this wonderful work is accomplished, and by means of a minute physiological analysis and of a gradual progression in method, the idiot has become a man, he is still an inferior in the midst of his fellow men, an individual who will never be able fully to adapt himself to the social environment: "Our bones are dried, and our hope is lost: we are cut off for our parts." This gives us another reason why the tedious method of Séguin was so often abandoned; the tremendous difficulty of the means, did not justify the end. Everyone felt this, and many said, "There is still so much to be done for normal children!"

Having through actual experience justified my faith in Séguin's method, I withdrew from active work among deficients, and began a more thorough study of the works of Itard and Séguin. I felt the need of meditation. I did a thing which I had not done before, and which perhaps few students have been willing to do, – I translated into Italian and copied out with my own hand, the writings of these men, from beginning to end, making for myself books as the old Benedictines used to do before the diffusion of printing. I chose to do this by hand, in order that I might have time to weigh the sense of each word, and to read, in truth, the *spirit* of the author. I had just finished copying the 600 pages of Séguin's French volume when I received from New York a *copy* of the English book published in 1866. This old volume had been found among the books discarded from the private library of a New York physician. I translated it with the help of an English friend. This volume did not add much in the way of new pedagogical experiments, but dealt with the philosophy of the experiences described in the first volume. The man who had studied abnormal children for thirty years expressed the idea that the physiological method, which has as its base the individual study of the pupil and which forms its educative methods upon the analysis of physiological and psychological phenomena, must come also to be applied to normal children. This step, he believed, would show the way to a complete human regeneration.

The voice of Séguin seemed to be like the voice of the forerunner crying in the wilderness, and my thoughts were filled with the immensity and importance of a work which should be able to reform the school and education.

At this time I was registered at the University as a student of philosophy, and followed the courses in experimental psychology, which had only recently been established in Italian universities, namely, at Turin, Rome and Naples. At the same time I made researches in Pedagogic Anthropology in the elementary schools, studying in this way the methods in organisation used for the education of normal children. This work led to the teaching of Pedagogic Anthropology in the University of Rome. I had long wished to experiment with the methods for deficients in a first elementary class of normal children, but I had never thought of making use of the homes or institutions where very young children were cared for. It was pure chance that brought this new idea to my mind.

It was near the end of the year 1906, and I had just returned from Milan, where I had been one of a committee at the International Exhibition for the assignment of prizes in the subjects of Scientific Pedagogy and Experimental Psychology. A great opportunity came to me, for I was invited by Edoardo Talamo, the Director General of the Roman Association for Good Building, to undertake the organisation of infant schools in its model tenements. It was Signor Talamo's happy idea to gather together in a large room all the little ones between the ages of three and seven belonging to the families living in the tenement. The play and work of these children was to be carried on under the guidance of a teacher who should have her own apartment in the tenement house. It was intended that every house should have its school, and as the Association for Good Building already owned more than 4000 tenements in Rome the work seemed to offer tremendous possibilities of development. The first school was to be established in January, 1907, in a large tenement house in the Quarter of San Lorenzo. In the same Quarter the Association already owned fifty eight buildings, and according to Signor Talamo's plans we should soon be able to open sixteen of these "schools within the house." This new kind of school was christened by Signora Olga Lodi, a mutual friend of Signor Talamo and myself, under the fortunate title of *Casa dei Bambini* or "*The Children's House*." Under this name the first of our schools was opened on the sixth of January, 1907, at 58 Via dei Marsi. It was confided to the care of Candida Nuccitelli and was under my guidance and direction.

From the very first I perceived, in all its immensity, the social and pedagogical importance of such institutions, and while at that time my visions of a triumphant future seemed exaggerated, to-day many are beginning to understand that what I saw before was indeed the truth. On the seventh of April of the same year, 1907, a second "Children's House" was opened in the Quarter of San Lorenzo; and on the eighteenth of October, 1908, another was inaugurated by the Humanitarian Society in Milan in the Quarter inhabited by workingmen. The workshops of this same society undertook the manufacture of the materials which we used. On the fourth of November following, a third "Children's House" was opened in Rome, this time not in

the people's Quarter, but in a modern building for the middle classes, situated in Via Famagosta, in that part of the city known as the Prati di Castello; and in January, 1909, Italian Switzerland began to transform its orphan asylums and children's homes in which the Froebel system had been used, into "Children's Houses" adopting our methods and materials.

The "Children's House" has a twofold importance: the social importance which it assumes through its peculiarity of being a school within the house, and its purely pedagogic importance gained through its methods for the education of very young children, of which I now made a trial. As I have said, Signor Talamo's invitation gave me a wonderful opportunity for applying the methods used with deficients to normal children, not of the elementary school age, but of the age usual in infant asylums. If a parallel between the deficient and the normal child is possible, this will be during the period of early infancy *when the child who has not the force to develop and he who is not yet developed* are in some ways alike. The very young child has not yet acquired a secure coordination of muscular movements, and, therefore, walks imperfectly, and is not able to perform the ordinary acts of life: such as fastening and unfastening its garments. The sense organs, such as the power of accommodation of the eye, are not yet completely developed; the language is primordial and shows those defects common to the speech of the very young child. The difficulty of fixing the attention, the general instability, etc., are characteristics which the normal infant and the deficient child have in common. Preyer, also, in his psychological study of children has turned aside to illustrate the parallel between pathological linguistic defects, and those of normal children in the process of developing. Methods which made growth possible to the mental personality of the idiot ought, therefore, to *aid the development of young children*, and should be so adapted as to constitute a hygienic education of the entire personality of a normal human being. Many defects which become permanent, such as speech defects, the child acquires through being neglected during the most important period of his age, the period between three and six, at which time he forms and establishes his principal functions.

Here lies the significance of my pedagogical experiment in the "Children's Houses." It represents the results of a series of trials made by me, in the education of young children, with methods already used with deficients. My work has not been in any way an application, pure and simple, of the methods of Séguin to young children, as anyone who will consult the works of the author will readily see. But it is none the less true that, underlying these two years of trial, there is a basis of experiment which goes back to the days of the French Revolution, and which represents the earnest work of the lives of Itard and Seguin.

As for me, thirty years after the publication of Séguin's second book, I took up again the ideas and, I may even say, the work of this great man, with the same freshness of spirit with which he received the inheritance of the work and ideas of his master Itard. For *ten years* I not only made practical experiments according to their methods, but through reverent meditation

absorbed the works of these noble and consecrated men, who have left to humanity most vital proof of their obscure heroism.

Thus my ten years of work may in a sense be considered as a summing up of the forty years of work done by Itard and Séguin. Viewed in this light, fifty years of active work preceded and prepared for this apparently brief trial of only two years, and I feel that I am not wrong in saying that these experiments represent the successive work of three physicians, who from Itard to me show in a greater or less degree the first steps along the path of psychiatry.

As definite factors in the civilisation of the people, the "Children's Houses" deserve a separate volume. They have, in fact, solved so many of the social and pedagogic problems in ways which have seemed to be Utopian, that they are a part of that modern transformation of the home which must most surely be realised before many years have passed. In this way they touch directly the most important side of the social question – that which deals with the intimate or home life of the people. It is enough here to reproduce the inaugural discourse delivered by me on the occasion of the opening of the second "Children's House" in Rome, and to present the rules and regulations which I arranged in accordance with the wishes of Signor Talamo. It will be noticed that the club to which I refer, and the dispensary which is also an out-patients' institution for medical and surgical treatment (all such institutions being free to the inhabitants) have already been established. In the modern tenement – Casa Moderna in the Prati di Castello, opened November 4, 1908, through the philanthropy of Signor Talamo – they are also planning to annex a "communal kitchen."

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The Uses of Intelligence Tests

Lewis M. Terman

Intelligence Tests of Retarded School Children

Numerous studies of the age-grade progress of school children have afforded convincing evidence of the magnitude and seriousness of the retardation problem. Statistics collected in hundreds of cities in the United States show that between a third and a half of the school children fail to progress through the grades at the expected rate; that from 10 to 15 per cent are retarded two years or more; and that from 5 to 8 per cent are retarded at least three years. More than 10 per cent of the $400,000,000 annually expended in the United States for school instruction is devoted to re-teaching children what they have already been taught but have failed to learn. The first efforts at reform which resulted from these findings were based on the supposition that the evils which had been discovered could be remedied by the individualizing of instruction, by improved methods of promotion, by increased attention to children's health, and by other reforms in school administration. Although reforms along these lines have been productive of much good, they have nevertheless been in a measure disappointing. The trouble was, they were too often based upon the assumption that under the right conditions all children would be equally, or almost equally, capable of making satisfactory school progress. Psychological studies of school children by means of standardized intelligence tests have shown that this supposition is not in accord with the facts. It has been found that children do not fall into two well-defined groups, the "feeble-minded" and the "normal." Instead, there are many grades of intelligence, ranging from idiocy on the one hand to genius on the other. Among those classed as normal, vast individual differences have been found to exist in original mental endowment, differences which affect profoundly the capacity to profit from school instruction.

Source: Lewis M. Terman, *The Measurement of Intelligence* (Boston: Houghton Mifflin, 1916).

We are beginning to realize that the school must take into account, more seriously than it has yet done, the existence and significance of these differences in endowment. Instead of wasting energy in the vain attempt to hold mentally slow and defective children up to a level of progress which is normal to the average child, it will be wiser to take account of the inequalities of children in original endowment and to differentiate the course of study in such a way that each child will be allowed to progress at the rate which is normal to him, whether that rate be rapid or slow.

While we cannot hold all children to the same standard of school progress, we can at least prevent the kind of retardation which involves failure and the repetition of a school grade. It is well enough recognized that children do not enter with very much zest upon school work in which they have once failed. Failure crushes self-confidence and destroys the spirit of work. It is a sad fact that a large proportion of children in the schools are acquiring the habit of failure. The remedy, of course, is to measure out the work for each child in proportion to his mental ability.

Before an engineer constructs a railroad bridge or trestle, he studies the materials to be used, and learns by means of tests exactly the amount of strain per unit of size his materials will be able to withstand. He does not work empirically, and count upon patching up the mistakes which may later appear under the stress of actual use. The educational engineer should emulate this example. Tests and forethought must take the place of failure and patchwork. Our efforts have been too long directed by "trial and error." It is time to leave off guessing and to acquire a scientific knowledge of the material with which we have to deal. When instruction must be repeated, it means that the school, as well as the pupil, has failed. Every child who fails in his school work or is in danger of failing should be given a mental examination. The examination takes less than one hour, and the result will contribute more to a real understanding of the case than anything else that could be done. It is necessary to determine whether a given child is unsuccessful in school because of poor native ability, or because of poor instruction, lack of interest, or some other removable cause.

It is not sufficient to establish any number of special classes, if they are to be made the dumping-ground for all kinds of troublesome cases – the feeble-minded, the physically defective, the merely backward, the truants, the incorrigibles, etc. Without scientific diagnosis and classification of these children the educational work of the special class must blunder along in the dark. In such diagnosis and classification our main reliance must always be in mental tests, properly used and properly interpreted.

Intelligence Tests of the Feeble-minded

Thus far intelligence tests have found their chief application in the identification and grading of the feeble minded. Their value for this purpose is twofold. In the first place, it is necessary to ascertain the degree of defect

before it is possible to decide intelligently upon either the content or the method of instruction suited to the training of the backward child. In the second place, intelligence tests are rapidly extending our conception of "feeble-mindedness" to include milder degrees of defect than have generally been associated with this term. The earlier methods of diagnosis caused a majority of the higher grade defectives to be overlooked. Previous to the development of psychological methods the low-grade moron was about as high a type of defective as most physicians or even psychologists were able to identify as feeble-minded.

Wherever intelligence tests have been made in any considerable number in the schools, they have shown that not far from 2 per cent of the children enrolled have a grade of intelligence which, however long they live, will never develop beyond the level which is normal to the average child of 11 or 12 years. The large majority of these belong to the moron grade; that is, their mental development will stop somewhere between the 7-year and 12-year level of intelligence, more often between 9 and 12.

The more we learn about such children, the clearer it becomes that they must be looked upon as real defectives. They may be able to drag along to the fourth, fifth, or sixth grades, but even by the age of 16 or 18 years they are never able to cope successfully with the more abstract and difficult parts of the common-school course of study. They may master a certain amount of rote learning, such as that involved in reading and in the manipulation of number combinations, but they cannot be taught to meet new conditions effectively or to think, reason, and judge as normal persons do.

It is safe to predict that in the near future intelligence tests will bring tens of thousands of these high-grade defectives under the surveillance and protection of society. This will ultimately result in curtailing the reproduction of feeble-mindedness and in the elimination of an enormous amount of crime, pauperism, and industrial inefficiency. It is hardly necessary to emphasize that the high-grade cases, of the type now so frequently overlooked, are precisely the ones whose guardianship it is most important for the State to assume.

Intelligence Tests of Delinquents

One of the most important facts brought to light by the use of intelligence tests is the frequent association of delinquency and mental deficiency. Although it has long been recognized that the proportion of feeble-mindedness among offenders is rather large, the real amount has, until recently, been underestimated even by the most competent students of criminology. The criminologists have been accustomed to give more attention to the physical than to the mental correlates of crime. Thus, Lombroso and his followers subjected thousands of criminals to observation and measurement with regard to such physical traits as size and shape of the skull, bilateral asymmetries,

anomalies of the ear, eye, nose, palate, teeth, hands, fingers, hair, dermal sensitivity, etc. The search was for physical "stigmata" characteristic of the "criminal type."

Although such studies performed an important service in creating a scientific interest in criminology, the theories of Lombroso have been wholly discredited by the results of intelligence tests. Such tests have demonstrated, beyond any possibility of doubt, that the most important trait of at least 25 per cent of our criminals is mental weakness. The physical abnormalities which have been found so common among prisoners are not the stigmata of criminality, but the physical accompaniments of feeble-mindedness. They have no diagnostic significance except in so far as they are indications of mental deficiency. Without exception, every study which has been made of the intelligence level of delinquents has furnished convincing testimony as to the close relation existing between mental weakness and moral abnormality. Some of these findings are as follows:

Miss Renz tested 100 girls of the Ohio State Reformatory and reported 36 per cent as certainly feeble-minded. In every one of these cases the commitment papers had given the pronouncement "intellect sound." Under the direction of Dr. Goddard the Binet tests were given to 100 juvenile court cases, chosen at random, in Newark, New Jersey. Nearly half were classified as feeble-minded. One boy 17 years old had 9-year intelligence; another of 15½ had 8-year intelligence. Of 56 delinquent girls 14 to 20 years of age tested by Hill and Goddard, almost half belonged either to the 9- or the 10-year level of intelligence. Dr. G. G. Fernald's tests of 100 prisoners at the Massachusetts State Reformatory showed that at least 95 per cent were feeble-minded. Of 1186 girls tested by Miss Dewson at the State Industrial School for Girls at Lancaster, Pennsylvania, 28 per cent were found to have subnormal intelligence.

Dr. Katherine Bement Davis's report on 1000 cases entered in the Bedford Home for Women, New York, stated that there was no doubt but that at least 157 were feeble-minded. Recently there has been established at this institution one of the most important research laboratories of the kind in the United States, with a trained psychologist, Dr. Mabel Fenald, in charge. Of 564 prostitutes investigated by Dr. Anna Dwyer in connection with the Municipal Court of Chicago, only 3 per cent had gone beyond the fifth grade in school. Mental tests were not made, but from the data given it is reasonably certain that half or more were feeble-minded. Tests, by Dr. George Ordahl and Dr. Louise Ellison Ordahl, of cases in the Geneva School for Girls, Geneva, Illinois, showed that, on a conservative basis of classification, at least 18 per cent were feeble-minded. At the Joliet Prison, Illinois, the same authors found 50 per cent of the female prisoners feeble-minded, and 26 per cent of the male prisoners. At the St. Charles School for Boys 26 per cent were feeble-minded. Tests, by Dr. J. Harold Williams, of 150 delinquents in the Whittier

State School for Boys, Whittier, California, gave 28 per cent feeble-minded and 25 per cent at or near the border-line. About 300 other juvenile delinquents tested by Mr. Williams gave approximately the same figures. As a result of these findings a research laboratory has been established at the Whittier School, with Dr. Williams in charge. In the girls' division of the Whittier School, Dr. Grace Fernald collected a large amount of psychological data on more than 100 delinquent girls. The findings of this investigation agree closely with those of Dr. Williams for the boys.

At the State Reformatory, Jeffersonville, Indiana, Dr. von Klein Schmid, in an unusually thorough psychological study of 1000 young adult prisoners, finds the proportion of feeble-mindedness not far from 50 per cent. But it is needless to multiply statistics. Those given are but samples. Tests are at present being made in most of the progressive prisons, reform schools, and juvenile courts throughout the country, and while there are minor discrepancies in regard to the actual percentage who are feebleminded, there is no investigator who denies the fearful role played by mental deficiency in the production of vice, crime, and delinquency.[1] Heredity studies of "degenerate" families have confirmed, in a striking way, the testimony secured by intelligence tests. Among the best known of such families are the "Kallikaks", "the Jukes", "the Hiu Folk", "the Nams", "the Zeros," and the "Ishmaelites."

The Kallikak family. Martin Kallikak was a youthful soldier in the Revolutionary War. At a tavern frequented by the militia he met a feeble-minded girl, by whom he became the father of a feeble-minded son. In 1912, there were 480 known direct descendants of this temporary union. It is known that 36 of these were illegitimates, that 33 were sexually immoral, that 24 were confirmed alcoholics, and that 8 kept houses of ill-fame. The explanation of so much immorality will be obvious when it is stated that of the 480 descendants, 143 were known to be feeble-minded, and that many of the others were of questionable mentality.

A few years after returning from the war this same Martin Kallikak married a respectable girl of good family. From this union 496 individuals have been traced in direct descent, and in this branch of the family there were no illegitimate children, no immoral women, and only one man who was sexually loose. There were no criminals, no keepers of houses of ill-fame, and only two confirmed alcoholics. Again the explanation is clear when it is stated that this branch of the family did not contain a single feeble-minded individual. It was made up of doctors, lawyers, judges, educators, traders, and landholders.[2]

The Hill Folk. The Hill Folk are a New England family of which 709 persons have been traced. Of the married women, 24 per cent had given birth to illegitimate offspring, and 10 per cent were prostitutes. Criminal tendencies were clearly shown in 24 members of the family, while alcoholism was still more common. The proportion of feeble-minded was 48 per cent. It was estimated that the Hill Folk have in the last sixty years cost the State

of Massachusetts, in charitable relief, care of feeble-minded, epileptic, and insane, conviction and punishment for crime, prostitution, pauperism, etc., at least $500,000.[3]

The Nam family and the Jukes give equally dark pictures as regards criminality, licentiousness, and alcoholism, and although feeble-mindedness was not as fully investigated in these families as in the Kallikaks and the Hill Folk, the evidence is strong that it was a leading trait. The 784 Nams who were traced included 187 alcoholics, 232 women and 199 men known to be licentious, and 40 who became prisoners. It is estimated that the Nams have already cost the State nearly $1,500,000.[4]

Of 540 Jukes, practically one fifth were born out of wedlock, 37 were known to be syphilitic, 53 had been in the poorhouse, 76 had been sentenced to prison, and of 229 women of marriageable age 128 were prostitutes. The economic damage inflicted upon the State of New York by the Jukes in seventy-five years was estimated at more than $1,300,000, to say nothing of diseases and other evil influences which they helped to spread.[5]

But why do the feeble-minded tend so strongly to become delinquent? The answer may be stated in simple terms. Morality depends upon two things: (a) the ability to foresee and to weigh the possible consequences for self and others of different kinds of behavior; and (b) upon the willingness and capacity to exercise self-restraint. That there are many intelligent criminals is due to the fact that (a) may exist without (b). On the other hand, (b) presupposes (a). In other words, not all criminals are feeble-minded, but all feeble-minded are at least potential criminals. That every feeble-minded woman is a potential prostitute would hardly be disputed by any one. Moral judgment, like business judgment, social judgment, or any other kind of higher thought process, is a function of intelligence. Morality cannot flower and fruit if intelligence remains infantile.

All of us in early childhood lacked moral responsibility. We were as rank egoists as any criminal. Respect for the feelings, the property rights, or any other kind of rights, of others had to be laboriously acquired under the whip of discipline. But by degrees we learned that only when instincts are curbed, and conduct is made to conform to principles established formally or accepted tacitly by our neighbors, does this become a livable world for any of us. Without the intelligence to generalize the particular, to foresee distant consequences of present acts, to weigh these foreseen consequences in the nice balance of imagination, morality cannot be learned. When the adult body, with its adult instincts, is coupled with the undeveloped intelligence and weak inhibitory powers of a 10-year-old child, the only possible outcome, except in those cases where constant guardianship is exercised by relatives or friends, is some form of delinquency.

Considering the tremendous cost of vice and crime, which in all probability amounts to not less than $500,000,000 per year in the United States alone, it is evident that psychological testing has found here one of its richest

applications. Before offenders can be subjected to rational treatment a mental diagnosis is necessary, and while intelligence tests do not constitute a complete psychological diagnosis, they are, nevertheless, its most indispensable part.

Intelligence Tests of Superior Children

The number of children with very superior ability is approximately as great as the number of feeble-minded. The future welfare of the country hinges, in no small degree, upon the right education of these superior children. Whether civilization moves on and up depends most on the advances made by creative thinkers and leaders in science, politics, art, morality, and religion. Moderate ability can follow, or imitate, but genius must show the way. Through the leveling influences of the educational lockstep such children at present are often lost in the masses. It is a rare child who is able to break this lockstep by extra promotions. Taking the country over, the ratio of "accelerates" to "retardates" in the school is approximately 1 to 10. Through the handicapping influences of poverty, social neglect, physical defects, or educational maladjustments, many potential leaders in science, art, government, and industry are denied the opportunity of a normal development. The use we have made of exceptional ability one of the primitive methods of surface mining.

It is necessary to explore the nation's hidden resources of intelligence. The common saying that "genius will out" is one of those dangerous half truths with which too many people rest content. Psychological tests show that children of superior ability are very likely to be misunderstood in school. The writer has tested more than a hundred children who were as much above average intelligence as moron defectives are below. The large majority of these were found located below the school grade warranted by their intellectual level. One third had failed to reap any advantage whatever, in terms of promotion, from their very superior intelligence. Even genius languishes when kept over-long at tasks that are too easy.

Our data show that teachers sometimes fail entirely to recognize exceptional superiority in a pupil, and that the degree of such superiority is rarely estimated with anything like the accuracy which is possible to the psychologist after a one-hour examination. *H. E.*, for example, was a little over 7½ years old when tested. He was in the third grade, and was therefore thought by his teacher to be accelerated in school. This boy's intelligence, however, was found to be above the 12-year level. There is no doubt that his mental ability would have enabled him, with a few months of individual instruction, to carry fifth or even sixth-grade work as easily as third, and without injury to body or mind. Nevertheless, the teacher and both the parents of this child had found nothing remarkable about him. In reality he belongs to a grade of genius not found oftener than once in several thousand cases.

Another illustration is that of a boy of 10½ years who tested at the "average adult" level. He was doing superior work in the sixth grade, but according to the testimony of the teacher had "no unusual ability." It was ascertained from the parents that this boy, at an age when most children are reading fairy stories, had a passion for standard medical literature and textbooks in physical science. Yet, after more than a year of daily contact with this young genius (who is a relative of Meyerbeer, the composer), the teacher had discovered no symptoms of unusual ability." Teachers should be better trained in detecting the signs of superior ability. Every child who consistently gets high marks in his school work with apparent ease should be given a mental examination, and if his intelligence level warrants it he should either be given extra promotions, or placed in a special class for superior children where faster progress can be made. The latter is the better plan, because it obviates the necessity of skipping grades; it permits rapid but continuous progress. The usual reluctance of teachers to give extra promotions probably rests upon three factors: (1) mere inertia; (2) a natural unwillingness to part with exceptionally satisfactory pupils; and (3) the traditional belief that precocious children should be held back for fear of dire physical or mental consequences.

In order to throw light on the question whether exceptionally bright children are specially likely to be one-sided, nervous, delicate, morally abnormal, socially unadaptable, or otherwise peculiar, the writer has secured rather extensive information regarding 31 children whose mental age was found by intelligence tests to be 25 per cent above the actual age. This degree of intelligence is possessed by about 2 children out of 100, and is nearly as far above average intelligence as high-grade feeble-mindedness is below. The supplementary information, which was furnished in most cases by the teachers, may be summarized as follows: –

1. *Ability special or general.* In the case of 20 out of 31 the ability is decidedly general, and with 2 it is mainly general. The talents of 5 are described as more or less special, but only in one case is it remarkably so. Doubtful 4.
2. *Health.* 15 are said to be perfectly healthy; 13 have one or more physical defects; 4 of the 13 are described as delicate; 4 have adenoids; 4 have eye-defects; 1 lisps; and 1 stutters. These figures are about the same as one finds in any group of ordinary children.
3. *Studiousness.* "Extremely studious," 15; "usually studious" or "fairly studious," 11; "not particularly studious," 5; "lazy," 0.
4. *Moral traits.* Favorable traits only, 19; one or more unfavorable traits, 8; no answer, 4. The eight with unfavorable moral traits are described as follows: 2 are "very self-willed"; 1 "needs close watching"; 1 is "cruel to animals"; 1 is "untruthful"; 1 is "unreliable"; 1 is "a bluffer"; 1 is "sexually abnormal," perverted," and "vicious." It will be noted

that with the exception of the last child, the moral irregularities mentioned can hardly be regarded, from the psychological point of view, as essentially abnormal. It is perhaps a good rather than a bad sign for a child to be self-willed; most children "need close watching"; and a certain amount of untruthfulness in children is the rule and not the exception.

5. *Social adaptability.* Socially adaptable, 25; not adaptable, 2; doubtful, 4.
6. *Attitude of other children.* "Favorable," "friendly," "liked by everybody," "much admired," "popular," etc., 26; "not liked," 1; "inspires repugnance," 1; no answer, 1.
7. *Is child a leader?* "Yes," 14; "no," or "not particularly," 12; doubtful, 5.
8. *Is play life normal?* "Yes," 26; "no," 1; "hardly," 1; doubtful, 3.
9. *Is child spoiled or vain?* "No," 22; "yes," 5; "somewhat," 2; no answer, 2.

According to the above data, exceptionally intelligent children are fully as likely to be healthy as ordinary children; their ability is far more often general than special, they are studious above the average, really serious faults are not common among them, they are nearly always socially adaptable, are sought after as playmates and companions, their play life is usually normal, they are leaders far oftener than other children, and notwithstanding their many really superior qualities they are seldom vain or spoiled.

It would be greatly to the advantage of such children if their superior ability were more promptly and fully recognized, and if (under proper medical supervision, of course) they were promoted as rapidly as their mental development would warrant. Unless they are given the grade of work which calls forth their best efforts, they run the risk of falling into lifelong habits of submaximum efficiency. The danger in the case of such children is not over-pressure, but under-pressure.

Intelligence Tests As a Basis for Grading

Not only in the case of retarded or exceptionally bright children, but with many others also, intelligence tests can aid in correctly placing the child in school. The pupil who enters one school system from another is a case in point. Such a pupil nearly always suffers a loss of time. The indefensible custom is to grade the newcomer down a little, because, forsooth, the textbooks he has studied may have differed somewhat from those he is about to take up, or because the school system from which he comes may be looked upon as inferior. Teachers are too often suspicious of all other educational methods besides their own. The present treatment accorded such children, which so often does them injustice and injury, should be replaced by an intelligence test. The hour of time required for the test is a small matter in comparison with the loss of a school term by the pupils.

Indeed, it would be desirable to make all promotions on the basis chiefly of intellectual ability. Hitherto the school has had to rely on tests of information because reliable tests of intelligence have not until recently been available. As trained Binet examiners become more plentiful, the information standard will have to give way to the criterion which asks merely that the child shall be able to do the work of the next higher grade. The brief intelligence test is not only more enlightening than the examination; it is also more hygienic. The school examination is often for the child a source of worry and anxiety; the mental test is an interesting and pleasant experience.

Intelligence Tests for Vocational Fitness

The time is probably not far distant when intelligence tests will become a recognized and widely used instrument for determining vocational fitness. Of course, it is not claimed that tests are available which will tell us unerringly exactly what one of a thousand or more occupations a given individual is best fitted to pursue. But when thousands of children who have been tested by the Binet scale have been followed out into the industrial world, and their success in various occupations noted, we shall know fairly definitely the vocational significance of any given degree of mental inferiority or superiority. Researches of this kind will ultimately determine the minimum "intelligence quotient" necessary for success in each leading occupation.

Industrial concerns doubtless suffer enormous losses from the employment of persons whose mental ability is not equal to the tasks they are expected to perform. The present methods of trying out new employees, transferring them to simpler and simpler jobs as their inefficiency becomes apparent, is wasteful and to a great extent unnecessary. A cheaper and more satisfactory method would be to employ a psychologist to examine applicants for positions and to weed out the unfit. Any business employing as many as five hundred or a thousand workers, as, for example, a large department store, could save in this way several times the salary of a well-trained psychologist.

That the industrially inefficient are often of subnormal intelligence has already been demonstrated in a number of psychological investigations. Of 150 "hoboes" tested under the direction of the writer by Mr. Knollin, at least 15 per cent belonged to the moron grade of mental deficiency, and almost as many more were border line cases. To be sure, a large proportion were found perfectly normal, and a few even decidedly superior in mental ability, but the ratio of mental deficiency was ten or fifteen times as high as that holding for the general population. Several had as low as 9- or 10-year intelligence, and one had a mental level of 7 years. The industrial history of such subjects, as given by themselves, was always about what the mental level would lead us to expect – unskilled work, lack of interest in accomplishment, frequent discharge from jobs, discouragement, and finally the "road."

The above findings have been fully paralleled by Mr. Glenn Johnson and Professor Eleanor Rowland, of Reed College, who tested 108 unemployed charity cases in Portland, Oregon. Both of these investigators made use of the Stanford revision of the Binet scale, which is especially serviceable in distinguishing the upper-grade defectives from normals. It hardly needs to be emphasized that when charity organizations help the feeble-minded to float along in the social and industrial world, and to produce and rear children after their kind, a doubtful service is rendered. A little psychological research would aid the united charities of any city to direct their expenditures into more profitable channels than would otherwise be possible.

Other Uses of Intelligence Tests

Another important use of intelligence tests is in the study of the factors which influence mental development. It is desirable that we should be able to guard the child against influences which affect mental development unfavorably; but as long as these influences have not been sifted, weighed, and measured, we have nothing but conjecture on which to base our efforts in this direction.

When we search the literature of child hygiene for reliable evidence as to the injurious effects upon mental ability of malnutrition, decayed teeth, obstructed breathing, reduced sleep, bad ventilation, insufficient exercise, etc., we are met by endless assertion painfully unsupported by demonstrated fact. We have, indeed, very little exact knowledge regarding the mental effects of any of the factors just mentioned. When standardized mental tests have come into more general use, such influences will be easy to detect wherever they are really present.

Again, the most important question of heredity is that regarding the inheritance of intelligence; but this is a problem which cannot be attacked at all without some accurate means of identifying the thing which is the object of study. Without the use of scales for measuring intelligence we can give no better answer as to the essential difference between a genius and a fool than is to be found in legend and fiction. Applying this to school children, it means that without such tests we cannot know to what extent a child's mental performances are determined by environment and to what extent by heredity. Is the place of the so-called lower classes in the social and industrial scale the result of their inferior native endowment, or is their apparent inferiority merely a result of their inferior home and school training? Is genius more common among children of the educated classes than among the children of the ignorant and poor? Are the inferior races really inferior, or are they merely unfortunate in their lack of opportunity to learn?

Only intelligence tests can answer these questions and grade the raw material with which education works. Without them we can never distinguish the results of our educational efforts with a given child from the influence of the child's original endowment. Such tests would have told us, for example,

whether the much-discussed "wonder children," such as the Sidis and Wiener boys and the Stoner girl, owe their precocious intellectual prowess to superior training (as their parents believe) or to superior native ability. The supposed effects upon mental development of new methods of mind training, which are exploited so confidently from time to time (e.g., the Montessori method and the various systems of sensory and motor training for the feeble-minded), will have to be checked up by the same kind of scientific measurement.

In all these fields intelligence tests are certain to play an ever-increasing rôle. With the exception of moral character, there is nothing as significant for a child's future as his grade of intelligence. Even health itself is likely to have less influence in determining success in life. Although strength and swiftness have always had great survival value among the lower animals, these characteristics have long since lost their supremacy in man's struggle for existence. For us the rule of brawn has been broken, and intelligence has become the decisive factor in success. Schools, railroads, factories, and the largest commercial concerns may be successfully managed by persons who are physically weak or even sickly. One who has intelligence constantly measures opportunities against his own strength or weakness and adjusts himself to conditions by following those leads which promise most toward the realization of his individual possibilities.

All classes of intellects, the weakest as well as the strongest, will profit by the application of their talents to tasks which are consonant with their ability. When we have learned the lessons which intelligence tests have to teach, we shall no longer blame mentally defective workmen for their industrial inefficiency, punish weak-minded children because of their inability to learn, or imprison and hang mentally defective criminals because they lacked the intelligence to appreciate the ordinary codes of social conduct.

Notes

1. See References at end of volume.
2. H. H. Goddard: *The Kallikak Family* (1914.) 141 pp.
3. Danielson and Davenport: *The Hill Folk*. Eugenics Record Office, Memoir No. 1, 1912. 56 pp.
4. Estabrook and Davenport: *The Nam Family*. Eugenics Record Office. Memoir No. 2. (1912). 85 pp.
5. R. L. Dugdale: *The Jukes*. (Fourth edition, 1910.) 120 pp. G. P. Putnam's Sons.
6. See p. 26 *ff.* for further illustrations of this kind.

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A Modern School

Abraham Flexner

As President [Charles William] Eliot [of Harvard] has so clearly pointed out in his paper in "The Changes Needed in American Secondary Education," tradition still too largely determines both the substance and the purpose of current education. A certain amount of readjustment has indeed taken place; in some respects almost frantic efforts are making to force this or that modern subject into the course of study. But traditional methods and purposes are strong enough to maintain most of the traditional curriculum and to confuse the handling of material introduced in response to the pressure of the modern spirit. It is therefore still true that the bulk of the time and energy of our children at school is devoted to formal work developed by schoolmasters without close or constant reference to genuine individual or social need.

The subjects in question deal predominantly with words or abstractions, remote from use and experience; and they continue to be acquired by children because the race has formed the habit of acquiring them, or more accurately the habit of going through the form of acquiring them, rather than because they serve the real purposes of persons living to-day. Generally speaking, it may be safely affirmed that the subjects commonly taught, the time at which they are taught, the manner in which they are taught and the amounts taught are determined by tradition, not be a fresh and untrammeled consideration of living and present needs.

I am not forgetful of the fact that the moment a student takes fire in studying any subject, no matter how remote or abstract, it assumes a present reality for him. Thus, sometimes through the personality of the teacher, less often through the congeniality of the subject matter, Latin and algebra may seem as real to particular students as woodwork, Shakespeare, biology or current events. It still remains true, however, that these cases are highly exceptional; and that most children in the elementary and high schools struggle painfully and ineffectually to bring the subject matter of their studies within

Source: *American Review of Reviews*, 53 (1916): 465–474.

a world that is real and genuine for them. The best of them succeed fitfully; most of them never succeed at all.

It is perhaps worth while stopping long enough to show by figures the extent to which our current teaching fails. Complete statistics which would tell us how many of all the pupils who study Latin and algebra and geometry fail to master them do not exist. But we know that a large percentage of the better students of these subjects try the College Entrance Examinations, and that for these examinations many receive special drill, in addition to the regular teaching.

Now in the examinations held by the College Entrance Board in 1915, 76.6 per cent of the candidates failed to make even a mark of 60 per cent. in the first six books of Virgil, every line of which they had presumably read and re-read; 69.7 per cent of those examined in algebra from quadratics on failed to make as much as 60 per cent; 42.4 per cent failed to make 60 per cent. in plane geometry.

What would the record be if all who studied these subjects were examined by an impartial outside body? Probably some of those who fail do not do themselves justice; but as many – perhaps more – of the few who reach the really low mark of 60 per cent Do so by means of devices that represent stultification rather than intelligence. For nothing is commoner in the teaching of ancient languages and formal mathematics than drilling in arbitrary signs by means of which pupils determine mechanically what they should do, without intelligent insight into what they are doing.

It is, therefore, useless to inquire whether a knowledge of Latin and mathematics is valuable, because pupils do not get it; and it is equally beside the mark to ask whether the effort to obtain this knowledge is a valuable discipline, since failure is so widespread that the only habits acquired through failing to learn Latin or algebra are habits of slipshod work, of guessing and of mechanical application of formulae, not themselves understood.

A word should perhaps be said at this point by way of explaining why the Germans appear to succeed where we fail. There are two reasons; in the first place, the German gymnasium makes a ruthless selection. It rejects without compunction large numbers whom we in American endeavor to educate; and on the education of this picked minority it brings to bear such pressure as we can never hope to apply – family pressure, social pressure, official pressure. Under such circumstances, success is possible with small numbers; but the rising tide of opposition to the classical gymnasium and the development of modern schools with equivalent privileges show that even in Germany the traditional education is undermined.

But not only do American children as a class fail to gain either knowledge or power through the traditional curriculum – they spend an inordinately long time in failing. The period spent in school and college before students begin professional studies is longer in the United States than in any other western country. An economy of two or three years is urgently necessary. The Modern School must therefore not only find what students can really learn – it must feel itself required to solve its problem within a given number of

years – the precise number being settled in advance on social, economic and professional grounds. Its problem may perhaps be formulated in these terms: how much education of a given type can a boy or girl get before reaching the age of, let us say, twenty, on the theory that at that age general opportunities automatically end.

A Modern Conception of Education

Before I undertake to do this, it is necessary to define education for the purposes of this sketch; and for obvious reasons this definition will be framed from a practical rather than from a philosophical point of view. All little children have certain common needs; but, beginning with adolescence, education is full of alternatives. The education planned for children who must leave school at fourteen necessarily differs in extent and thus in degree in content from that feasible for those who can remain, say two years longer, so as to acquire the rudiments of a vocation. Still different are the possibilities for children who have the good fortune to remain until they are eighteen or twenty, reasonably free during this lengthened period from the necessity of determining procedure by other than educational considerations. I assume that the Modern School of which we are now speaking contemplates liberal and general education in the sense last-mentioned. With regard to children who expect to enjoy such opportunities, what do we moderns mean when we speak of an educated man? How do we know and recognize an educated man in the modern sense? What can he do that an uneducated man – uneducated in the modern sense – cannot do?

I suggest that, in the first place, a man educated in the modern sense has mastered the fundamental tools of knowledge: he can read and write; he can spell the words he is in the habit of using; he can express himself clearly orally or in writing; he can figure correctly and with moderate facility within the limits of practical need; he knows something about the globe on which he lives. So far there is no difference between a man educated in the modern sense and a man educated in any other sense.

There is, however, a marked divergence at the next step. The education which we are criticizing is overwhelmingly formal and traditional. If objection is made to this or that study on the ground that it is useless or unsuitable, the answer comes that it "trains the mind" or has been valued for centuries. "Training the mind" in the sense in which the claim is thus made for algebra or ancient languages is an assumption none too well founded; traditional esteem is an insufficient offset to present and future uselessness.

A man educated in the modern sense will forego the somewhat doubtful mental discipline received from formal studies; he will be contentedly ignorant of things for learning which no better reason than tradition can be assigned. Instead, his education will be obtained from studies that serve real purposes. Its content, spirit, and aim will be realistic and genuine, not formal or traditional. Thus, the man educated in the modern sense will be trained

to know, to care about and to understand the world he lives in, both the physical world and the social world. A firm grasp of the physical world means the capacity to note and to interpret phenomena; a firm grasp of the social world means a comprehension of and sympathy with current industry, current science, and current politics.

The extent to which history and literature of the past are utilized depends, not on what we call the historic value of this or that performance or classic, but on its actual pertinency to genuine need, interest, or capacity. In any case, the object in view would be to give children the knowledge they need to develop in them the power to handle themselves in our own world. Neither history nor what are called purely cultural claims would alone be regarded as compelling.

Even the progressive curricula of the present time are far from accepting the principle above formulated. For, though they include things that serve purposes, their eliminations are altogether too timid. They have occasionally dropped, occasionally curtailed what experience shows to be either unnecessary or hopelessly unsuitable. But they retain the bulk of the traditional course of study, and present it in traditional fashion, because an overwhelming case has not – so it is judged – yet been made against it. If, however, the standpoint which I have urged were adopted, the curriculum would contain only what can be shown to serve a purpose. The burden of proof would be on the subject, not on those who stand ready to eliminate it. If the subject serves a purpose, it is eligible to the curriculum; otherwise not. I need not stop at this juncture to show that "serving a purpose," "useful," "genuine," "realistic," and other descriptive terms are not synonyms with "utilitarian," "materialistic," "commercial," etc., – for intellectual and spiritual purposes are genuine and valid, precisely as are physical, physiological and industrial purposes. That will become clear as we proceed.

The Aim: Intellectual Power

It follows from the way in which the child is made, and from constitution and appeal of modern society, that instruction in objects and in phenomena will at one time or another play a very prominent part in the Modern School. It is, however, clear that mere knowledge of phenomena, our mere ability to understand or to produce objects falls short of the ultimate purpose of a liberal education. Such knowledge and such ability indubitably have, as President Eliot's paper pointed out, great value in themselves; and they imply such functioning of the senses as promises a rich fund of observation and experience. But in the end, if the Modern School is to be adequate to the need of modern life, this concrete training must produce sheer intellectual power. Abstract thinking has perhaps never before played so important a part in life as in this materialistic and scientific world of ours, – this world of

railroads, automobiles, wireless telegraphy, and international relationships. Our problems involve indeed concrete data and present themselves in concrete forms; but, back of the concrete details, lie difficult and involved intellectual processes. Hence the realistic education we propose must eventuate in intellectual power.

We must not only cultivate the child's interests, senses and practical skill, but we must train him to interpret what he thus gets to the end that he may not only be able to perceive and to do, but that he may know in intellectual terms the significance of what he has perceived and done. The Modern School would prove a disappointment, unless greater intellectual power is procurable on the basis of a realistic training than has been procured from formal education, which is prematurely intellectual, and to no slight extent a mere make-believe. . . .

What the Curriculum Omits

This necessarily brief and untechnical sketch will perhaps become more definite if I look at the curriculum from the standpoint of the omissions. Let us restate our guiding thesis: Modern education will include nothing simply because tradition recommends it or because its inutility has not been conclusively established. It proceeds in precisely the opposite way: *It includes nothing for which an affirmative case cannot now be made out.*

As has already been intimated, this method of approach would probably result in greatly reducing the time allowed to mathematics, and in decidedly changing the form of what is still retained. If, for example, only so much arithmetic is taught as people actually have occasion to use, the subject will shrink to modest proportions; and if this reduced amount is taught so as to serve real purposes, the teachers of science, industry, and domestic economy will do much of it incidentally. The same policy may be employed in dealing with algebra and geometry. What is taught, when it is taught, and how it is taught will in that event depend altogether on what is needed, and the form in which it is needed.

Precisely the same line of reasoning would be applied to English, history, and literature. For example: There has been a heated discussion for years on the subject of formal grammar, which has been defended, first, on the ground that it furnishes a valuable mental discipline; second, on the ground that it assists the correct use of language. It is passing strange how many ill-disciplined minds there are among those who have spent years being mentally disciplined, now in this subject, now in that. The Modern School would not hesitate to take the risk to mental discipline involved in dropping the study of formal grammar. It would, tentatively at least, also risk the consequences to correct speech involved in the same step. For such evidence as we possess points to the futility of formal grammar as an aid to correct

speaking and writing. The study would be introduced later, only if a real need for it were felt, – and only in such amounts and at such periods as this need clearly required.

In respect to history and literature, a Modern School would have the courage not to go through the form of teaching children useless historic facts just because previous generations of children have learned and forgotten them; and also the courage not to read obsolete and uncongenial classics, simply because tradition has made this sort of acquaintance a kind of good form. We might thus produced a generation as ignorant of the name of the Lickman laws as we who have studied them are ignorant of their contents and significance; a generation that did not at school analyze Milton's "Lycidias" or Burke's speech as we did, who then and there vowed life-long hostility to both. But might there not be an offset if the generation in question really cared about the history and politics of, say, modern England or New York City, and read for sheer fun at one time or another and quite regardless of chronological order Homer, Chaucer, Shakespeare, Walter Scott, Stevenson, Kipling and Masefield?

Neither Latin nor Greek would be contained in the curriculum of the Modern School, – not, of course, because their literatures are less wonderful than they are reputed to be, but because their present position in the curriculum rests upon tradition and assumption. A positive case can be made out of neither.

The literary argument fails, because stumbling and blundering through a few patches of Latin classics do not establish a contact with Latin literature. Nor does present-day teaching result in a practical mastery of Latin useful for other purposes. Mature students who studied Latin through the high school, and perhaps to some extent in college, find it difficult or impossible to understand a Latin document encountered in, say, a course of history. If practical mastery is desired, more Latin can be learned in enormously less time by postponing the study until the student needs the language or wants it. At that stage he can learn more Latin in a few months than he would have succeeded in acquiring through four or five years of reluctant effort in youth.

Finally, the disciplinary argument fails, because "mental discipline" is not a real purpose; moreover, it would in any event constitute an argument against rather than for the study of Latin. I have quoted figures to show how egregiously we fail to teach Latin. These figures mean that instead of getting orderly training by solving difficulties in Latin translation or composition, pupils guess, fumble, receive surreptitious assistance or accept on faith the injunctions of teacher and grammar. The only discipline that most students could get from their classical studies is a discipline in doing things as they should not be done.

I should perhaps deal with yet another argument – viz., that Latin aids in securing a vigorous or graceful use of the mother tongue. Like the arguments previously considered, this is unsubstantiated opinion; no evidence has ever yet been presented. . . .

Possible Results

Would the proposed education educate? Many of the disagreeable features of education with which under existing circumstances children are compelled to wrestle would be eliminated. Would not the training substituted be soft-lacking in vigor, incapable of teaching the child to work against the grain? Again, is there not danger that a school constituted on the modern basis would be unsympathetic with ideals and hostile to spiritual activity?

Two questions are thus raised, (1) the question of discipline, moral and mental, (2) the question of interest or taste.

There is, I think, no harm to be apprehended on either score. The Modern School would "discipline the mind" in the only way in which the mind can be effectively disciplined – by energizing it through the doing of real tasks. The formal difficulties which the Modern School discards are educationally inferior to the genuine difficulties involved in science, industry, literature, and politics; for formal problems are not apt to evoke prolonged and resourceful effort. It is, indeed, absurd to invent formal difficulties for the professed purpose of discipline, when, within the limits of science, industry, literature, and politics, real problems abound. Method can be best acquired, and stands the best chance of being acquired, if real issues are presented. Are problems any the less problems because a boy attacks them with intelligence and zest? He does not attack them because they are easy, nor does he shrink from them because they are hard. He attacks them, if he has been wisely trained, because they challenge his powers. And in this attack he gets what the conventional school so generally fails to give – the energizing of his faculties, and a directive clue as to where he will find a congenial and effective object in life.

A word on the subject of what I have just called the "directive clue." Our college graduates are in large numbers pathetically in the dark as to "what next." Even the elective system has not enabled most of them to find themselves. The reason is clear. A formal education, devoted to "training the mind" and "culture" does little to connect capacity with opportunity or ambition. The more positive endowments, of course, assert themselves; but the more positive endowments are relatively scarce. In the absence of bent, social pressure determines a youth's career in America, less frequently than in more tightly organized societies. But an education that from the start makes a genuine appeal will disclose, develop, and specialize interest. It will, in a word, give the individual a clue.

In this connection it may be fairly asked whether, in the end, it will not turn out that the Modern School practically eschews compulsion. Not at all. But it distinguishes. First of all, the interests of childhood, spontaneous or readily excitable, are of great educational significance: interests in life, objects, adventure, face – these the Modern School proposes to utilize and to develop in their natural season. Next, the capacities of childhood – for the learning of languages, for example – of these the Modern School proposes to make timely use with a view to remote contingencies. So far there is little

need to speak of compulsion. Compulsion will be employed, however, to accomplish anything that needs to be accomplished by compulsion, provided that it can be accomplished by compulsion. Children can and, if necessary, must be compelled to spell and to learn the multiplication table, and anything else that serves a chosen purpose, near or remote; but they cannot be compelled to care about the "Faerie Queene," and sheer compulsion applied to that end is wasted. If children cannot through skillful teaching be brought to care about the "Faerie Queene," compulsory reading of a book or two is as futile a performance as can be imagined. The Modern School will not, therefore, eschew compulsion; but compulsion will be employed with intelligence and discrimination.

As to the second question – whether the Modern School would not be spiritually unsympathetic, the answer depends on the relation of genuine interests of a varied character to spiritual activity. It is, of course, obvious that, if the Modern School were limited to industrial or commercial activities, with just so much language, mathematics, and science as the effective prosecution of those activities requires, the higher potentialities of the child would remain undeveloped. But the Modern School proposes nothing of this kind. It undertakes a large and free handling of the phenomenal world, appealing in due course to the observational, the imaginative, and the reasoning capacities of the child; and in precisely the same spirit and with equal emphasis, it will utilize art, literature and music. Keeping always with in reach of the child's genuine response should indeed make for, not against, the development of spiritual interests. Are science and such poetry as children can be brought to love more likely or less likely to stir the soul than formal grammar, algebra, or the literature selections that emanate from the people who supervise the college entrance examinations?

The education of the particular pupils who attend the Modern School might prove to be the least of the services rendered by the School. More important would perhaps be its influence in setting up positive as against dogmatic educational standards. We go on teaching this or that subject in this or that way for no better reason than that its ineffectiveness or harmfulness has not been established. Medicines were once generally and are still not infrequently prescribed on exactly the same basis. Modern teaching, like modern medicine, should be controlled by positive indications. The schools should teach Latin and algebra, if at all, just as the intelligent physician prescribes quinine, because it serves a purpose that he knows and can state. Nor will tact and insight and enthusiasm cease to be efficient virtues, simply because curriculum and teaching method are constant objects of scientific scrutiny.

In education, as in other realms, the inquiring spirit will be the productive spirit. There is an important though not very extensive body of educational literature of philosophical and inspirational character; but there is little of scientific quality. The scientific spirit is just beginning to creep into elementary and secondary schools; and progress is slow, because the conditions are unfavorable. The Modern School should be a laboratory from which would

issue scientific studies of all kinds of educational problems – a laboratory, first of all, which would test and evaluate critically the fundamental propositions on which it is itself based, and the results as they are obtained.

The inauguration of the experiment discussed in this paper would be at first seriously hampered because of the lack of school paraphernalia adapted to its spirit and purposes. Text-books, apparatus, and methods would have to be worked out – contrived, tentatively employed, remodeled, tried elsewhere, and so on. In the end the implements thus fashioned would be an important factor in assisting the reorganization and reconstruction of other schools – schools that could adopt a demonstration, even though they could not have made the original experiment.

Finally, the Modern School seeking not only to train a particular group of children, but to influence educational practice, can be a seminary for the training of teachers, first its own, then others who will go out into service. The difficulty of recruiting a satisfactory staff to begin with must not be overlooked; for available teachers have been brought up and have taught on traditional lines. On the other hand, the spirit of revolt is rife; and teachers can be found whose efforts have already passed beyond conventional limits. With these the new enterprise would be started.

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Aims in Education

John Dewey

1. The Nature of an Aim

The account of education given in our earlier chapters virtually anticipated the results reached in a discussion of the purport of education in a democratic community. For it assumed that the aim of education is to enable individuals to continue their education – or that the object and reward of learning is continued capacity for growth. Now this idea cannot be applied to all the members of a society except where intercourse of man with man is mutual, and except where there is adequate provision for the reconstruction of social habits and institutions by means of wide stimulation arising from equitably distributed interests. And this means a democratic society. In our search for aims in education, we are not concerned, therefore, with finding an end outside of the educative process to which education is subordinate. Our whole conception forbids. We are rather concerned with the contrast which exists when aims belong within the process in which they operate and when they are set up from without. And the latter state of affairs must obtain when social relationships are not equitably balanced. For in that case, some portions of the whole social group will find their aims determined by an external dictation; their aims will not arise from the free growth of their own experience, and their nominal aims will be means to more ulterior ends of others rather than truly their own.

Our first question is to define the nature of an aim so far as it falls within an activity, instead of being furnished from without. We approach the definition by a contrast of mere results with ends. Any exhibition of energy has results. The wind blows about the sands of the desert; the position of the grains is changed. Here is a result, an effect, but not an end. For there is nothing in the outcome which completes or fulfills what went before it. There is mere spatial redistribution. One state of affairs is just as good as

Source: John Dewey, *Democracy and Education* (New York: Macmillan, 1916)

any other. Consequently there is no basis upon which to select an earlier state of affairs as a beginning, a later as an end, and to consider what intervenes as a process of transformation and realization.

Consider for example the activities of bees in contrast with the changes in the sands when the wind blows them about. The results of the bees' actions may be called ends not because they are designed or consciously intended, but because they are true terminations or completions of what has preceded. When the bees gather pollen and make wax and build cells, each step prepares the way for the next. When cells are built, the queen lays eggs in them; when eggs are laid, they are sealed and bees brood them and keep them at a temperature required to hatch them. When they are hatched, bees feed the young till they can take care of themselves. Now we are so familiar with such facts, that we are apt to dismiss them on the ground that life and instinct are a kind of miraculous thing anyway. Thus we fail to note what the essential characteristic of the event is: namely, the significance of the temporal place and order of each element; the way each prior event leads into its successor while the successor takes up what is furnished and utilizes it for some other stage, until we arrive at the end, which, as it were, summarizes and finishes off the process.

Since aims relate always to results, the first thing to look to when it is a question of aims, is whether the work assigned possesses intrinsic continuity. Or is it a mere serial aggregate of acts, first doing one thing and then another? To talk about an educational aim when approximately each act of a pupil is dictated by the teacher, when the only order in the sequence of his acts is that which comes from the assignment of lessons and the giving of directions by another, is to talk nonsense. It is equally fatal to an aim to permit capricious or discontinuous action in the name of spontaneous self-expression. An aim implies an orderly and ordered activity, one in which the order consists in the progressive completing of a process. Given an activity having a time span and cumulative growth within the time succession, an aim means foresight in advance of the end or possible termination. If bees anticipated the consequences of their activity, if they perceived their end in imaginative foresight, they would have the primary element in an aim. Hence it is nonsense to talk about the aim of education – or any other undertaking – *where conditions do not permit of foresight of results, and do not stimulate* a person to look ahead to see what the outcome of a given activity is to be.

In the next place the aim as a foreseen end gives direction to the activity; it is not an idle view of a mere spectator, but influences the steps taken to reach the end. The foresight functions in three ways. In the first place, it involves careful observation of the given conditions to see what are the means available for reaching the end, and to discover the hindrances in the way. In the second place, it suggests the proper order or sequence in the use of means. It facilitates an economical selection and arrangement. In the third place, it makes choice of alternatives possible. If we can predict the outcome of acting this way or that, we can then compare the value of the two courses

of action; we can pass judgment upon their relative desirability. If we know that stagnant water breeds mosquitoes and that they are likely to carry disease, we can, disliking that anticipated result, take steps to avert it. Since we do not anticipate results as mere intellectual onlookers, but as persons concerned in the outcome, we are partakers in the process which produces the result. We intervene to bring about this result or that.

Of course these three points are closely connected with one another. We can definitely foresee results only as we make careful scrutiny of present conditions, and the importance of the outcome supplies the motive for observations. The more adequate our observations, the more varied is the scene of conditions and obstructions that presents itself, and the more numerous are the alternatives between which choice may be made. In turn, the more numerous the recognized possibilities of the situation, or alternatives of action, the more meaning does the chosen activity possess, and the more flexibly controllable is it. Where only a single outcome has been thought of, the mind has nothing else to think of; the meaning attaching to the act is limited. One only steams ahead toward the mark. Sometimes such a narrow course may be effective. But if unexpected difficulties offer themselves, one has not as many resources at command as if he had chosen the same line of action after a broader survey of the possibilities of the field. He cannot make needed readjustments readily.

The net conclusion is that acting with an aim is all one with acting intelligently. To foresee a terminus of an act is to have a basis upon which to observe, to select, and to order objects and our own capacities. To do these things means to have a mind – for mind is precisely intentional purposeful activity controlled by perception of facts and their relationships to one another. To have a mind to do a thing is to foresee a future possibility; it is to have a plan for its accomplishment; it is to note the means which make the plan capable of execution and the obstructions in the way, – or, if it is really a mind to do the thing and not a vague aspiration – it is to have a plan which takes account of resources and difficulties. Mind is capacity to refer present conditions to future results, and future consequences to present conditions. And these traits are just what is meant by having an aim or a purpose. A man is stupid or blind or unintelligent – lacking in mind – just in the degree in which in any activity he does not know what he is about, namely, the probable consequences of his acts.A man is imperfectly intelligent when he contents himself with looser guesses about the outcome than is needful, just taking a chance with his luck, or when he forms plans apart from study of the actual conditions, including his own capacities. Such relative absence of mind means to make our feelings the measure of what is to happen. To be intelligent we must "stop, look, listen" in making the plan of an activity.

To identify acting with an aim and intelligent activity is enough to show its value – its function in experience. We are only too given to making an entity out of the abstract noun "consciousness." We forget that it comes from the adjective "conscious." To be conscious is to be aware of what we are

about; conscious signifies the deliberate, observant, planning traits of activity. Consciousness is nothing which we have which gazes idly on the scene around one or which has impressions made upon it by physical things; it is a name for the purposeful quality of an activity, for the fact that it is directed by an aim. Put the other way about, to have an aim is to act with meaning, not like an automatic machine; it is to mean to do something and to perceive the meaning of things in the light of that intent.

2. The Criteria of Good Aims

We may apply the results of our discussion to a consideration of the criteria involved in a correct establishing of aims.

(1) The aim set up must be an outgrowth of existing conditions. It must be based upon a consideration of what is already going on; upon the resources and difficulties of the situation. Theories about the proper end of our activities – educational and moral theories – often violate this principle. They assume ends lying outside our activities; ends foreign to the concrete makeup of the situation; ends which issue from some outside source. Then the problem is to bring our activities to bear upon the realization of these externally supplied ends. They are something for which we ought to act. In any case such "aims" limit intelligence; they are not the expression of mind in foresight, observation, and choice of the better among alternative possibilities. They limit intelligence because, given ready-made, they must be imposed by some authority external to intelligence, leaving to the latter nothing but a mechanical choice of means.

(2) We have spoken as if aims could be completely formed prior to the attempt to realize them. This impression must now be qualified. The aim as it first emerges is a mere tentative sketch. The act of striving to realize it teses its worth. If it suffices to direct activity successfully, nothing more is required, since its whole function is to set a mark in advance; and at times a mere hint may suffice. But usually – at least in complicated situations – acting upon it brings to light conditions which had been overlooked. This calls for revision of the original aim; it has to be added to and subtracted from. An aim must, then, be flexible; it must be capable of alteration to meet circumstances. An end established externally to the process of action is always rigid. Being inserted or imposed from without, it is not supposed to have a working relationship to the concrete conditions of the situation. What happens in the course of action neither confirms, refutes, nor alters it. Such an end can only be insisted upon. The failure that results from its lack of adaptation is attributed simply to the perverseness of conditions, not to the fact that the end is not reasonable under the circumstances. The value of a legitimate aim, on the contrary, lies in the fact that we can use it to change conditions. It is a method for dealing with conditions so as to effect desirable alterations in them. A farmer who should passively accept things just as he finds them

would make as great a mistake as he who framed his plans in complete disregard of what soil, climate, etc., permit. One of the evils of an abstract or remote external aim in education is that its very inapplicability in practice is likely to react into a haphazard scrambling as immediate conditions. A good aim surveys the present state of experience of pupils, and forming a tentative plan of treatment, keeps the plan constantly in view and yet modifies it as conditions develop. The aim, in short, is experimental, and hence constantly growing as it is tested in action.

13. The aim must always represent a freeing of activities. The term end in view is suggestive, for it puts before the mind the termination or conclusion of some process. The only way in which we can define an activity is by putting before ourselves the objects in which it terminates – as one's aim in shooting is the target. But we must remember that the object is only a mark or sign by which the mind specifies the activity one desires to carry out. Strictly speaking, not the target but hitting the target is the end in view; one takes aim by means of the target, but also by the sight on the gun. The different objects which are thought of are means of directing the activity. Thus one aims at, say, a rabbit; what he wants is to shoot straight: a certain kind of activity. Or, if it is the rabbit he wants, it is not rabbit apart from his activity, but as a factor in activity: he wants to eat the rabbit, or to show it as evidence of his marksmanship – he wants to do something with it. The doing with the thing, not the thing in isolation, is his end. The object is but a phase of the active end, – continuing the activity successfully. This is what is meant by the phrases used above, "freeing activity."

In contrast with fulfilling some process in order that activity may go on, stands the static character of an end which is imposed from without the activity. It is always conceived of as fixed; it is something to be attained and possessed. When one has such a notion, activity is a mere unavoidable means to something else; it is not significant or important on its own account. As compared with the end it is but a necessary evil; something which must be gone through before one can reach the object which is alone worth while. In other words, the external idea of the aim leads to a separation of means from end, while an end which grows up within an activity as plan for its direction is always both ends and means, the distinction being only one of convenience. Every means is a temporary end until we have attained it. Every end becomes a means of carrying activity further as soon as it is achieved. We call it end when it marks off the future direction of the activity in which we are engaged; means when it marks off the present direction. Every divorce of end from means diminishes by that much the significance of the activity and tends to reduce it to a drudgery from which one would escape if he could. A farmer has to use plants and animals to carry on his farming activities. It certainly makes a great difference to his life whether he is fond of them, or whether he regards them merely as means which he has to employ to get something else in which alone he is interested. In the former case, his entire course of activity is significant; each phase of it has its own value. He has

the experience of realizing his end at every stage; the postponed aim, or end in view, being merely a sight ahead by which to keep his activity going fully and freely. For if he does not look ahead, he is more likely to find himself blocked. The aim is as definitely a means of action as is any other portion of an activity.

3. Applications in Education

There is nothing peculiar about educational aims. They are just like aims in any directed occupation. The educator, like the farmer, has certain things to do, certain resources with which to do, and certain obstacles with which to contend. The conditions with which the farmer deals, whether as obstacles or resources, have their own structure and operation independently of any purpose of his. Seeds sprout, rain falls, the sun shines, insects devour, blight comes, the seasons change. His aim is simply to utilize these various conditions; to make his activities and their energies work together, instead of against one another. It would be absurd if the farmer set up a purpose of farming, without any reference to these conditions of soil, climate, characteristic of plant growth, etc. His purpose is simply a foresight of the consequences of his energies connected with those of the things about him, a foresight used to direct his movements from day to day. Foresight of possible consequences leads to more careful and extensive observation of the nature and performances of the things he had to do with, and to laying out a plan – that is, of a certain order in the acts to be performed.

It is the same with the educator, whether parent or teacher. It is as absurd for the latter to set up his "own" aims as the proper objects of the growth of the children as it would be for the farmer to set up an ideal of farming irrespective of conditions. Aims mean acceptance of responsibility for the observations, anticipations, and arrangements required in carrying on a function – whether farming or educating. Any aim is of value so far as it assists observation, choice, and planning in carrying on activity from moment to moment and hour to hour; if it gets in the way of the individual's own common sense (as it will surely do if imposed from without or accepted on authority) it does harm.

And it is well to remind ourselves that education as such has no aims. Only persons, parents, and teachers, etc., have aims, not an abstract idea like education. And consequently their purposes are indefinitely varied, differing with different children, changing as children grow and with the growth of experience on the part of the one who teaches. Even the most valid aims which can be put in words will, as words, do more harm than good unless one recognizes that they are not aims, but rather suggestions to educators as to how to observe, how to look ahead, and how to choose in liberating and directing the energies of the concrete situations in which they find themselves. As a recent writer has said: "To lead this boy to read Scott's novels instead of

old Sleuth's stories; to teach this girl to sew; to root out the habit of bullying from John's make-up; to prepare this class to study medicine, – these are samples of the millions of aims we have actually before us in the concrete work of education."

Bearing these qualifications in mind, we shall proceed to state some of the characteristics found in all good educational aims. (1) An educational aim must be founded upon the intrinsic activities and needs (including original instincts and acquired habits) of the given individual to be educated. The tendency of such an aim as preparation is, as we have seen, to omit existing powers, and find the aim in some remote accomplishment or responsibility. In general, there is a disposition to take considerations which are dear to the hearts of adults and set them up as ends irrespective of the capacities of those educated. There is also an inclination to propound aims which are so uniform as to neglect the specific powers and requirements of an individual, forgetting that all learning is something which happens to an individual at a given time and place. The larger range of perception of the adult is of great value in observing the abilities and weaknesses of the young, in deciding what they may amount to. Thus the artistic capacities of the adult exhibit what certain tendencies of the child are capable of: if we did not have the adult achievements we should be without assurance as to the significance of the drawing, reproducing, modelling, coloring activities of childhood. So if it were not for adult language, we should not be able to see the import of the babbling impulses of infancy. But it is one thing to use adult accomplishments as a context in which to place and survey the doings of childhood and youth; it is quite another to set them up as a fixed aim without regard to the concrete activities of those educated.

(2) An aim must be capable of translation into a method of cooperating with the activities of those undergoing instruction. It must suggest the kind of environment needed to liberate and to organize their capacities. Unless it lends itself to the construction of specific procedures, and unless these procedures test, correct, and amplify the aim, the latter is worthless. Instead of helping the specific task of teaching, it prevents the use of ordinary judgment in observing and sizing up the situation. It operates to exclude recognition of everything except what squares up with the fixed end in view. Every rigid aim just because it is rigidly given seems to render it unnecessary to give careful attention to concrete conditions. Since it must apply anyhow, what is the use of noting details which do not count?

The vice of externally imposed ends has deep roots. Teachers receive them from superior authorities; these authorities accept them from what is current in the community. The teachers impose them upon children. As a first consequence, the intelligence of the teacher is not free; it is confined to receiving the aims laid down from above. Too rarely is the individual teacher so free from the dictation of authoritative supervision, textbook on methods, prescribed course of study, etc., that he can let his mind come to close quarters with the pupil's mind and the subject matter. This distrust of the teacher's

experience is then reflected in lack of confidence in the responses of pupils. The latter receive their aims through a double or treble external imposition, and are constantly confused by the conflict between the aims which are natural to their own experience at the time and those in which they are taught to acquiesce. Until the democratic criterion of the intrinsic significance of every growing experience is recognized, we shall be intellectually confused by the demand for adaptation to external aims.

(3) Educators have to be on their guard against ends that are alleged to be general and ultimate. Every activity, however specific, is, of course, general in its ramified connections, for it leads out indefinitely into other things. So far as a general idea makes us more alive to these connections, it cannot be too general. But "general" also means "abstract," or detached from all specific context. And such abstractness means remoteness, and throws us back, once more, upon teaching and learning as mere means of getting ready for an end disconnected from the means. That education is literally and all the time its own reward means that no alleged study or discipline is educative unless it is worth while in its own immediate having. A truly general aim broadens *the outlook; it stimulates one to take more consequences (connections)* into account. This means a wider and more flexible observation of means. The more interacting forces, for example, the farmer takes into account, the more varied will be his immediate resources. He will see a greater number of possible starting places, and a greater number of ways of getting at what he wants to do. The fuller one's conception of possible future achievements, the less his present activity is tied down to a small number of alternatives. If one knew enough, one could start almost anywhere and sustain his activities continuously and fruitfully.

Understanding then the term general or comprehensive aim simply in the sense of a broad survey of the field of present activities, we shall take up some of the larger ends which have currency in the educational theories of the day, and consider what light they throw upon the immediate concrete and diversified aims which are always the educator's real concern. We premise (as indeed immediately follows from what has been said) that there is no need of making a choice among them or regarding them as competitors. When we come to act in a tangible way we have to select or choose a particular act at a particular time, but any number of comprehensive ends may exist without competition, since they mean simply different ways of looking at the same scene. One cannot climb a number of different mountains simultaneously, but the views had when different mountains are ascended supplement one another: they do not set up incompatible, competing worlds. Or, putting the matter in a slightly different way, one statement of an end may suggest certain questions and observations, and another statement another set of questions, calling for other observations. Then the more general ends we have, the better. One statement will emphasize what another slurs over. What a plurality of hypotheses does for the scientific investigator, a plurality of stated aims may do for the instructor.

Summary

An aim denotes the result of any natural process brought to consciousness and made a factor in determining present observation and choice of ways of acting. It signifies that an activity has become intelligent. Specifically it means foresight of the alternative consequences attendant upon acting in a given situation in different ways, and the use of what is anticipated to direct observation and experiment. A true aim is thus opposed at every point to an aim which is imposed upon a process of action from without. The latter is fixed and rigid; it is not a stimulus to intelligence in the given situation, but is an externally dictated order to do such and such things. Instead of connecting directly with present activities, it is remote, divorced from the means by which it is to be reached. Instead of suggesting a freer and better balanced activity, it is a limit set to activity. In education, the currency of these externally imposed aims is responsible for the emphasis put upon the notion of preparation for a remote future and for rendering the work of both teacher and pupil mechanical and slavish.

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The Project Method

William Heard Kilpatrick

The word 'project' is perhaps the latest arrival to knock for admittance at the door of educational terminology. Shall we admit the stranger? Not wisely until two preliminary questions have first been answered in the affirmative: First, is there behind the proposed term and waiting even now to be christened a valid notion or concept which promises to render appreciable service in educational thinking? Second, if we grant the foregoing, does the term 'project' fitly designate the waiting concept? Because the question as to the concept and its worth is so much more significant than any matter of mere names, this discussion will deal almost exclusively with the first of the two inquiries. It is indeed entirely possible that some other term, as 'purposeful act', for example, would call attention to a more important element in the concept, and, if so, might prove superior as a term to the word 'project'. At the outset it is probably wise to caution the reader against expecting any great amount of novelty in the idea here presented. The metaphor of christening is not to be taken too seriously; the concept to be considered is not in fact newly born. Not a few readers will be disappointed that after all so little new is presented.

A little of the personal may perhaps serve to introduce the more formal discussion. In attacking with successive classes in educational theory the problem of method, I had felt increasingly the need of unifying more completely a number of important related aspects of the educative process. I began to hope for some one concept which might serve this end. Such a concept, if found, must, so I thought, emphasize the factor of action, preferably wholehearted vigorous activity. It must at the same time provide a place for the adequate utilization of the laws of learning, and no less for the essential elements of the ethical quality of conduct. The last named looks of course to the social situation as well as to the individual attitude. Along with these should go, as it seemed, the important generalization that education is life – so

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easy to say and so hard to delimit. Could now all of these be contemplated under one workable notion? If yes, a great gain. In proportion as such a unifying concept could be found in like proportion would the work of presenting educational theory be facilitated; in like proportion should be the rapid spread of a better practice.

But could this unifying idea be found? Here was in fact the age-old problem of effective logical organization. My whole philosophic outlook had made me suspicious of so-called "fundamental principles". Was there yet another way of attaining unity? I do not mean to say that I asked these questions, either in these words or in this order. Rather is this a retrospective ordering of the more important outcomes. As the desired unification lay specifically in the field of method, might not some typical unit of concrete procedure supply the need – some unit of conduct that should be, as it were, a sample of life, a fair sample of the worthy life and consequently of education? As these questionings rose more definitely to mind, there came increasingly a belief – corroborated on many sides – that the unifying idea I sought was to be found in the conception of whole-hearted purposeful activity proceeding in a social environment, or more briefly, in the unit element of such activity, the hearty purposeful act.

It is to this purposeful act with the emphasis on the word purpose that I myself apply the term 'project'. I did not invent the term nor did I start it on its educational career. Indeed, I do not know how long it has already been in use. I did, however, consciously appropriate the word to designate the typical unit of the worthy life described above. Others who were using the term seemed to me either to use it in a mechanical and partial sense or to be intending in a general way what I tried to define more exactly. The purpose of this article is to attempt to clarify the concept underlying the term as much as it is to defend the claim of the concept to a place in our educational thinking. The actual terminology with which to designate the concept is, as was said before, to my mind a matter of relatively small moment. If, however, we think of a project as a pro-ject, something pro-jected, the reason for its adoption may better appear.

Postponing yet a little further the more systematic presentation of the matter, let us from some typical instances see more concretely what is contemplated under the term project or hearty purposeful act? Suppose a girl makes a dress. If she did in hearty fashion purpose to make the dress, if she planned it, if she made it herself, then I should say the instance is that of a typical project. We have a wholehearted purposeful act carried on amid social surroundings. That the dressmaking was purposeful is clear: the purpose once formed dominated each succeeding step in the process and gave unity to the whole. That the girl was wholehearted in the work was assured in the illustration. That the activity proceeded in a social environment is clear: other girls at least are to see the dress. As another instance, suppose a boy undertakes to get out a school newspaper. If he is in earnest about it, we again have the effective purpose being the essence of the project. So we may instance

a pupil writing a letter (if the hearty purpose is present), a child listening absorbedly to a story. Newton explaining the motion of the moon on the principles of terrestrial dynamics, Demosthenes crying to arouse the Greeks against Philip, Da Vinci painting the *Last Supper*, my writing this article, a boy solving with felt purpose an 'original' in geometry. All of the foregoing have been acts of individual purposing, but this is not to rule out group projects: a class presents a play, a group of boys organize a baseball nine, three pupils prepare to read a story to their comrades. It is clear then that projects may present every variety that purposes present in life. It is also clear that a mere description of outwardly observable facts might not disclose the essential factor, namely the presence of a dominating purpose. It is equally true that there can be every degree of approximation to full projects according as the animating purpose varies in clearness and strength. If we conceive activities as ranging on a scale from those performed under dire compulsion up to those into which one puts his 'whole heart', the argument herein made restricts the term 'project' or purposeful act to the upper portions of the scale. An exact dividing line is hard to draw, and yields indeed in importance to the notion that psychological value increases with the degree of approximation to 'wholeheartedness'. As to the social environment element, some may feel that, however important this is to the fullest educative experience, it is still not essential to the conception of the purposeful act as here presented. These might therefore wish to leave this element out of the defining discussion. To this I should not object if it were clearly understood that the resulting concept – now essentially psychological in character – generally speaking, demands the social situation both for its practical working and for the comparative valuation of proffered projects.

With this general introduction, we may, in the first place, say that the purposeful act is the typical unit of the worthy life. Not that all purposes are good, but that the worthy life consists of purposive activity and not mere drifting. We scorn the man who passively accepts what fate or some other chance brings to him. We admire the man who is master of his fate, who with deliberate regard for a total situation forms clear and far-reaching purposes, who plans and executes with nice care the purposes so formed. A man who habitually so regulates his life with reference to worthy social aims meets at once the demands for practical efficiency and of moral responsibility. Such a one presents the ideal of democratic citizenship. It is equally true that the purposeful act is not the unit of life for the serf or the slave. These poor unfortunates must in the interest of the overmastering system be habituated to act with a minimum of their own purposing and with a maximum of servile acceptance of others' purposes. In important matters they merely follow plans handed down to them from above, and execute these according to prescribed directions. For them another carries responsibility and upon the results of their labor another passes judgment. No such plan as that here advocated would produce the kind of docility required for their hopeless fate. But it is a democracy which we contemplate and with which we are here concerned.

As the purposeful act is thus the typical unit of the worthy life in a democratic society, so also should it be made the typical unit of school procedure. We of America have for years increasingly desired that education be considered as life itself and not as a mere preparation for later living. The conception before us promises a definite step toward the attainment of this end. If the purposeful act be in reality the typical unit of the worthy life, then it follows that to base education on purposeful acts is exactly to identify the process of education with worthy living itself. The two become then the same. All the arguments for placing education on a life basis seem, to me at any rate, to concur in support of this thesis. On this basis education has become life. And if the purposeful act thus makes of education life itself, could we reasoning in advance expect to find a better preparation for later life than practice in living now? We have heard of old that "we learn to do by doing," and much wisdom resides in the saying. If the worthy life of the coming day is to consist of well chosen purposeful acts, what preparation for that time could promise more than practice now, under discriminating guidance, in forming and executing worthy purposes? To this end must the child have within rather large limits the opportunity to purpose. For the issues of his act he must – in like limits – be held accountable. That the child may properly progress, the total situation – all the factors of life, including comrades – speaking, if need be through the teacher, must make clear its selective judgment upon what he does, approving the better, rejecting the worse. In a true sense the whole remaining discussion is but to support the contention here argued in advance that education based on the purposeful act prepares best for life while at the same time it constitutes the present worthy life itself.

A more explicit reason for making the purposeful act the typical unit of instruction is found in the utilization of the laws of learning which this plan affords. I am assuming that it is not necessary in this magazine to justify or even explain at length these laws. Any act of conduct consists of a response to the existing situation. That response and not some other followed the given situation because there existed in the nervous system a bond or connection joining the stimulus of that situation with that response. Some such bonds come with us into the world, as, for example, the infant cries (responds) when he is very hungry (situation acting as stimulus). Other bonds are acquired, as when the child later asks in words for food when he is hungry. The process of acquiring or otherwise changing bonds we call learning. The careful statements of the conditions under which bonds are built or changed are the laws of learning. Bonds are not always equally ready to act: when I am angry, the bonds that have to do with smiling are distinctly unready; other bonds controlling uglier behavior are quite ready. When a bond is ready to act, to act gives *satisfaction* and not to act gives *annoyance*. When a bond is not ready to act, to act gives annoyance and not to act gives satisfaction. These two statements constitute the Law of Readiness. The law that most concerns us in

this discussion is that of Effect when a modifiable bond acts it is strengthened or weakened according as satisfaction or annoyance results. The ordinary psychology of common observation has not been so conscious of these two laws as it has of the third law, that of Exercise; but for our present purposes, repetition simply means the continued application of the law of Effect. There are yet other laws necessary for a full explanation of the facts of learning. Our available space allows for only one more, that of 'set' or attitude, the others we have to assume without explicit reference. When a person is very angry, he is sometimes colloquially said to be "mad all over." Such a phrase implies that many bonds are ready to act conjointly to an end, in this case, the end of overcoming or doing damage to the object of anger. Under such conditions there is (a) available and at work a stock of energy for attaining the end, (b) a state of readiness in the bonds pertaining to the activity at hand, and (c) a correlative unreadiness on the part of the bonds that might thwart the attainment of the end contemplated by the 'set'. The reader is asked to note (a) how a 'set' towards an end means readiness and action of pertinent bonds with reference to that end, (b) how this end defines success, (c) how readiness means satisfaction when success is attained, and (d) how satisfaction strengthens the bonds whose action brought success. These facts fit well with the generalization that man's mental powers and capacities came into being in connection with the continual attaining of ends demanded by the life of the organism. The capacity for 'set' means in the case of man the capacity for determined and directed action. Such action means for our discussion not only the that (objective) success is more likely to result, but that learning better takes place. The bonds whose action brought success are by the resulting satisfaction more firmly fixed, both as distinct bonds separately considered and as a system of bonds working together under the 'set'. Set, readiness, determined action, success, satisfaction, and learning are inherently connected.

How then does the purposeful act utilize the laws of learning? A boy is intent upon making a kite that will fly. So far he has not succeeded. The purpose is clear. This purpose is but the 'set' consciously and volitionally bent on its end. As set the purpose is the inner urge that carries the boy on in the face of hindrance and difficulty. It brings 'readiness' to pertinent inner resources of knowledge and thought. Eye and hand are made alert. The purpose acting as aim guides the boy's thinking, directs his examination of plan and material, elicits from within appropriate suggestions, and tests these several suggestions by their pertinency to the end in view. The purpose in that it contemplates a specific end defines success: the kite must fly or he has failed. The progressive attaining of success with reference to subordinate aims brings satisfaction at the successive stage stages of completion. Satisfaction; in detail and in respect of the whole by the automatic working of the second law of learning (Effect) fixes the several bonds which by their successive successes brought the finally successful kite. The purpose thus sup-

plies the motive power, makes available inner resources, guides the process to its pre-conceived end and by this satisfactory success fixes in the boy's mind anti-character the successful steps as part and parcel of one whole. The purposeful act does utilize the laws of learning.

But this account does not yet exhaust the influence of the purpose on the resulting learning. Suppose as extreme cases two boys making kites, the one with wholeheartedness of purpose as we have just described, the other under direct compulsion as a most unwelcome task. For simplicity's sake suppose the latter under enforced directions makes a kite identical with the other. Call the identical movements in the two cases the "primary" responses in kite-making. These furnish the kind of responses that we can and customarily do assign as task – the external irreducible minimum for the matter at hand. Upon such we can feasibly insist, even to the point of punishment if we so decide. Follow now the thinking of the two boys as they make their kites. Besides the thinking necessarily involved in the "primary" responses, other thoughts, few or many, will come; some perhaps of materials or processes involved, penumbrae as it were of the primary responses; others more personal or by way of comment upon the process. The penumbrae of the primary we may call the "accessory" or complementary responses; the others, the "concomitants" or by products of the activity. The terminology not entirely happy, and exact lines of division are not easy to draw; but the distinctions may perhaps help us to see a further function of purpose.

As for the primary responses we need do little more than recall the discussion of the immediately preceding paragraphs. The factor of "set" conditions the learning process. A strong set acting through the satisfaction which attends success fixes quickly and strongly the bonds which brought success. In the case of coercion, however, a different state of affairs holds. There are in effect two sets operating; one set kept in existence solely through coercion is concerned to make a kite that will pass muster; the other set has a different end and would pursue a different course were the coercion removed. Each set in so far as it actually exists means a possible satisfaction and in that degree a possible learning. But the two sets being opposed mean at times a confusion as to the object of success, and in every case each set destroys a part of the other's satisfaction and so hampers the primary learning. So far then as concerns even the barest mechanics of kite-making, the boy of wholehearted purpose – will emerge with a higher degree of skill and knowledge and his learning will longer abide with him.

In the case of the accessory or complementary responses the is equally noticeable. The unified set of wholeheartedness will render available all the pertinent connected inner resources. A wealth of marginal responses will be ready to come forward at every opportunity. Thoughts will be turned over and over, and each step will be connected in many ways with other experiences. Alluring leads in various allied directions will open before the boy, which only the dominant present purpose could suffice to postpone. The element of satisfaction will attend connections seen, so that the complex of

allied thinking will the longer remain as a mental possession. All of this is exactly not so with the other boy. The forbidden 'set' so long as it persists will pretty effectually quench the glow of thought. Unreadiness will rather characterize his attitude. Responses accessory to the work at hand will be few in number, and the few that come will lack the element of satisfaction to fix them. Where the one boy has a wealth of accessory ideas, the other has poverty. What abides with the one, is fleeting with the other. Even more pronounced is the difference in the by-products or *concomitants* from these contrasted activities. The one boy looks upon his school activity with joy and confidence and plans yet other projects; the other counts his school a bore and begins to look elsewhere for the expression there denied. To the one the teacher is a friend and comrade; to the other, a taskmaster and enemy. The one easily feels himself on the side of the school and other social agencies, the other with equal ease considers them all instruments of suppression.

The contrasts here made are consciously of extremes. Most children live between the two. The question is whether we shall not consciously put before us as an ideal the one type of activity and approximate it as closely as we can rather than supinely rest content to live as close to the other type as do the general run of our American schools. Does not the ordinary school among us put its almost exclusive attention on the primary responses and the learning of these in the second fashion here described? Do we not too often reduce the subject matter of instruction to the level of this type alone? Does not our examination system – even our scientific tests at times – tend to carry us in the same direction? How many children at the close of a course decisively shut the book and say, "Thank gracious, I am through with that!" How many people 'get an education' and yet, hate books and hate to think?

The thought suggested at the close of the preceding paragraph may be generalized into a criterion more widely applicable. The richness of life is seen upon reflection to depend, in large measure at least, upon the tendency of what one does to suggest and prepare for succeeding activities. Any activity – beyond the barest physical wants – which does not thus 'lead on' becomes in time stale and flat. Such 'leading on' means that the individual has been modified so that he sees what before he did not see or does what before he could not do. But this is exactly to say that the activity has had an educative effect. Not to elaborate the argument, we may assert that the richness of life depends exactly on its tendency to lead one on to other like fruitful activity, that the degree of this tendency consists exactly in the educative effect of the activity involved; and that we may therefore take as the criterion of the value of any activity – whether intentionally educative or not its tendency directly or indirectly to lead the individual and others whom he touches on to other like fruitful activity. If we apply this criterion to the common run of American schools we get exactly the discouraging results indicated above. It is the thesis of this paper that these evil results must inevitably follow the effort to found our educational procedure on an unending round of set tasks in conscious disregard of the element of dominant

purpose in those who perform the tasks. This again is not to say that every purpose is good nor that the child is a suitable judge as between purposes nor that he is never to be forced to act against a purpose which he entertains. We contemplate no scheme of subordination of teacher or school to childish whim; but we do mean that any plan of educational procedure which does not aim consciously and insistently at securing and utilizing vigorous purposing on the part of the pupils is founded essentially on an ineffective and unfruitful basis. Nor is the quest for desirable purposes hopeless. There is no necessary conflict in kind between the social demands and the child's interests. Our whole fabric of institutional life grew out of human interests. The path of the race is here a possible path for the individual. There is no normal boy but has already many socially desirable interests and is capable of many more. It is the special duty and opportunity of the teacher to guide the pupil through his present interests and achievement unto the wider interests and achievement demanded by the wider social life of the older world.

The question of moral education was implicitly raised in the preceding paragraph. What is the effect on morals of the plan herein advocated? A full discussion is unfortunately impossible. Speaking for myself, however, I consider the possibilities for building moral character in a regime of purposeful activity one of the strongest points in its favor; and contrariwise the tendency toward a selfish individualism one of the strongest counts against our customary set-task alone-at your-own-desk procedure. Moral character is primarily an affair of shared social relationships, the disposition to determine one's conduct and attitudes with reference to the welfare of the group. This means psychologically, building stimulus-response bonds such that when certain ideas are present as stimuli certain approved responses will follow. We are then concerned that children get a goodly stock of ideas to serve as stimuli for conduct, that they develop good judgment for selecting the idea appropriate to a given case, and that they have firmly built such response bonds as will bring – as inevitably as possible – the appropriate conduct once the proper idea has been chosen. In terms of this (necessarily simplified) analysis we wish such school procedure as will most probably result in the requisite body of ideas, in the needed skill in *judging* a moral situation and in unfailing appropriate response bonds. To get these three can we conceive of a better way than by living in a social milieu which provides, under competent supervision for shared coping with a variety of social situations? In the school procedure here advocated children are living together in the pursuit of a rich variety of purposes, some individually sought, many conjointly. As must happen in social commingling occasions of moral stress will arise, but here – fortunately – under conditions that exclude extreme and especially – harmful cases. Under the eye of the skillful teacher the children as an embryonic society will make increasingly finer discriminations as to what is right and proper. Ideas and judgments come thus. Motive and occasion arise together; the teacher has but to steer the process of evaluating the situation. The teacher's success – if we believe in democracy – will consist in gradually eliminating himself or herself from the success of the procedure.

Not only do defined ideas and skill in judging come from such a situation, but response bonds as well. The continual sharing of purposes in such a school offers ideal conditions for forming the necessary habits of give and take. The laws of learning hold here as elsewhere, especially the Law of Effect. If the child is to set up habits of acting, satisfaction must attend the doing or annoyance the failure. Now there are few satisfactions so gratifying and few annoyances so distressing as the approval and the disapproval of our comrades. Anticipated approval will care for most cases; but the positive social disapproval of one's fellows has peculiar potency. When the teacher merely coerces and the other pupils side with their comrade, a contrary 'set' – such as we earlier discussed – is almost inevitable, often so definite as to prevent the fixing in the child's character of the desired response. Conformity may be but outward. But when all concerned take part in deciding what is just – if the teacher act wisely – there is far less likelihood of an opposing 'act'. Somehow disapproval by those who understand from one's own point of view tends to dissolve an opposing 'set', and one acts then more fully from his own decision. In such cases the desired bond is better built in one's moral character. Conformity is not merely outward. It is necessary to emphasize the part the teacher plays in this group building of bonds. Left alone, as 'the gentleman's grade' in college indicates, pupils may develop habits of dawdling. Against this purposelessness the present thesis is especially directed; but proper ideals must be built up in the school group. As an ideal is but an idea joined with tendencies to act, the procedure for building has been discussed; but the teacher is responsible for the results. The pupils working under his guidance must through the social experiences encountered build the ideals necessary for approved social life. The regime of purposeful activity offers then a wider variety of educative moral experiences more nearly typical of life itself than does our usual school procedure, lends itself better to the educative evaluation of these, and provides better for the fixing of all as permanent acquisitions in the intelligent moral character.

The question of the growth or building of interests is important in the theory of the plan here discussed. Many points still prove difficult, but some things can be said. Most obvious is the fact of 'maturing' (itself a difficult topic). At first an infant responds automatically to his environment. Only later, after many experiences have been organized, can he, properly speaking, entertain purposes; and in this there are many gradations. Similarly, the earliest steps involved in working out a set are those that have been instinctively joined with the process. Later on, steps may be taken by 'suggestion' (the relatively automatic working of acquired associations). Only comparatively late do we find true adaptation of means to end, the conscious choice of steps to the attainment of deliberately formed purposes. These considerations must qualify any statements made regarding child purposes. One result of the growth here discussed is the 'leading on' it affords. A skill acquired as end can be applied as means to new purposes. Skill or idea arising

first in connection with means may be singled out for special consideration and so form new ends. This last is one of the most fruitful sources of new interests, particularly of the intellectual kind.

In connection with this 'maturing' goes a general increase in the 'interest span', the length of time during which a set will remain active, the time within which a child will – if allowed – work at any given project. What part of this increase is due to nature and physical maturing, what part to nurture, why the span is long for some activities and short for others, how we can increase the span in any given cases, are questions of the greatest moment for the educator. It is a matter of common knowledge that within limits interests may be built up the correlative interest spans appreciably increased. Whatever else may be said this must mean that stimulus-response bonds have been formed and this in accordance with the laws of learning. We have already seen the general part played by the factor of purpose in utilizing the laws of learning. There seems no reason to doubt that like considerations hold here. In particular the discussion of coercion with its two opposed sets holds almost unchanged. Since the 'set' of external origin has its correlative goal and its consequent possible success, there is a theoretical possibility of learning. In this way we may conceive a new interest built by coercion. Two factors, however, greatly affect the practical utilization of this possibility, the one inherently to hinder, the other possibly to help. The inherent hindrance is the opposed internal set, which in proportion to its intensity and persistence will confuse the definition of success and lessen the satisfaction of attainment. Acquiring a new interest is in this respect accordingly doubly and inherently hindered by coercion. The second factor, which may chance favorably, is the possibility that what (reduced) learning takes place may connect with some already potentially existent interest giving such expression to it that the inner opposition to the enforced activity is won over, and the opposing set dissolved. This second factor is of especial significance for the light it throws upon the relation of teacher and pupils in this matter of coercion. It seems from these considerations that if compulsion will result in such learning as sets free some self-continuing activity and these before harmful concomitants have been set up, we may approve such compulsion as a useful temporary device. Otherwise, so *far* as concerns the building of interests, the use of coercion seems a choice of evils with the general probabilities opposing. . . .

The limits of the article forbid a discussion of other important aspects of the topic: the changes necessitated by this plan in room furniture and equipment, perhaps in school architecture, the new type of text-book, the new kind of curriculum and program, possibly new plans of grading and promotion, most of all a changed attitude as to what to wish for in the way of achievement. Nor can we consider what this type of procedure means for democracy in furnishing us better citizens, alert, able to think and act, too intelligently critical to be easily hoodwinked either by politicians or by patent medicines, self-reliant, ready of adaptation to the new social conditions that

impend. The question of difficulties would itself require a separate article: opposition of tradition, of taxpayers; unprepared and incompetent teachers; the absence of a worked-out procedure; problems of administration and supervision. All these and more would suffice to destroy the movement were it not deeply grounded.

In conclusion then, we may say that the child is naturally active, especially along social lines. Heretofore a regime of coercion has only too often reduced our schools to aimless dawdling and our pupils to selfish individualists. Some in reaction have resorted to foolish humoring of childish whims. The contention of this paper is that wholehearted purposeful activity in a social situation as the typical unit of school procedure is the best guarantee of the utilization of the child's native capacities now too frequently wasted. Under proper guidance purpose means efficiency, not only in reaching the projected end of the activity immediately at hand, but even more in securing from the activity the learning which it potentially contains. Learning of all kinds and in its all desirable ramifications best proceeds in proportion as wholeheartedness of purpose is present. With the child naturally social and with the skillful teacher to stimulate and guide his purposing, we can especially expect that kind of learning we call character building. The necessary reconstruction consequent upon these considerations offers a most alluring 'project' to the teacher who but dares to purpose.

38

The Problem of the School

Antonio Gramsci

The problem of the school (like any other problem which concerns a general activity of the state, a necessary function in society) must be studied as part of the sphere of action of the state of workers' and peasants' councils. We are aiming to stimulate a mentality of construction, of comrades already ideally organized in the state of the Councils, already ideally active and at work in evoking all the organs of the new social life. The educational propaganda conducted so far by the Socialists has been largely negative and critical: it could not have been otherwise. Today, after the positive experiences of our Russian comrades, it can and must be otherwise if we want to ensure that their experiences have not been in vain for us. We must develop these experiences critically, paring away from them what is specific to Russia, dependent on the particular conditions in which the Soviet Republic found Russian society when it came to power. We must pick out and establish what in them is of permanent necessity to communist society, dependent on the needs and aspirations of the class of workers and peasants exploited to the same degree in all parts of the globe.

The problem of the school is at once both technical and political. In a parliamentary-democratic state there can be no technical and political solution to the problem of the school. Ministers of education are placed in office because they belong to a political party, not because they know how to administer and direct the educational function of the state. It cannot even in all honesty be claimed that the bourgeois class moulds the school to its own ends of domination. If this were to happen, it would mean that the bourgeois class had an educational programme and was carrying it out with single-minded energy: the school would then be a living thing. This is not the case. The bourgeoisie, as the class which controls the state, takes no interest in the school. It lets the bureaucrats make or destroy it as they are

Source: David Forgacs (ed.), *A Gramsci Reader: Selected Writings 1916–1935* (London: Lawrence and Wishart, 1988), 'The Problem of the School' *L'Ordine Nuovo*, 27 June, 1919, pp. 68–70.

able and allows the education ministers to be chosen according to the caprice of political competition, through partisan intrigue, so as to attain a happy balance of parties in the cabinet. In these conditions the technical study of the educational problem is a pure exercise of mental chess, a matter of intellectual gymnastics rather than a serious and concrete contribution to the problem itself: when, that is, it is not a tiresome lamentation and rehashing of old banalities about the excellence of the educative role of the state, the benefits of education, etc.

In the state of the Councils, the school will represent one of the most important and essential of public activities. Indeed, to the development and success of the school is linked the development of the communist state, the advent of a democracy in which the dictatorship of the proletariat is absorbed. The present generation will be educated into the practice of the social discipline necessary for the realization of communist society, with assemblies and direct participation in deliberation and the administration of the socialist state. The school will have the task of rearing the new generations, those who will enjoy the fruits of our sacrifices and efforts, those who will reap, after the transitional period of national proletarian dictatorships, the fullness of life and development of international communist democracy. How will the communist schools carry out this task? How should the educative function of the state be organized in the overall system of the Councils? What administrative duty will need to be carried out by the primary and secondary teachers' union? How will universities and polytechnics be transformed and co-ordinated in the general cultural activity? Once the constitution is changed and the fundamental principles of the law have been altered, what character should the Faculty of Law possess? Our review numbers among its subscribers and readers a strong contingent of young students, artists and teachers of different levels who have the ability and the training to pose these problems critically and try to solve them. We appeal to their good will, to the active desire they feel for useful co-operation towards the advent of the new order of communism.

Unsigned, *L'Ordine Nuovo*, 27 June 1919, SCW, 39–40

39

The Aims of Education

Alfred North Whitehead

Culture is activity of thought, and receptiveness to beauty and humane feeling. Scraps of information have nothing to do with it. A merely well informed man is the most useless bore on God's earth. What we should aim at producing is men who possess both culture and expert knowledge in some special direction. Their expert knowledge will give them the ground to start from, and their culture will lead them as deep as philosophy and as high as art. We have to remember that the valuable intellectual development is self development, and that it mostly takes place between the ages of sixteen and thirty. As to training, the most important part is given by mothers before the age of twelve. A saying due to Archbishop Temple illustrates my meaning. Surprise was expressed at the success in after-life of a man, who as a boy at Rugby had been somewhat undistinguished. He answered, "It is not what they are at eighteen, it is what they become afterwards that matters."

In training a child to activity of thought, above all things we must beware of what I will call "inert ideas" – that is to say, ideas that are merely received into the mind without being utilised, or tested, or thrown into fresh combinations.

In the history of education, the most striking phenomenon is that schools of learning, which at one epoch are alive with a ferment of genius, in a succeeding generation exhibit merely pedantry and routine. The reason is, that they are overladen with inert ideas. Education with inert ideas is not only useless: it is, above all things, harmful – *Corruptio optimi, pessima.* Except at rare intervals of intellectual ferment, education in the past has been radically infected with inert ideas. That is the reason why uneducated clever women, who have seen much of the world, are in middle life so much the most cultured part of the community. They have been saved from this horrible burden of inert ideas. Every intellectual revolution which has ever stirred humanity into greatness has been a passionate protest against inert ideas. Then, alas, with

Source: Alfred North Whitehead, *The Aims of Education and Other Essays* (Macmillan, 1929).

pathetic ignorance of human psychology, it has proceeded by some educational scheme to bind humanity afresh with inert ideas of its own fashioning. Let us now ask how in our system of education we are to guard against this mental dryrot. We enunciate two educational commandments, "Do not teach too many subjects," and again, "What you teach, teach thoroughly."

The result of teaching small parts of a large number of subjects is the passive reception of disconnected ideas, not illumined with any spark of vitality. Let the main ideas which are introduced into a child's education be few and important, and let them be thrown into every combination possible. The child should make them his own, and should understand their application here and now in the circumstances of his actual life. From the very beginning of his education, the child should experience the joy of discovery. The discovery which he has to make, is that general ideas give an understanding of that stream of events which pours through his life, which is his life. By understanding I mean more than a mere logical analysis, though that is included. I mean "understanding' in the sense in which it is used in the French proverb, "To understand all, is to forgive all." Pedants sneer at an education which is useful. But if education is not useful, what is it? Is it a talent, to be hidden away in a napkin? Of course, education should be useful, whatever your aim in life. It was useful to Saint Augustine and it was useful to Napoleon. It is useful, because understanding is useful.

I pass lightly over that understanding which should be given by the literary side of education. Nor do I wish to be supposed to pronounce on the relative merits of a classical or a modern curriculum. I would only remark that the understanding which we want is an understanding of an insistent present. The only use of a knowledge of the past is to equip us for the present. No more deadly harm can be done to young minds than by depreciation of the present. The present contains all that there is. It is holy ground; for it is the past, and it is the future. At the same time it must be observed that an age is no less past if it existed two hundred years ago than if it existed two thousand years ago. Do not be deceived by the pedantry of dates. The ages of Shakespeare and of Moliere are no less past than are the ages of Sophocles and of Virgil. The communion of saints is a great and inspiring assemblage, but it has only one possible hall of meeting, and that is, the present, and the mere lapse of time through which any particular group of saints must travel to reach that meeting-place, makes very little difference.

Passing now to the scientific and logical side of education, we remember that here also ideas which are not utilised are positively harmful. By utilising an idea, I mean relating it to that stream, compounded of sense perceptions, feelings, hopes, desires, and of mental activities adjusting thought to thought, which forms our life. I can imagine a set of beings which might fortify their souls by passively reviewing disconnected ideas. Humanity is not built that way except perhaps some editors of newspapers.

In scientific training, the first thing to do with an idea is to prove it. But allow me for one moment to extend the meaning of "prove"; I mean – to prove its worth. Now an idea is not worth much unless the propositions in which it is embodied are true. Accordingly an essential part of the proof of an idea is the proof, either by experiment or by logic, of the truth of the propositions. But it is not essential that this proof of the truth should constitute the first introduction to the idea. After all, its assertion by the authority of respectable teachers is sufficient evidence to begin with. In our first contact with a set of propositions, we commence by appreciating their importance. That is what we all do in after-life. We do not attempt, in the strict sense, to prove or to disprove anything, unless its importance makes it worthy of that honour. These two processes of proof, in the narrow sense, and of appreciation, do not require a rigid separation in time. Both can be proceeded with nearly concurrently. But in so far as either process must have the priority, it should be that of appreciation by use.

Furthermore, we should not endeavour to use propositions in isolation. Emphatically I do not mean, a neat little set of experiments to illustrate Proposition I and then the proof of Proposition I, a neat little set of experiments to illustrate Proposition II and then the proof of Proposition II, and so on to the end of the book. Nothing could be more boring. Interrelated truths are utilised *en bloc*, and the various propositions are employed in any order, and with any reiteration. Choose some important applications of your theoretical subject, and study them concurrently with the systematic theoretical exposition. Keep the theoretical exposition short and simple, but let it be strict and rigid so far as it goes. It should not be too long for it to be easily known with thoroughness and accuracy. The consequences of a plethora of half-digested theoretical knowledge are deplorable. Also the theory should not be muddled up with the practice. The child should have no doubt when it is proving and when it is utilising. My point is that what is proved should be utilised, and that what is utilised should – so far, as is practicable – be proved. I am far from asserting that proof and utilisation are the same thing.

At this point of my discourse, I can most directly carry forward my argument in the outward form of a digression. We are only just realising that the art and science of education require a genius and a study of their own: and that this genius and this science are more than a bare knowledge of some branch of science or of literature. This truth was partially perceived in the past generation; and headmasters, somewhat crudely, were apt to supersede learning in their colleagues by requiring left-hand bowling and a taste for football. But culture is more than cricket, and more than football, and more than extent of knowledge.

Education is the acquisition of the art of the utilisation of knowledge. This is an art very difficult to impart. Whenever a textbook is written of real educational worth, you may be quite certain that some reviewer will say that it will be difficult to teach from it. Of course it will be difficult to

teach from it. If it were easy, the book ought to be burned; for it cannot be educational. In education, as elsewhere, the broad primrose path leads to a nasty place. This evil path is represented by a book or a set of lectures which will practically enable the student to learn by heart all the questions likely to be asked at the next external examination. And I may say in passing that no educational system is possible unless every question directly asked of a pupil at any examination is either framed or modified by the actual teacher of that pupil in that subject. The external assessor may report on the curriculum or on the performance of the pupils, but never should be allowed to ask the pupil a question which has not been strictly supervised by the actual teacher, or at least inspired by a long conference with him. There are a few exceptions to this rule, but they are exceptions, and could easily be allowed for under the general rule.

We now return to my previous point, that theoretical ideas should always find important applications within the pupil's curriculum. This is not an easy doctrine to apply, but a very hard one. It contains within itself the problem of keeping knowledge alive, of preventing it from becoming inert, which is the central problem of all education.

The best procedure will depend on several factors, none of which can be neglected, namely, the genius of the teacher, the intellectual type of the pupils, their prospects in life, the opportunities offered by the immediate surroundings of the school and allied factors of this sort. It is for this reason that the uniform external examination is so deadly. We do not denounce it because we are cranks, and like denouncing established things. We are not so childish. Also, of course, such examinations have their use in testing slackness. Our reason of dislike is very definite and very practical. It kills the best part of culture. When you analyse in the light of experience the central task of education, you find that its successful accomplishment depends on a delicate adjustment of many variable factors. The reason is that we are dealing with human minds, and not with dead matter. The evocation of curiosity, of judgment, of the power of mastering a complicated tangle of circumstances, the use of theory in giving foresight in special cases all these powers are not to be imparted by a set rule embodied in one schedule of examination subjects.

I appeal to you, as practical teachers. With good discipline, it is always possible to pump into the minds of a class a certain quantity of inert knowledge. You take a text-book and make them learn it. So far, so good. The child then knows how to solve a quadratic equation. But what is the point of teaching a child to solve a quadratic equation? There is a traditional answer to this question. It runs thus: The mind is an instrument, you first sharpen it, and then use it; the acquisition of the power of solving a quadratic equation is part of the process of sharpening the mind. Now there is just enough truth in this answer to have made it live through the ages. But for all its half-truth, it embodies a radical error which bids fair to stifle the genius of the modern world. I do not know who was first responsible for this analogy of the mind to a dead instrument. For aught I know, it may have been one

of the seven wise men of Greece, or a committee of the whole lot of them. Whoever was the originator, there can be no doubt of the authority which it has acquired by the continuous approval bestowed upon it by eminent persons. But whatever its weight of authority, whatever the high approval which it can quote, I have no hesitation in denouncing it as one of the most fatal, erroneous, and dangerous conceptions ever introduced into the theory of education. The mind is never passive; it is a perpetual activity, delicate, receptive, responsive to stimulus. You cannot postpone its life until you have sharpened it. Whatever interest attaches to your subject matter must be evoked here and now; whatever powers you are strengthening in the pupil, must be exercised here and now; whatever possibilities of mental life your teaching should impart, must be exhibited here and now. That is the golden rule of education, and a very difficult rule to follow.

The difficulty is just this: the apprehension of general ideas, intellectual habits of mind, and pleasurable interest in mental achievement can be evoked by no form of words, however accurately adjusted. All practical teachers know that education is a patient process of the mastery of details, minute by minute, hour by hour, day by day. There is no royal road to learning through an airy path of brilliant generalisations. There is a proverb about the difficulty of seeing the wood because of the trees. That difficulty is exactly the point which I am enforcing. The problem of education is to make the pupil see the wood by means of the trees.

The solution which I am urging is to eradicate the fatal disconnection of subjects which kills the vitality of our modern curriculum. There is only one subject-matter for education, and that is Life in all its manifestations. Instead of this single unity, we offer children – Algebra, from which nothing follows; Geometry, from which nothing follows; Science, from which nothing follows; History, from which nothing follows; a Couple of Languages, never mastered; and lastly, most dreary of all, Literature, represented by plays of Shakespeare, with philological notes and short analyses of plot and character to be in substance committed to memory. Can such a list be said to represent Life, as it is known in the midst of the living of it? The best that can be said of it is, that it is a rapid table of contents which a deity might run over in his mind while he was thinking of creating a world, and has not yet determined how to put it together.

Let us now return to quadratic equations. We still have on hand the unanswered question, Why should children be taught their solution? Unless quadratic equations fit into a connected curriculum, of course there is no reason to teach anything about them. Furthermore, extensive as should be the place of mathematics in a complete culture, I am a little doubtful whether for many types of boys algebraic solutions of quadratic equations do not lie on the specialist side of mathematics. I may here remind you that as yet I have not said anything of the psychology or the content of the specialism, which is so necessary a part of an ideal education. But all that is an evasion of our real question, and I merely state it in order to avoid being misunderstood in my answer.

Quadratic equations are part of algebra, and algebra is the intellectual instrument which has been created for rendering clear the quantitative aspects of the world. There is no getting out of it. Through and through the world is infected with quantity. To talk sense, is to talk in quantities. It is no use saying that the nation is large, – How large? It is no use saying that radium is scarce, – How scarce? You cannot evade quantity. You may fly to poetry and to music, and quantity and number will face you in your rhythms and your octaves. Elegant intellects which despise the theory of quantity, are but half developed. They are more to be pitied than blamed. The scraps of gibberish, which in their school-days were taught to them in the name of algebra, deserve some contempt. This question of the degeneration of algebra into gibberish, both in word and in fact, affords a pathetic instance of the uselessness of reforming educational schedules without a clear conception of the attributes which you wish to evoke in the living minds of the children. A few years ago there was an outcry that school algebra, was in need of reform, but there was a general agreement that graphs would put everything right. So all sorts of things were extruded, and graphs were introduced. So far as I can see, with no sort of idea behind them, but just graphs. Now every examination paper has one or two questions on graphs. Personally I am an enthusiastic adherent of graphs. But I wonder whether as yet we have gained very much. You cannot put life into any schedule of general education unless you succeed in exhibiting its relation to some essential characteristic of all intelligent or emotional perception. It is a hard saying, but it is true; and I do not see how to make it any easier. In making these little formal alterations you are beaten by the very nature of things. You are pitted against too skilful an adversary, who will see to it that the pea is always under the other thimble.

Reformation must begin at the other end. First, you must make up your mind as to those quantitative aspects of the world which are simple enough to be introduced into general education; then a schedule of algebra should be framed which will about find its exemplification in these applications. We need not fear for our per graphs, they will be there in plenty when we once begin to treat algebra as a serious means of studying the world. Some of the simplest applications will be found in the quantities which occur in the simplest study of society. The curves of history are more vivid and more informing than the dry catalogues of names and dates which comprise the greater part of that arid school study. What purpose is effected by a catalogue of undistinguished kings and queens? Tom, Dick, or Harry, they are all dead. General resurrections are failures, and are better postponed. The quantitative flux of the forces of modern society is capable of very simple exhibition. Meanwhile, the idea of the variable, of the function, of rate of change, of equations and their solution, of elimination, are being studied as an abstract science for their own sake. Not, of course, in the pompous phrases with which I am alluding to them here, but with that iteration of simple special cases proper to teaching.

If this course be followed, the route from Chaucer to the Black Death, from the Black Death to modern Labour troubles, will connect the tales of the mediaeval pilgrims with the abstract science of algebra, both yielding diverse aspects of that single theme, Life. I know what most of you are thinking at this point. It is that the exact course which I have sketched out is not the particular one which you would have chosen, or even see how to work. I quite agree. I am not claiming that I could do it myself. But your objection is the precise reason why a common external examination system is fatal to education. The process of exhibiting the applications of knowledge must, for its success, essentially depend on the character of the pupils and the genius of the teacher. Of course I have left out the easiest applications with which most of us are more at home. I mean the quantitative sides of sciences, such as mechanics and physics.

Again, in the same connection we plot the statistics of social phenomena against the time. We then eliminate the time between suitable pairs. We can speculate how far we have exhibited a real causal connection, or how far a mere temporal coincidence. We notice that we might have plotted against the time one set of statistics for one country and another set for another country, and thus, with suitable choice of subjects, have obtained graphs which certainly exhibited mere coincidence. Also other graphs exhibit obvious causal connections. We wonder how to discriminate. And so are drawn on as far as we will.

But in considering this description, I must beg you to remember what I have been insisting on above. In the first place, one train of thought will not suit all groups of children. For example, I should expect that artisan children will want something more concrete and, in a sense, swifter than I have set down here. Perhaps I am wrong, but that is what I should guess. In the second place, I am not contemplating one beautiful lecture stimulating, once and for all, an admiring class. That is not the way in which education proceeds. No; all the time the pupils are hard at work solving examples drawing graphs, and making experiments, until they have a thorough hold on the whole subject. I am describing the interspersed explanations, the directions which should be given to their thoughts. The pupils have got to be made to feel that they are studying something, and are not merely executing intellectual minuets.

Finally, if you are teaching pupils for some general examination, the problem of sound teaching is greatly complicated. I have you ever noticed the zig-zag moulding round a Norman arch? The ancient work is beautiful, the modern work is hideous. The reason is, that the modern work is done to exact measure, the ancient work is varied according to the idiosyncrasy of the workman. Here it is crowded, and there it is expanded. Now the essence of getting pupils through examinations is to give equal weight to all parts of the schedule. But mankind is naturally specialist. One man sees a whole subject, where another can find only a few detached examples. I know that it seems contradictory to allow for specialism in a curriculum especially

designed for a broad culture. Without contradictions the world would be simpler, and perhaps duller. But I am certain that in education wherever you exclude specialism you destroy life.

We now come to the other great branch of a general mathematical education, namely Geometry. The same principles apply. The theoretical part should be clear-cut, rigid, short, and important. Every proposition not absolutely necessary to exhibit the main connection of ideas should be cut out, but the great fundamental ideas should be all there. No omission of concepts, such as those of Similarity and Proportion. We must remember that, owing to the aid rendered by the visual presence of a figure, Geometry is a field of unequalled excellence for the exercise of the deductive faculties of reasoning. Then, of course, there follows Geometrical Drawing, with its training for the hand and eye.

But, like Algebra, Geometry and Geometrical Drawing must be extended beyond the mere circle of geometrical ideas. In an industrial neighbourhood, machinery and workshop practice form the appropriate extension. For example, in the London Polytechnics this has been achieved with conspicuous success. For many secondary schools I suggest that surveying and maps are the natural applications. In particular, plane-table surveying should lead pupils to a vivid apprehension of the immediate application of geometric truths. Simple drawing apparatus, a surveyor's chain, and a surveyor's compass, should enable the pupils to rise from the survey and mensuration of a field to the construction of the map of a small district. The best education is to be found in gaining the utmost information from the simplest apparatus. The provision of elaborate instruments is greatly to be deprecated. To have constructed the map of a small district, to have considered its roads, its contours, its geology, its climate, its relation to other districts, the effects on the status of its inhabitants, will teach more history and geography than any knowledge of Perkin Warbeck or of Behren's Straits. I mean not a nebulous lecture on the subject, but a serious investigation in which the real facts are definitely ascertained by the aid of accurate theoretical knowledge. A typical mathematical problem should be: Survey such and such a field, draw a plan of it to such and such a scale, and find the area. It would be quite a good procedure to impart the necessary geometrical propositions without their proofs. Then, concurrently in the same term, the proofs of the propositions would be learnt while the survey was being made.

Fortunately, the specialist side of education presents an easier problem than does the provision of a general culture. For this there are many reasons. One is that many of the principles of procedure to be observed are the same in both cases, and it is unnecessary to recapitulate. Another reason is that specialist training takes place – or should take place – at a more advanced stage of the pupil's course, and thus there is easier material to work upon. But undoubtedly the chief reason is that the specialist study is normally a study of peculiar interest to the student. He is studying it because, for some reason, he wants to know it. This makes all the difference. The general culture

is designed to foster an activity of mind; the specialist course utilises this activity. But it does not do to lay too much stress on these neat antitheses. As we have already seen, in the general course foci of special interest will arise; and similarly in the special study, the external connections of the subject drag thought outwards.

Again, there is not one course of study which merely gives general culture and another which gives special knowledge. The subjects pursued for the sake of a general education are special subjects specially studied; and, on the other hand, one of the ways of encouraging general mental activity is to foster a special devotion. You may not divide the seamless coat of learning. What education has to impart is an intimate sense for the power of ideas, for the beauty of ideas, and for the structure of ideas, together with a particular body of knowledge which has peculiar reference to the life of the being possessing it.

The appreciation of the structure of ideas is that side of a cultured mind which can only grow under the influence of a special study. I mean that eye for the whole chess-board, for the bearing of one set of ideas on another. Nothing but a special study can give any appreciation for the exact formulation of general ideas, for their relations when formulated, for their service in the comprehension of life. A mind so disciplined should be both more abstract and more concrete. It has been trained in the comprehension of abstract thought and in the analysis of facts.

Finally, there should grow the most austere of all mental qualities: I mean the sense for style. It is an aesthetic sense, based on admiration for the direct attainment of a foreseen end, simply and without waste. Style in art, style in literature, style in science, style in logic, style in practical execution have fundamentally the same aesthetic qualities, namely, attainment and restraint. The love of a subject in itself and for itself, where it is not the sleepy pleasure of pacing a mental quarter deck, is the love of style as manifested in that study.

Here we are brought back to the position from which we started, the utility of education. Style, in its finest sense, is the last acquirement of the educated mind; it is also the most useful. It pervades the whole being. The administrator with a sense for style hates waste; the engineer with a sense for style economises his material; the artisan with a sense for style prefers good work. Style is the ultimate morality of mind.

But above style, and above knowledge, there is something, a vague shape like fate above the Greek gods. That something is Power. Style is the fashioning of power, the restraining of power. But, after all, the power of attainment of the desired end is fundamental. The first thing is to get there. Do not bother about your style, but solve your problem, justify the ways of God to man, administer your province, or do whatever else is set before you.

Where, then, does style help? In this, with style the end is attained without side issues, without raising undesirable inflammations. With style you attain your end and nothing but your end. With style the effect of your activity is calculable, and foresight is the last gift of gods to men. With style your power

is increased, for your mind is not distracted with irrelevancies, and you are more likely to attain your object. Now style is the exclusive privilege of the expert. Whoever heard of the style of an amateur painter, of the style of an amateur poet? Style is always the product of specialist study, the peculiar contribution of specialism to culture.

English education in its present phase suffers from a lack of definite aim, and from an external machinery which kills its vitality. Hitherto in this address I have been considering the aims which should govern education. In this respect England halts between two opinions. It has not decided whether to produce amateurs or experts. The profound change in the world which the nineteenth century has produced is that the growth of knowledge has given foresight. The amateur is essentially a man with appreciation and with immense versatility in mastering a given routine. But he lacks the foresight which comes from special knowledge. The object of this address is to suggest how to produce the expert without loss of the essential virtues of the amateur. The machinery of our secondary education is rigid where it should be yielding, and lax where it should be rigid. Every school is bound on pain of extinction to train its boys for a small set of definite examinations. No headmaster has a free hand to develop his general education or his specialist studies in accordance with the opportunities of his school, which are created by its staff, its environment, its class of boys, and its endowments. I suggest that no system of external tests which aims primarily at examining individual scholars can result in anything but educational waste.

Primarily it is the schools and not the scholars which should be inspected. Each school should grant its own leaving certificates, based on its own curriculum. The standards of these schools should be sampled and corrected. But the first requisite for educational reform is the school as a unit, with its approved curriculum based on its own needs, and evolved by its own staff. If we fail to secure that, we simply fall from one formalism into another, from one dung hill of inert ideas into another.

In stating that the school is the true educational unit in any national system for the safeguarding of efficiency, I have conceived the alternative system as being the external examination of the individual scholar. But every Scylla is faced by its Charybdis – or, in more homely language, there is a ditch on both sides of the road. It will be equally fatal to education if we fall into the hands of a supervising department which is under the impression that it can divide all schools into two or three rigid categories, each type being forced to adopt a rigid curriculum. When I say that the school is the educational unit, I mean exactly what I say, no larger unit, no smaller unit. Each school must have the claim to be considered in relation to its special circumstances. The classifying of schools for some purposes is necessary. But no absolutely rigid curriculum, not modified by its own staff, should be permissible. Exactly the same principles apply, with the proper modifications, to universities and to technical colleges. When one considers in its length and in its breadth the importance of this question of the education of a nation's young, the broken

lives, the defeated hopes, the national failures, which result from the frivolous inertia with which it is treated, it is difficult to restrain within oneself a savage rage. In the conditions of modern life the rule is absolute, the race which does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your wit, not all your victories on land or at sea, can move back the finger of fate. To-day we maintain ourselves. To-morrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will then be pronounced on the uneducated.

We can be content with no less than the old summary of educational ideal which has been current at any time from the dawn of our civilisation. The essence of education is that it be religious.

Pray, what is religious education?

A religious education is an education which inculcates duty and reverence. Duty arises from our potential control over the course of events. Where attainable knowledge could have changed the issue, ignorance has the guilt of vice. And the foundation of reverence is this perception, that the present holds within itself the complete sum of existence, backwards and forwards, that whole amplitude of time, which is eternity.

40

The American Experimental School

Harold Rugg

I

As the mass school in America is a replica of the mass mind of America, so the experimental school is a replica of the experimental mind.[1] The acquisitive mass mind produced the formal, disciplined school, the school of the status quo. The experimental mind, lagging three generations behind, succeeded only in setting up tentative educational innovations – schools for a dynamic civilization. These innovating schools are our only institutions worthy of the name of experimental.

The experimental school could be evaluated adequately only by analyzing thoroughly the economic and psychological setting from which it emerged. That setting is the spectacular epic of industrial civilization: three centuries of inductive science, mechanical invention, dramatic exploitation of natural resources, and widespread experiment with democratic forms of government. The late emergence of the experimental and of its corresponding educational innovations can be understood only by a mastery of that dramatic background. To sketch that drama even in skeletal form would necessitate a series of lectures instead of one, and its word description would fill more than the traditional five-foot shelf. To-night, therefore, I must be content with the mere enumeration of the chief captions of its movements and characteristics.

II

It is my confident judgment that there were no truly experimental schools in America until the turn of the twentieth century. It is true that even in the first years of our national existence occasional evangelical protagonists of child life tried to establish schools which were free from the regimentation of the

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disciplinary conception. Witness Bronson Alcott and his Temple School in Boston, Robert Owen and the experiments at New Harmony, Indiana. Note especially Francis Parker and his struggles with the New England scholastics and the Chicago politicians to inject more active and natural forms of learning into the mass school. After 1880 the more liberal college and school administrators attempted to bring about the administrative liberalizing of school machinery.

These initial attempts no doubt expedited much the work of the present generation of laboratory schools. Nevertheless, it is not too much to say that the little institution which John Dewey and his neighbors established in 1896 for the proper education of their children was the first truly laboratory school. Even though it did not employ standard tests, the control group, and the statistics of correlation, it did reveal the essential characteristic of an experimental school. It revealed an experimental attitude of mind; a determination to ignore the practical exigencies of mass education, and to attempt to develop a curriculum of activities and materials of instruction on the criterion of maximum all round child growth.

I wish there were time to remind you of what a striking achievement that was: to call to mind the century-long movement for the establishment of a school system in America. I wish it were possible to set forth fully the manner in which educational leaders, overwhelmed by the task of housing millions of children, selecting and training thousands of school teachers, and persuading an unwilling public to finance modern universal education, were compelled to devote themselves almost entirely to the mechanics of school administration. I would sketch for you their inevitable neglect of educational theory and the consequent tinkering of the curriculum of the mass school into a patchwork of school subjects. It is, indeed, only through an understanding of the frame of rigid academic pigeonholes – reading, writing, arithmetic, grammar, history, geography, the sciences, the classics, etc. – which constitute the curriculum of our schools that we can truly understand the dynamic significance of the continuing stream of activities which came to constitute the core of the curriculum of the innovating schools. If there were time to sketch that story, it would be possible to contrast sharply the guiding concepts of the mass school, namely "discipline," "skill," "classified knowledge," "order," "social efficiency," with the concepts of the experimental schools of the twentieth century: "self-cultivation," "freedom," "activity," "creative self-expression."

III

It is to three groups of protagonists of change[7] that we owe the present experimental school: first, a few experimentally-minded administrators of schools and colleges; second, students of the scientific study of education; third, the protagonists of the truly child-centered schools.

The first group, liberal college and school administrators, like Eliot of Harvard, Harper of Chicago, Greenwood of Kansas City, sought to liberalize college entrance requirements, which were exerting a strangle hold on the secondary school curriculum. They sought to economize time by providing more flexible promotion plans and methods of organizing the school grades. Their experimentation went no further than truing-up the superfices of school administration. The philosophy and psychology of education were not changed. The disciplinary conception dominated even the most flexible school machines.

What was the contribution of the students of the scientific study of education – Thorndike, Judd, Freeman, et al. – to the establishment of the experimental schools? Their chief contribution was an understanding of the scientific method and the statistical and experimental, fact-finding technique. They themselves rarely worked within experimental schools. The students of scientific method sought to produce more objective attitudes among teachers and administrators and to set up measured and controlled experimental studies. From the early years of the twentieth century they launched, indeed, a hectic era of fact-finding. New slogans: Tests to measure teaching! Controlled experiments! Statistics! Score cards for school buildings! Rating cards! The school survey! Budgeting the school! An increasingly voluminous body of knowledge was made available concerning the verbal intelligence of children, modes of learning and retaining the skills, techniques of teaching the school subjects, and the social usefulness of the materials of the school curriculum.

The gains achieved through the efforts of these two groups – administrative reorganizes and students of scientific method – are distinctive, and will be remembered long in the annals of education. In fundamental attitude of mind, however, the philosophy of education was not changed by the efforts of either. They all, even the scientific men, supported the point of view which has been described by Professor Kilpatrick as "subject-matter-set-out-to-be-learned."

To the concept of flexible organization and objective study were added stirring concepts of educational reconstruction: the integration of personality, freedom, activity, child interest, initiative, and responsibility. This was the contribution of the educational revolutionists, led by Dewey, Merriam, and Kilpatrick. These were the true experimentalists; these achieved a new attitude of mind; these sponsored the revolutionary philosophy of child growth.

Under the influences of the initial experimentation of these pioneers, innovating schools appeared in various centers. There were the Organic School of Fairhope, Alabama, 1907; the Park School of Baltimore, and the Shady Hill School of Cambridge, 1912; the Play School of New York, afterward the City and Country School, and the Edgewood School, Greenwich, Connecticut, 1913; the Walden School, 1915; the Lincoln School of Teachers College, 1917; the Ojai Valley School, 1923. Furthermore, it was during these years that, under the influence of Kilpatrick and his colleagues, tentative experimentation with child-centered education began in occasional classrooms in town and

city systems, and even in the practice schools of teachers colleges. This very incomplete catalog provides a striking exhibit of the rapidity with which the long-delayed movement committed itself to practice. To-day, scores of schools exist in which teaching is directed by child interest, in which self-cultivation is coordinate in importance with the mastery of race experience. Founded to demonstrate this or that emphasis in the theory of education, these schools vary greatly, of course, in importance in the experimental world. Some are still largely committed to the "subject matter" point of view. Few are, indeed, educational laboratories in the rigorously scientific sense of the term. The sponsors of some have all too often been untrained zealous laymen. But all may be characterized as distinctive innovations in school program, the curriculum, and in teaching.

IV

These, then, are the forces and attitudes which confront one another on the current American educational scene. On the extreme right, the intrenched college and school administrators and their allies sponsor the disciplinary conception of education, accepting the traditional academic organization of subject matter, and conceiving learning solely as acquiring race experience. On the extreme left, the educational revolutionaries advocate a freer type of education, presenting the self-cultivation of the whole child as the supreme goal, and insisting upon activity and child initiative. Between the two are the students of the scientific study of education, masters of technique, immersed in a vast fact finding movement, and finding it difficult to wrench themselves free from the traditional "subject matter" point of view.

Each of the latter two groups has produced important techniques and partially substantiated hypotheses for the building of the future experimental school in America. The scientific man offers the techniques of fact finding, of measurement, of experimentation, and of statistical methods; the protagonists of the child-centered school have produced novel types of school program, dynamic activities, and new hypotheses concerning the integrated nature of learning and growth.

The quarter century since 1900 has, indeed, produced a striking body of knowledge concerning human growth. Through scores of painstaking scientific investigations, the physiologists and the psycho biologists have built up a whole new conception of the integration of the nervous system and of bodily, intellectual, and emotional activity. Their emphasis upon the integrated nature of experience coincides exactly with the insistence upon the integrative nature of learning that has come from the independent intuitions of the psychologists and experimentalists in the child centered schools. The fundamental hypotheses of the protagonists of the child centered school, I say, paralleled closely the hypotheses and the conclusions of Sherrington, Cride, Cannon, Childs, Herrick, and the other students of the nervous life of human beings. This was

inevitable because Dewey and his colleagues, influenced much by James and by the evolutionists, adopted the central principle of growth as the dynamic criterion for educational reconstruction.

V

To what extent, then, has the experimental school emerged in America and what are its actual accomplishments? Its chief accomplishment is that a small but growing number of elementary schools have been established which, in administration, in class management, in scholastic atmosphere, are radical innovations. They may be regarded as our only true experimental centers. They are few and far between, possibly a score in number, certainly not more than two score. These include a few of the more objectively-directed laboratory schools and occasional classrooms in public school systems. I exclude, however, from this discussion the demonstration and training schools of our teachers colleges and normal schools. An examination of the curricula of these institutions reveals the almost complete absence of real experimentation.

The programs of those schools which stand far out on the frontier of educational experimentation reveal five distinctive characteristics:

First: they have substituted a diversified program of activities – so-called "units of work," "centers of interest," or "projects" – for the academic subject matter program of the mass school. In the primary grades of the more radical experiments, subjects have been almost entirely abolished: but in the intermediate grades there is a considerable use of them. The programs of the higher elementary grades and those of the high school, however, are built definitely upon the traditional school subjects.

Second: the child-centered schools are experimenting vigorously with the hypothesis that the systematic treatment of the skills – reading, writing, arithmetic – should be postponed until the third or fourth school year.

Third: the creative artist has been discovered and already has succeeded in substituting the drawing-out environment for the coercive one. When the true artist crossed the threshold of the classroom, art entered the school. No contribution of the child-centered school is of greater significance than that which it has already made in sketching the outlines of a new psychology of the creative act.

Fourth: as a corollary to the discovery of the creative artist is the parallel discovery of the significance of rhythmic capacities. The creative artist, although uninformed concerning the scientific achievements of the biologists, has through sheer intuitive genius, traced out the rhythmic nature of life and has rediscovered, independently, the unity and the uniqueness of individuality. Witness the new concept that "Personality is an orchestration of rhythms."

Fifth: finally, one other discovery of these innovating schools can be registered as a distinctive accomplishment, namely, the utilization of the life of the whole school as the necessary agency for the maximum development of

the whole child. The claim of the child-centered schools to be recognized as experimental institutions rests, therefore, upon the establishment of these five persuasive hypotheses.

VI

These, then, are the conspicuous accomplishments of a few centers of radical innovation. Not one of these schools, however, is conducting scientifically controlled experiments. Enthusiastic innovation, but not scientific study, marks out the advances of the experimental school. With this brief view of the achievements of the child-centered schools, what are their chief deficiencies, and what is the promise that they will attack scientifically the crucial and unsolved problems which now confront us?

It is my judgment that all of their weaknesses can be summed up in one – lack of scholarship. This lack reveals itself in the unbalanced character of the school programs in the teachers' lack of alertness to the maximum development of ideas, in the lack of planned repetition in the curriculum – of meanings, generalizations, and problems, as well as of skills; and in the widespread lack of interest in scientific study, either of society or of the child.[7]

The curriculum of each of these laboratory schools is a mosaic of relatively isolated units. In not one of them have the teachers visualized the program of the entire school in constructing the program for any one year or any one unit. In spite of the wealth of dynamic activity in the separated units of work, the programs are lopsided; in one overloaded with the study of tools and science, in another dominated by the miniature community, in a third devoted almost altogether to the social studies.

There is, correspondingly, too little respect for the planned development of meaning and power of generalization. Although the laboratory schools are truly interested in teaching isolated facts, altogether too frequently they leave the development of ideas to chance and to the succession of spontaneous events. There is an imperative need that these experimental schools design their curricula, utilizing the wealth of conclusion now available from the scientific study of curriculum-making.

The current absence of design reveals itself in the lack of recognition of the established principle that skill in thinking can develop only through practice in thinking. The need in program making is obvious – the conscious selection and arrangement of analyzed activities in terms of their promise of training in reflective thinking.

The criticism of the lack of scholarship in the staffs of the laboratory schools is most clearly revealed by the unscientific character of their work. They exhibit, essentially, a free-lance attitude marked by interest in innovation, in activity, and in freedom, but unchecked by modern knowledge of physiology, of psychology, of the social sciences. The teachers in these laboratory schools are sincere and enthusiastic artists, groping their way on the frontier of child

growth but ignoring the necessary scientific techniques and attitudes which are essential to the full fruition of their work. They forget, indeed, that there are two factors in the educative process: on the one hand, the preservation of the social heritage and, on the other, the development of the active, expressive traits of the child. Correspondingly, there are two methods of experimental procedure; on the one hand, the employment of the intuitions of the artist and, on the other, the utilization of all available techniques in the scientific study of American civilization, the modern world, and the physiology and psychology of the child's life.

VII

Current criticisms of the laboratory school point, however, to a more subtle problem. It is a problem raised by the present widespread interest in creative activities. I have already commented on the fact that a large proportion of the energy of the new school goes into the creative process. I regard this as a distinctive achievement. It is undoubtedly true, however, that the interjection of creative activity in the programs of the laboratory schools is a sign merely of the first groping intuitions of the artist, uncontrolled and unaided by the careful, scholarly study of the psychology of the creative act. Indeed, we lack to-day a definitive psychological analysis of the creative process.

This brings us, therefore, to one of the next steps to be taken in our experimental schools – a thorough study of the psychology of the creative act and, correspondingly, the psychological processes of assimilation. It is my opinion that they are psychologically different: that the process of producing a creative, unique interpretation is not identical with the process of assimilation of meanings common to the experience of others. Apparently, the leaders of the child-centered schools regard them as identical. Certainly the most frequently encountered criticism of the laboratory schools is that although they draw out the creative capacity of the children, they fail lamentably in developing persistent habits of work. Interest in the creative act has caused the laboratory school to forget the necessity for systematic adjustment to the environment. Hence the minimizing of the scholastic techniques and of scholarly attitudes toward intellectual work.

VIII

The foregoing comments on the deficiencies in the programs of the laboratory schools lead to the generalization that radical administrative changes must be made to develop truly experimental schools of the scientific and controlled type. The number of pupils must be markedly increased, at least fivefold from the present maximum enrollment of fifty or sixty per grade, and equivalent control groups installed. Either the laboratory schools must be endowed so

that tuition charges can be abolished, or else experimentation must be confined to public school systems. The present tuition charges have produced "selected" pupil bodies (average IQ's of 115 to 120, pupils advanced linguistically and socially several years beyond the level of the corresponding public school grades). Hence many conclusions from experiments in the present laboratory schools are not applicable to the rank and file of public schools.

Such conditions reveal, clearly, the need for setting up experimental schools in public school systems. Several hundred school systems are now operating bureaus of measurement and curriculum research. By far the greater part of the energy of these bureaus is devoted to matters of administrative routine. Most of this energy should be diverted to the setting up of widespread experimentation. Certainly one of the most needed steps in the development of the experimental school in America is the setting aside, in our public school systems, of either groups of classes or of entire schools for controlled experimentation.[7]

IX

What, then, are the steps in the development of the experimental school? To answer this question we must first answer another: What are the chief unsolved problems of American education?

The chief task confronting those in charge of our experimental schools is to discriminate clearly between these unsolved problems and to concentrate their entire efforts upon the most important ones. These problems are crucial. They must be solved if the national school system is to be adequately reconstructed. Unless radical innovations are made they cannot be solved in the present mass school because of the attitude of conformity to the status quo, because of the widespread indifference to philosophic speculation, and because of the lack of insight into experimental methods. Our greatest need, I say, is for discrimination between the problems which press for solution, the hypotheses which can be set up for us now as a result of the past quarter century of research, and the techniques which are available.

More than all else, we need orientation. At the present time each of the two "experimental" groups – the scientific students of education and the teachers in the child-centered schools – is devoting itself blindly to the over-manipulation of one set of techniques. The students of scientific method, for example, are immersed in the study of administrative problems and know no methods other than the statistical survey, inventory, and measurement. Less than one-twentieth of our recent research products are truly experimental studies.[8]

We are still in the grip of the fact finding era. Salvation via statistics! We are in the throes of the measurement-statistical movement which was launched shortly after 1900 with thrilling, epoch making studies of child accounting, school finance, buildings, and the measurement of sensori-motor skills. This spectacular movement has engaged and still monopolizes almost all

the inventive and imaginative ability of our profession – almost all but that minute fraction which has devoted itself to the setting up of child-centered schools.

The statistical and measuring approach is guided primarily by the concept of analysis: this has tended to lead the scientific worker to ignore the integrated nature of the nervous system, of human experience, and of appropriate school programs. I am confident that we should call seriously into question the assumption of the experimentalists of the S-R bond school; namely, that the whole of human experience is equivalent to the sum of all its parts, that personality can be broken up into traits, that the latter can be measured, diagnosed, and trained in isolation and assembled into a mosaic that will constitute a true and rehabilitated individuality.

I am confident that this assumption is negated by the scientific findings of the physiologists, of the Gestalt school of psychology, and by the intuitive insights of the creative artists. All three of these groups concur emphatically in the view that neither personality nor the infinitesimal increments of experience which build it, is a mosaic, a synthesis; rather each is a complex integration – traits and processes fused, welded inextricably together. Personality, therefore, can be understood only when studied in toto and, correspondingly, social situations in which personalities are developed can be understood and employed in education only in toto. These three groups of workers attacking individuality from totally different angles and by severally independent techniques concur in the view that the humpty-dumpty of human personality, once broken up into its parts, could never be put together again, even with the aid of all the techniques of modern science.

I hasten to add that the analytic technique of the Stimulus-Response researchers is least harmful, indeed probably practically helpful, in the diagnosis and training of the specific skill process. For example, arithmetical computation, sensori-motor skills of handwriting, typewriting, and the like. The contribution which it has made to the improvement of the skills in the elementary school is a distinctive one. No doubt a small fraction instead of the current preponderance of our research energies should be devoted to the further clearing up of the unsolved problems of practice.

X

The implications of the foregoing comments seem to me to be clear. The "experimental" schools (I refer now to the child-centered laboratory schools) are in a strategic position to launch a new era marked by the thorough study of child personality. They have already achieved a sound orienting belief in the integration of personality. Whether they know it or not, their crudely phrased hypotheses of the integration of experience have solid foundation in the facts found by the neurologists and the configuration psychologists, and in the intuitions of the creative artists throughout all time. Their general attitude toward the complex nature of the whole child and the desire to

study his development in total social situations prepare them effectively for true experimental research. With this attitude, however, must be combined understanding of more thoroughgoing, more objective, more scientific methods of studying the growth of child personality.

The experimental school, therefore, should launch comprehensive studies of child personality with as objective techniques as it can muster. To many of my hearers the scientific study of the integration of personality will sound like just so many words. However, the maximum development of personality can be defined and studied objectively. It consists essentially in the development of the individual's intellectual, physical, rhythmic, and emotional powers. On the one hand, his understanding of himself and the world about him; on the other hand, the drawing out of his self expressive, self-cultivative capacities. Understanding | Self-cultivation through creative self-expression! Are not these the two dynamic aims of the education of tomorrow? And does not their psychological exploration constitute the most pertinent problem to which our experimental schools should devote themselves? I believe it does.

We confront on the one hand the age long problem of the conduct of the understanding – the development of informed, thinking youth. Our problem is no less than that of the psychological study of the four factors of motive, attitude, meaning, and judgment. Specifically, how through the various years of school life do grasp of meaning and power of judgment develop? What are the motives and the resultant attitudes that determine the conduct of the kindergarten-primary child, the child in the intermediate school, the young people of our junior and senior high schools? These, on the side of the intellectual activities of the school, rather than the determination of amounts and distribution of practice on the skills, constitute our most urgent problems of research.

XI

Motive! Attitude! Meaning! Judgment! Basic elements in the integrated experience of the individual. To be studied by what method? By tests? Yes, in part through the use of tests. Tests, however, which truly diagnose motive and attitude; tests which measure the wealth of meaning, of connotation which has been built up in the experience of the individual, tests which really explore his capacity to reason, to judge. Tests, furthermore, which measure these elements in relationship. In isolation the factors of experience mean almost nothing. I would not, therefore, discontinue the present endeavor to develop measuring instruments for the detection of deep, underlying drives of conduct.

But the devising and using of tests constitutes at best but a partial technique for exploring human understanding. Their contribution will be small compared to the total eye-witness study of child behavior. We must install in our laboratory schools machinery for the objective portrayal of the

conduct of growing children. Instead of the inadequate, retrospective, wishful records of teachers, we must have the verbatim account of the eye-witness analyst. The record must be made of the total behavior of the child – his language, his gesture, and the products of his creative achievement. Studies of children in action, critical analyses of personality as it develops in natural social situations. The environment of the laboratory schools in the primary grades at least, provides a natural setting for such social study.

To set up the machinery for an objective record of what goes on in a school, two persons must be placed in each of our experimental classrooms, together with adequate stenographic and clerical service. We must finance the cooperative study of childhood. Teaching and the study of learning must go on together by partners – equally cognizant of curriculum needs, skilled in the artistry of teaching, and equipped with the attitudes and techniques of scientific study. Fifteen years of experience in experimentation has taught us clearly that it is impossible for a teacher to teach and to study learning at the same time. The processes are markedly different. The teacher is concerned with the drawing-out of children; the analyst, striving to dig beneath the overt behavior of children, is concerned with discovering how they are drawn out. The process of drawing-out the children, of getting them to reconstruct their experiences, cannot be successfully interrupted to carry on concurrently the process of analyzing how growth takes place. Hence the imperative need of putting two trained students of childhood in every experimental classroom."

It will not be a sufficient reply from the administrators of our experimental schools to say that funds are lacking for such a thorough eyewitness study of behavior and growth. Funds are now available. Huge amounts of money are being spent by our great foundations for surveys of academic subjects of study, as well as for the development of experimental schools. A considerable proportion of this money could be devoted now to the endowing of trained specialists to make continuing growth studies of childhood.

XII

This paper has already exceeded its limited space, and I have outlined only the important researches in the intellectual problems of understanding. I have been unable even to comment upon the fact that we have available for our study tentatively substantiated hypotheses and techniques. I can merely remind you in passing that scholastic experience, philosophic analysis, and, in certain fields, considerable measured investigation have given us, for example, the hypotheses first of the integrative nature of learning; second, of its active, dynamic nature; third, of its inductive, cumulative, integrative character. These fundamental hypotheses and their corresponding techniques of investigation are available now for systematic exploitation in the experimental school.

At the expense of being dogmatic, therefore, I can merely characterize briefly the other great group of relatively unexplored problems. I refer to the problem of a psychological analysis of creative self-expression; in short, the psychology of the creative act.

In the past ten years laboratory schools, and to some extent public schools, have produced striking exhibits of the creative capacities of children. Volumes of child poetry, stimulated by Hughes Mearns's Creative Youth, have come from the educational press. Annual scholastic exhibits abound with the original products of creative painting and sculpture. Social studies are being reconstructed through a wealth of original graphic productivity – maps, cartoons, graphs, what not. Units of work include much original writing and acting of plays, painting of scenery, designing and constructing of costumes. Even creative music has entered the school.

To the present time, however, the laboratory schools have produced almost no analyses of the conditions which must inhere in the educative process to bring about these creative products. The creative artists who have produced these stirring results have revealed a marked reticence to explore the psychology of the creative act. It is my judgment that it can be explored and that its careful study would expedite its more widespread emergence in our public schools.

How can the creative act be explored? First and foremost, only by artists, persons who are sensitive to the fundamental conditions of the creative process itself. The utilization of the eye-witness analyst – the analyst himself an artist as well as a scientist in point of view – will uncover, I am confident, many of the symptoms of the creative process. From the writings of Mearns, Coleman, Cane, Levin, Mitchell, and a growing host of others, we can already discern the faint outlines of the psychology of the creative act.

At this point we are, however, far out on the frontier of inquiry. Studies must be set up which will determine the role of technique in the creative process; which will reveal the stages through which maturing childhood achieves more and more integrated revelations of that process. Complicated and difficult investigations must be set under way to determine the place of the several arts in the school program – whether, for example, arts should be allotted a separate place in the schedule or whether, rather, the creative act shall be permitted its day in each of the units of work.

I venture one negative prediction concerning the techniques by which this study of the creative act can be successfully carried on. That is, that it is not susceptible of study by statistical and "measuring" methods. It will not be successfully investigated by the designing of scales, as has been done in recent years for the measurement of drawing ability or for the evaluation of English composition. It is my confident judgment that the designing and construction and use of scales in art, in composition, in poetry have in the past, and will in the future, constantly seriously to retard the development of truly creative processes in our schools.

To discriminate clearly the role of measurement, we must bear in mind the clear-cut distinctions between the goals and the methods of science and of art. Science aims at the discovery and production of uniformity. It desires standardization. It searches for recurrence, for the determination of law. Hence, measurement is its necessary tool. Science, to achieve uniformity, was compelled to design scales of approximately equal units, and its most serious endeavor has been to reduce error.

How totally different is the situation in art! Art, in contradistinction to science, aims at uniqueness. Its goal is non-uniformity, non-standardization. Art is the striving of individuality to express itself in unique ways. Each human being in the world is a unique individuality. So, too, his creative processes and their products are unique. Hence, it is inconceivable that these creative products (not the adaptive ones) can be measured on a scale, the units of which correspond to the units of any other individual's scale. To devise adequate measuring instruments in creative art, therefore, would necessitate the absurd production of as many scales as there were artists, and produce the absurd conclusion that only a given individual could make his scale and use it to measure the product of his creative work. Hence, my hypothesis that the exploration of the creative act and the development of the arts in the school program will be impeded rather than advanced by the design and construction of standardized scales, tests, and their inevitable norms.

Let no one leave this lecture, however, with a misconception concerning my spoken attitude toward measurement. For the improvement of the skills – handwriting, arithmetical computation, and the like – for the enlargement of meaning, for the diagnosing and developing of reasoning, we shall employ as wisely as possible carefully designed measuring instruments. I remind you, therefore, that in thinking about measurement we must draw a clear distinction between the adaptive processes of the school and the creative processes. No more subtle and baffling problem confronts the experimental school in America.

XIII

In conclusion, I can merely remind you of the manifold problems of administration that confront the laboratory schools of to-day and to-morrow.

Paralleling these crucial problems of understanding and creative self-cultivation there are urgent and difficult problems for the reconstruction of the program of the school. For example: to what extent will the program of the school of tomorrow be composed of broad units of work which develop out of the previous experiences of children and ramify through many fields now subdivided in a dozen academic school subjects? More specifically, should the program consist of four or five long units of work, or, on the other hand, of a dozen or more relatively short units? Various schemes of organization are now extant, but no definitely controlled investigation

of the problem is being carried on. This represents one of the most urgent next steps before the experimental school.

On to what extent should the curriculum be planned in advance? Many published writings are before us from the advocates of the two opposed points of view. One group defends the rigorous planning of the curriculum in advance, the other the spontaneous building of the curriculum on the spot. The problem can be solved only by elaborate objective records of interest, achievement, and growth, made under varying conditions. This is a problem, however, of such great complexity that I do not look for its experimental solution in our own time.

Baffling problems confront us in the field of the selection of the activities and materials of instruction. For example: (1) the determination of the central concepts and generalizations which are essential to the clear thinking of growing childhood; (2) complicated problems of the grade placement of activities (there exists at the present time great confusion concerning the optimum assignment of activities and materials to the grades); (3) problems involved in the theoretical postponement of the skills in the primary grades.

This enumerative addendum must bring to a close my brief sketch of the experimental school. I regret that the huge scope of our problem has made impossible elaborate illustration of each of its baffling aspects.

What, then, is our greatest need? I return to my original thesis: The need for greater scholarship, and a more truly experimental attitude of mind. The scholarship of the scientists, and the divine discontent of the artist: an attitude which will compel us to master the known knowledge and techniques of students on every frontier of personality; the technical methods and findings of the neurologist, the physiologist, the experimental findings of each of the great psychological schools of thought. Each constitutes an important asset to the structure of our understanding of human personality.

I believe that the future of the experimental school rests upon the capacity of the experimental mind in America to comprehend the conflicting goals, hypotheses, points of view, and techniques, and to reconcile them in a comprehensive experimental theory. As Victor Branford phrased it, it is the "reconciliation of science and sanctity" that we need; it is "the marriage of knowledge and reverence," it is the integration of the points of view and the techniques of science and of art.

Notes

1. An address given in the Horace Mann Auditorium, Teachers College, Columbia University, on December 4, 1925. It was one of a series of lectures on Progressive Education, sponsored by the International Institute of Teachers College.
2. An extended discussion of this history is given in: The Child-Centered School, World Book Co., Yonkers, N. Y.
3. These conclusions are presented more fully in Chapters VI-X inclusive, in: The Child-Centered School, World Book Co., Yonkers, New York.

4. In the address as read, I established the points, first, that I had been unable to find a single school in America that was conducting true experimentation in the senior high school grades; second, that this lack was due to the influence of the college. The solution of the problem of developing an experimental high school is theoretically simple but administratively almost impossible. The point was made that it can be solved (1) by including the collegiate years in the high school; (2) by the colleges accepting whatever graduates the secondary schools send them; (3) by the ignoring of the college by the high school.
5. This generalization is based upon my study of the annual reports of the presidents of the American Educational Research Association, a new study of the monographs, articles, books published during the past ten years, and my experience as editor of the Journal of Educational Psychology since 1921.
6. In the January, 1929, issue of the Journal of Educational Psychology, in collaboration with two associates, I report the first of a series of such studies.
7. In the January, 1929, issue of the Journal of Educational Psychology already referred to, I discuss this technique more extensively.

VOLUME

1

FOUNDATIONS OF EDUCATIONAL THOUGHT

EDITED BY EUGENE F PROVENZO JR