

Excerpted from
A Notion at Risk: Preserving Public Education as an Engine for Social Mobility,
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NOTES

Chapter 1

1. Peter Schrag, "Education and the Election," *The Nation*, March 6, 2000.
2. U.S. Department of Education, *NAEP 1998 Reading Report Card for the Nation*, March 1999, p. 59.
3. For further discussion of this idea, see Richard D. Kahlenberg, "Economic School Desegregation," *Education Week*, March 31, 1999, p. 52; and Kahlenberg, *All Together Now: Creating Middle-Class Schools through Public School Choice*, a Century Foundation Book (Washington, D.C.: Brookings Institution Press, 2000).

Chapter 2

1. See Doris R. Entwisle, Karl L. Alexander, and Linda Steffel Olson, *Children, Schools, and Inequality* (Boulder, Colo.: Westview Press, 1997); Doris R. Entwisle and Karl L. Alexander, "Summer Setback: Race, Poverty, School Composition, and Mathematics Achievement in the First Two Years of School," *American Sociological Review* 57 (February 1992): 72–84; Doris R. Entwisle and Karl L. Alexander, "Winter Setback: School Racial Composition and Learning to Read," *American Sociological Review* 59 (June 1994): 446–60.
2. See Jeanne Brooks-Gunn, Greg J. Duncan, and Nancy Maritato, "Poor Families, Poor Outcomes: The Well-Being of Children and Youth," in Greg J.

Duncan and Jeanne Brooks-Gunn, eds., *The Consequences of Growing Up Poor* (New York: The Russell Sage Foundation, 1997).

3. For example, see Irwin Garfinkel and Sara S. McLanahan, *Single Mothers and Their Children: A New American Dilemma* (Washington, D.C.: Urban Institute Press, 1986); Robert H. Haveman and Barbara L. Wolfe, *Succeeding Generations: On the Effects of Investments in Children* (New York: Russell Sage Foundation, 1994); Glen H. Elder, Jr., *Children of the Great Depression: Social Change in Life Experience* (Chicago: University of Chicago Press, 1974); Vonnie McLoyd, "Socialization and Development in a Changing Economy: The Effects of Paternal Income and Job Loss on Children," *American Psychologist* 44 (February 1989): 293–302; Vonnie C. McLoyd, "The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development," *Child Development* 62 (April 1990): 311–46.

4. Haveman and Wolfe, *Succeeding Generations*.

5. U.S. Bureau of the Census, *Statistical Abstract of the United States: 1998* (Washington, D.C.: Government Printing Office, 1998), Tables 296, 297.

6. National Center for Education Statistics, *The Condition of Education 1994*, NCES 94-149 (Washington, D.C.: U.S. Department of Education, 1994).

7. Susan E. Mayer, *What Money Can't Buy: Family Income and Children's Life Chances* (Cambridge, Mass.: Harvard University Press, 1997), Table 3.1.

8. *National Urban Education Goals: 1992–93 Indicators Report* (Washington, D.C.: Council of Great City Schools, 1994).

9. U.S. Bureau of the Census, *Statistical Abstract: 1998*, Table 299.

10. Duane F. Alwin and Arland Thornton, "Family Origins and the Schooling Process: Early versus Late Influence of Parental Characteristics," *American Sociological Review* 49 (December 1984): 784–802; Kevin Marjoribanks, *Families and Their Learning Environments* (London: Routledge, 1979).

11. For example, see Richard J. Murnane, *The Impact of School Resources on the Learning of Inner City Children* (Cambridge, Mass.: Ballinger, 1975); Marjoribanks, *Families and Their Learning Environments*; Karl L. Alexander and Doris R. Entwisle, "Educational Tracking in the Early Years: First Grade Placements and Middle School Constraints," in Alan C. Kerckhoff, ed., *Generating Social Stratification: Toward a New Research Agenda* (New York: Westview Press, 1996); Greg J. Duncan et al., "How Much Does Childhood Poverty Affect the Life Chances of Children?" *American Sociological Review* 63 (June 1998): 406–23.

12. Marshall S. Smith, "Equality of Educational Opportunity: The Basic Findings Reconsidered," in Frederick Mosteller and Daniel P. Moynihan, eds., *On Equality of Educational Opportunity* (New York: Vantage Books, 1972), pp. 230–342; Aletha C. Huston, *Children in Poverty: Designing Research to Affect Policy*, Social Policy Report, Society for Research in Child Development (Ann Arbor: University of Michigan, 1994).

13. Mayer, *What Money Can't Buy*.

14. This research is a prospective longitudinal study of children's academic and social development beginning in first grade and continuing through high school graduation and beyond. Data collection began in 1982 and is ongoing. In 1982 a two-stage random sample of youngsters beginning first grade in the Baltimore City Public Schools was selected for study. First, a sample of twenty schools, stratified by racial mix (six predominantly African American, six white, eight integrated) and by socioeconomic status (fourteen inner city or working class and six middle class) was selected. Second, within each school students were randomly sampled from every first-grade classroom by using kindergarten lists from the previous spring supplemented by class rosters after school began in the fall. Parents' permission was obtained for 97 percent of the children so chosen, resulting in a final sample of 790 youngsters beginning first grade for the first time in 1982. See Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, for an overall presentation of the Beginning School Study (BSS) and for more information on the study design and procedures.

15. California Achievement Test (CAT) Form C, Reading Comprehension and Mathematics Concepts and Applications subtests. For documentation on test see California Achievement Test, *Technical Bulletin 1, Forms C and D, Levels 10-19* (Monterey, Calif.: McGraw-Hill, 1979).

16. Students qualified for the federal meal subsidy program based on income and family size guidelines developed by the Department of Agriculture. The guidelines are obtained each year by multiplying the federal income poverty level by 1.85 for reduced-price meals and by 1.30 for free meals. Sixty-seven percent of the sample qualified for either reduced-price meals or a full subsidy.

17. In BSS data, reading scores at the beginning of first grade for meal subsidy students were lower by about three months in terms of annual growth than those for non-meal subsidy students. Likewise, for math, meal subsidy students were about five months below more affluent students.

18. Karl L. Alexander, Doris R. Entwisle, and Susan L. Dauber, *On the Success of Failure: A Reassessment of the Effects of Retention in the Primary Grades* (Cambridge: Cambridge University Press, 1994).

19. Susan M. Bianchi, "Children's Progress through School: A Research Note," *Sociology of Education* 57 (July 1984): 184-92.

20. National Center for Education Statistics, *A Profile of the American Eighth Grader: NELS 88 Student Descriptive Summary*, U.S. Department of Education, Office of Educational Research and Improvement (Washington, D.C.: U.S. Government Printing Office, 1990).

21. The Beginning School Study often is referred to as the "Baltimore Study."

22. Alexander, Entwisle, and Dauber, *On the Success of Failure*.

23. Consortium of Longitudinal Studies, *As the Twig Is Bent: Lasting Effect of Preschool Programs* (Hillsdale, N.J.: Erlbaum, 1983); Aaron M. Pallas, *School*

Dropouts in the United States, issue paper CS87-426, Center for Education Statistics, Office of Educational Research and Improvement (Washington, D.C.: U.S. Government Printing Office, 1987); R. W. Rumberger, "High School Dropouts: A Review of Issues and Evidence," *Review of Educational Research* 57, no. 2 (1987): 101–21; T. C. Wagenaar, "What Do We Know about Dropping Out of High School?" in A. C. Kerckhoff, ed., *Research in Sociology of Education and Socialization* (Greenwich, Conn.: JAI, 1987), pp 161–90.

24. J. B. Grissom and L. A. Shepard, "Repeating and Dropping Out of School," in L. A. Shepard and M. L. Smith, eds., *Flunking Grades: Research and Policies on Retention* (London: Falmer, 1989), pp. 34–63; Aaron M. Pallas, "The Determinants of High School Dropouts," Ph.D. diss., Johns Hopkins University, Baltimore, Md., 1984.

25. See Table 25 in National Center for Education Statistics, NCES 97-473, *Dropout Rates in the United States: 1995* (Washington, D.C.: U.S. Government Printing Office, 1995).

26. Robert B. Cairns, Beverley D. Cairns, and Holly J. Neckerman, "Early School Dropout: Configurations and Determinants," *Child Development* 60 (December 1989): 1437–52; D. N. Lloyd, "Prediction of School Failure from Third-Grade Data," *Educational and Psychological Measurement* 38, no. 4 (Winter 1978): 1193–1200; Atlee L. Stroup and Lee N. Robins, "Elementary School Predictors of High School Dropout among Black Males," *Sociology of Education* 45 (Spring 1972): 212–22; Karl L. Alexander, Doris R. Entwisle, and Carrie S. Horsey, "From First Grade Forward: Early Foundations of High School Dropout," *Sociology of Education* 70 (April 1997): 87–107.

27. Barbara Heyns, *Summer Learning and the Effects of Schooling* (New York: Academic, 1978); Geoffrey B. Saxe, Steven R. Guberman, and Maryl Gearheart, "Social Processes in Early Number Development," *Monographs of the Society for Research in Child Development* 52, no. 2, serial No. 216 (1987); Barbara L. Schneider and James S. Coleman, *Parents, Their Children, and Schools* (Boulder, Colo.: Westview, 1993); Doris R. Entwisle and Karl L. Alexander, "A Parent's Economic Shadow: Family Structure versus Family Resources as Influences on Early School Achievement," *Journal of Marriage and the Family* 57 (May 1995): 399–409.

28. Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, p. 40.

29. For Beginning School Study children, borrowing books from the library in the summer and children's socioeconomic status correlate 0.37. See also Heyns, *Summer Learning* p. 119.

30. Mayer, *What Money Can't Buy*, p. 2.

31. Elizabeth G. Menaghan and Toby L. Parcel, "Stability and Change in Children's Home Environments: The Effects of Parental Occupational Experiences and Family Conditions," paper presented at the meeting of the Society for Research on Child Development, Seattle, Wash., April 1991.

32. Robert D. Hess and Virginia C. Shipman, "Early Experience and the Socialization of Cognitive Modes in Children," *Child Development* 36, no. 4 (1965): 869–88.

33. Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, Table 3.4, p. 41.

34. *Ibid.*, Table 3.5, p. 43.

35. See Karl L. Alexander and Doris R. Entwisle, "Achievement in the First Two Years of School: Patterns and Processes," *Monographs of the Society for Research in Child Development* 53, no. 2, serial No. 218 (1988); Doris R. Entwisle and Karl L. Alexander, "Beginning School Math Competence," *Child Development* 61 (April 1990): 454–71; Karl L. Alexander, Doris R. Entwisle, M. Jane Sundius, and Susan L. Dauber, "Developmental Trends in Academic Self-Image and Marks: Lessons from the Experience of Repeaters," Johns Hopkins University, Baltimore, Md., 1994; Aaron M. Pallas et al., "Ability-Group Effects: Instructional, Social or Institutional?" *Sociology of Education* 67 (January 1994): 27–46; Doris R. Entwisle and Karl L. Alexander, "Family Type and Children's Growth in Reading and Math over the Primary Grades," *Journal of Marriage and the Family* 58 (May 1996): 341–55.

36. Entwisle and Alexander, "Family Type and Children's Growth."

37. Heyns, *Summer Learning*

38. Valerie Lee, Anthony S. Bryk, and Julia B. Smith, "The Organization of Effective Secondary Schools," in Linda Darling-Hammond, ed., *Review of Research in Education* (Washington D.C.: American Educational Research Association, 1993), pp. 171–67; Entwisle and Alexander, "Family Type and Children's Growth."

39. Heyns, *Summer Learning*; Murnane, *Impact of School Resources*; Harris Cooper et al., "The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review," *Review of Educational Research* 66 (Fall 1996): 227–69.

40. Family socioeconomic status is measured as a composite, using information on student participation in the school meal subsidy program and mother's and father's educational levels and occupational status. A three-category version of this measure was derived, with the low-status group averaging 10.0 years of education for mothers and a 95 percent rate of participation in the school meal subsidy program. For the high-status group, mothers averaged 14.6 years of education and 13 percent of students received a meal subsidy.

41. See top half of Table 3.1 in Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, p. 34.

42. See *ibid.*, lower panel of Table 3.1.

43. Multivariate analyses of variance show that these seasonal differences vary significantly with family socioeconomic status over the first two years of school. See Entwisle and Alexander, "Summer Setback"; Entwisle and

Alexander, "Winter Setback"; Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*.

44. Heyns, *Summer Learning*

45. Murnane, *Impact of School Resources*.

46. See Donald P. Hayes and Judith Grether, "The School Year and Vacations: When Do Students Learn?" paper presented at the annual meeting of the Eastern Sociological Association, New York, April 1969; Jane L. David, "Follow-Through Summer Study: A Two-Part Investigation of the Impact of Exposure to Schooling on Achievement Growth," Ed.D. diss., Harvard Graduate School of Education, Cambridge, Mass., 1974; Donald P. Hayes and J. P. King, *The Development of Reading Achievement Differentials During the School Year and Vacations*, Cornell University, Ithaca, N.Y., 1974; Sol H. Pelavin and Jane L. David, *Evaluating Long-Term Achievement: An Analysis of Longitudinal Data from Compensatory Educational Programs*, EPRC 4537-15, prepared for the Office of the Assistant Secretary for Education, Department of Health, Education and Welfare (Washington, D.C.: SRI International Educational Policy Research Center, 1977); Jane L. David and Sol H. Pelavin, "Secondary Analysis: In Compensatory Education Programs," *New Directions for Program Evaluation* 4 (1978): 31-44; Pierce A. Hammond and Joy A. Frechtling, "Twelve, Nine and Three Month Achievement Gains of Low and Average Achieving Elementary School Students," paper presented at annual meeting of the American Educational Research Association, San Francisco, April 8, 1979.

47. Beginning School Study schools were located in neighborhoods which ranged from very low socioeconomic status (close to 40 percent of families in poverty, the average parent a drop-out, and only 5 percent of workers in professional/managerial jobs) to relatively high socioeconomic status (2 percent of families in poverty, the average parent close to a college graduate, and 64 percent of workers in professional/managerial jobs).

48. The gains also corresponded to the average number of children *not* on meal subsidy in the (neighborhood) school the child attended. See Table 3.8 in Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, p. 50.

49. See *ibid.*, left side, Table 3.8.

50. Paul A. Jargowsky and Mary Jo Bane, "Ghetto Poverty: Basic Questions," in Laurence E. Lynn and Michael G. H. McGeary, eds., *Inner-City Poverty in the United States* (Washington, D.C.: National Academy Press, 1990); Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*.

51. Annette Lareau, "Social Class Differences in Family-School Relationships: The Importance of Cultural Capital," *Sociology of Education* 60 (April 1987): 73-85.

52. Joyce L. Epstein, "Effects on Student Achievement of Teachers' Practices of Parent Involvement," in S. Silvern, ed., *Literacy Through Family, Community,*

and *School Interaction*, vol. 6 (Greenwich, Conn.: JAI Press, 1991), pp. 261–76; Joyce L. Epstein, “School and Family Partnerships,” in Marvin Alkin, ed., *Encyclopedia of Educational Research*, 6th ed. (New York: Macmillan, 1992), pp. 1139–51.

53. Hess and Shipman, “Early Experience and the Socialization of Cognitive Modes in Children.”

54. Lareau, “Social Class Differences in Family-School Relationships.” Also see Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, p. 52; Karl L. Alexander, Doris R. Entwisle, and Samuel D. Bedinger, “When Expectations Work: Race and Socioeconomic Differences in School Performance,” *Social Psychology Quarterly* 57, no. 4 (1994): 283–99.

55. Doris R. Entwisle and Leslie A. Hayduk, *Too Great Expectations: The Academic Outlook of Young Children* (Baltimore: Johns Hopkins University Press, 1978); Doris R. Entwisle and Leslie A. Hayduk, *Early Schooling: Cognitive and Affective Outcomes* (Baltimore: Johns Hopkins University Press, 1982); Doris R. Entwisle and Leslie A. Hayduk, “Lasting Effects of Elementary School,” *Sociology of Education* 61 (July 1988): 147–59.

56. See Alexander, Entwisle, and Bedinger, “When Expectations Work.”

57. See Doris R. Entwisle and Leslie A. Hayduk, “Academic Expectations and the School Attainment of Young Children,” *Sociology of Education* 54 (January 1981): 34–50; Entwisle and Hayduk, *Too Great Expectations*.

58. DuBois and his colleagues, for instance, found that school-based supports buffered or compensated for hazards in the home and other places outside school, and that disadvantaged youths had a greater potential than their better-off classmates to benefit from adults’ social support in school achievement. See David L. DuBois et al., “A Prospective Study of Life Stress, Social Support, and Adaptation in Early Adolescence,” *Child Development* 63 (June 1992): 542–57; David L. DuBois et al., “Prospective Investigation of the Effects of Socioeconomic Disadvantage, Life Stress, and Social Support on Early Adolescent Adjustment,” *Journal of Abnormal Psychology* 103, no. 3 (1994): 511–22.

59. Robert C. Pianta, L. Alan Sroufe, and Byron Egeland, “Continuity and Discontinuity in Maternal Sensitivity at 6, 24 and 42 Months of Age in a High-Risk Sample,” *Child Development* 60 (April 1989): 481–87;

60. Steven Parker, Steven Greer, and Barry Zuckerman, “Double Jeopardy: The Impact of Poverty on Early Child Development,” *Pediatric Clinics of North America* 35 (December 1988): 1227–40.

61. Entwisle and Alexander, “Family Type and Children’s Growth.”

62. See Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, Table 3.7, p. 47.

63. The rank-order correlation is 0.71.

64. That is, three standard deviations below the average interest and participation rating of students in the same school.

65. For early studies see Hayes and Grether, "School Year and Vacations"; Hayes and King, *Development of Reading Achievement Differentials*; M. M. Shapiro, J. L. Bresnahan, and I. J. Knopf, cited by Heyns, *Summer Learning* Murnane, *The Impact of School Resources*; David, "Follow-Through Summer Study."

66. For an overview of this research see, for example, Charles Ballinger, "Prisoners No More," *Educational Leadership* 53 (November 1995): 28–31; Harris Cooper et al., "Making the Most of Summer School: A Meta-Analytic and Narrative Review," *Monographs of the Society for Research in Child Development* 65, pt. 1 (2000). Importantly, the Cooper et al. review tallies only studies sponsored by schools, school districts, or colleges and universities. Other studies, also cited in this chapter, address more clearly the picture for social class differences in summer school effects.

67. See Cooper et al., "Making the Most of Summer School"; and earlier research by G. R. Austin, B. G. Rogers, and H. H. Walbesser, "The Effectiveness of Summer Compensatory Education: A Review of the Research," *Review of Educational Research* 42 (1972): 171–81; Barbara Heyns, *Summer Programs and Compensatory Education: The Future of an Idea*, Working paper, National Institute of Education, Chapter One Study Team, Conference on the Effects of Alternative Designs in Compensatory Education, Washington, D.C., 1986, ERIC Document Reproduction Service No. ED 293906; C. Ascher, "Summer School, Extended School Year, and Year-Round Schooling for Disadvantaged Students," *ERIC Clearinghouse on Urban Education Digest* 42 (1988): 1–2. Cooper and his colleagues (p. 46) conclude that students from middle-class homes gained more from summer school than students from disadvantaged homes when student socioeconomic status (SES) is defined as a "moderator variable" affecting summer school outcomes. This approach signifies finding a difference between summer school gains of "middle SES and low SES" students. The conclusion is based on three samples limited to middle-class students, that is, no comparison of middle with low SES. M. Welch and J.B. Jensen, "Write P.L.E.A.S.E.: A Video-Assisted Strategic Intervention to Improve Written Expression of Inefficient Learners," *Remedial and Special Education* 12 (January/February 1991): 37–47; R. Geis, *A Preventive Summer Program for Kindergarten Children Likely to Fail First Grade Reading* (La Canada, Calif.: La Canada Unified School District, 1968), ERIC Document Reproduction Service No. ED 1029427; H. S. Leviton, "The Effect of a Summer Compensatory Education Program on Academic Achievement and Self-Concept of Primary Grade Learning Disabled Children with Follow-up Study," Ph.D. diss., University of Iowa, Iowa City, 1973; plus a fourth study (D. Doss et al., *Interim Evaluation Report: The 1979 Summer School Program* [Washington, D.C.: Department of Health, Education, and Welfare, 1979], ERIC Document Reproduction Service No. ED 188823) showing *no*

effects for either middle-class or migrant/Title I students who took part in a randomized experiment. Two other studies are based on children of migrant workers: V. J. Garafolo, *Evaluation of Migrant Summer School Programs Supported by the New York Department of Education During 1968*, Final Report (Albany: New York State Education Department, 1968), ERIC Document Reproduction Service No. ED 026162; D. M. Baxley and M. Hinton, *The Eloy Story. A Report from the Eloy Elementary School Summer Migrant Program for Kindergarten through Second Grade Level Children* (Phoenix: Arizona State Department of Education, 1971), ERIC Document Reproduction Services No. ED 067217. The 1971 report is based on eight students.

68. See Cooper et al., "Making the Most of Summer School."

69. Ibid.

70. See Launor F. Carter, "The Sustaining Effects Study of Compensatory and Elementary Education," *Educational Researcher* 13 (August/September 1984): 4–13; Leonard S. Klibanoff and Sue A. Haggart, *Report # 8: Summer Growth and the Effectiveness of Summer School*, technical report to the Office of Program Evaluation, U.S. Department of Education (Mountain View, Calif.: RMC Research Corporation, 1981), which is entirely devoted to summer growth.

71. Barbara Heyns, "Schooling and Cognitive Development: Is There a Season for Learning?" *Child Development* 58 (October 1987): 1151–60. See especially pp. 1153, 1158.

72. Heyns, *Summer Learning*

73. See Thomas D. Cook et al., *"Sesame Street" Revisited* (New York: Russell Sage, 1975), especially Chapter 1, which points out how difficult evaluations are to conduct and the kinds of stumbling blocks that researchers encounter. It also lists Matthew effects, such as that more viewing of *Sesame Street* by disadvantaged children was associated with less parental reading to children, and viewing itself was positively correlated with parents' income and education. For another example, see Carter, "Sustaining Effects Study." Students who entered Title I programs at near-average achievement levels profited most, whereas those entering at a low level profited only little or not at all. More recently, in 1997 the New York State Legislature enacted a universal kindergarten for four-year-olds, but there has been *underenrollment* in the communities with limited access to quality preschools. See Foundation for Child Development, *March 1999 Update* (New York: Foundation for Child Development, 1999).

74. See Heyns, *Summer Learning*, p. 128.

75. National Center for Education Statistics, *The Condition of Education 1998*, NCES 98-013 (Washington, D.C.: U.S. Government Printing Office, 1998), Indicator 1: Preprimary Education Enrollment.

76. Achievement test data for Beginning School Study children and for national samples as well show that their scores increase most in first grade, next most in second grade, and continue to decelerate each year thereafter.

These decreasing rates are visible in the upper (winter) portions of Table 3.1 (Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, p. 34), but are visible as well in standardized test data more generally. While psychometric issues of how these tests are scaled are complex and worrisome, the general observation that there is a spurt in children's cognitive growth at the time formal schooling begins is not in doubt. See also Doris R. Entwisle and Karl L. Alexander, "Further Comments on Seasonal Learning," in Alan Booth and Judith F. Dunn, eds., *Family-School Links: How Do They Affect Educational Outcomes?* (Mahwah, N.J.: Lawrence Erlbaum Associates, 1996), pp. 125–36; Barbara L. Schneider, "Production Analysis of Gains in Achievement," paper presented at the annual meeting of the American Educational Research Association, Boston, 1980.

77. See Irving Lazar and Richard Darlington, "Lasting Effects of Early Education: A Report from the Consortium for Longitudinal Studies," *Monographs of the Society for Research in Child Development* 47, nos. 2–3 (1982): ix–139; Consortium for Longitudinal Studies, *As the Twig Is Bent*.

78. Alexander, Entwisle, and Dauber, *On the Success of Failure*.

79. This analysis of the effects of first-grade retention on later high school dropout included controls on race, gender, family socioeconomic status, and reading and math CAT scores at the beginning of first grade.

80. See Doris R. Entwisle, "The Role of Schools in Sustaining Benefits of Early Childhood Programs," *The Future of Children* 5, no. 3 (Winter 1995): 133–44.

81. See W. Steven Barnett, "Long-Term Effects of Early Childhood Care and Education on Disadvantaged Children's Cognitive Development and School Success," *The Future of Children* 5, no. 3 (1995): 36–39, Table 2.

82. This will not be easy because in 1996 roughly twice as many three- and four-year-old children in families with incomes above \$50,000 were enrolled in center-based programs as in families with incomes of \$10,000 or less. National Center for Education Statistics, *The Condition of Education 1998*, Indicator 1.

83. Maryland State Department of Education, *Maryland School Performance Report, 1994: State and School Systems* (Baltimore: Maryland State Department of Education, 1994).

84. National Center for Education Statistics, *The Condition of Education 1995*, NCES 95-273 (Washington, D.C.: U.S. Department of Education, 1995), pp. 24, 30.

85. Doris R. Entwisle et al., "Kindergarten Experience: Cognitive Effects or Socialization?," *American Educational Research Journal* 24 (Fall 1987): 337–64.

86. See Arthur. J. Reynolds, "Effects of a Preschool Plus Follow-On Intervention for Children at Risk," *Developmental Psychology* 30 (December 1994): 787–804; Arthur. J. Reynolds and Judy A. Temple, "Extended Early Childhood Intervention and School Achievement: Age Thirteen Findings from the Chicago Longitudinal Study," *Child Development* 69 (1998): 231–46;

Judy A. Temple, Arthur J. Reynolds, and Wendy T. Miedel, "Can Early Intervention Prevent High School Dropout? Evidence from the Chicago Child-Parent Centers," Institute for Research on Poverty, discussion paper no. 1180-98 (Madison: University of Wisconsin, 1998). Primary-grade (follow-on) programs that are school-based operate five days a week during the school year and are tailored to increase children's learning opportunities through reduced class size, parental involvement activities, and instructional coordination. A major focus is child-centered attention to develop reading comprehension and writing skills.

87. Heyns, *Summer Learning* p. 191.

88. Regression analyses predicting summer test score gains controlled on race, sex, and family socioeconomic status.

89. For a discussion of the link between organized sports and academic progress, see Doris R. Entwisle, Karl L. Alexander, and Linda Steffel Olson, "The Gender Gap in Math: Its Possible Origins in Neighborhood Effects," *American Sociological Review* 59 (December 1994): 822–38.

90. James S. Coleman, *The Adolescent Society: The Social Life of the Teenager and Its Impact on Education* (New York: Free Press, 1961).

91. In fact, the pooled psychological capital of adults in better-off neighborhoods probably explains some of the summer growth of children in those neighborhoods. Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*, p. 51.

92. See Ballinger, "Prisoners No More."

93. See Reynolds and Temple, "Extended Early Childhood Intervention."

94. Lazar and Darlington, "Lasting Effects of Early Education."

95. Entwisle, Alexander, and Olson, *Children, Schools, and Inequality*.

96. Barnett, "Long-Term Effects."

97. Christopher Jencks estimates that children's cognitive growth rate in first grade may be ten times as great as the rate in high school. See Christopher Jencks, "How Much Do High School Students Learn?" *Sociology of Education* 58 (April 1985): 128–35.

98. Alan C. Kerckhoff, *Diverging Pathways: Social Structure and Career Deflections* (New York: Cambridge University Press, 1993).

Chapter 3

1. Paul Minorini and Stephen D. Sugarman, "School Finance Litigation in the Name of Educational Equity: Its Evolution, Impact and Future," in Helen Ladd, Rosemary Chalk, and Janet S. Hansen, eds., *Equity and Adequacy in Education Finance: Issues and Perspectives* (Washington, D.C.: National Academy Press, 1999), pp. 34–71.

2. U.S. Department of Education, Office of Educational Research and Improvement, *NAEP 1998 Reading Report Card for the Nation and the States*, NCES 1999-500, National Center for Education Statistics, 1999, Table 3.6. Scores on the National Assessment of Educational Progress (NAEP) are disaggregated by children's eligibility for the free and reduced-price lunch program. Children are eligible for the free lunch program if their families have income equal to or less than 130 percent of the federal poverty line. Children are eligible for the subsidized ("reduced-price") lunch program if their families have income equal to or less than 185 percent of the federal poverty line. While NAEP is administered to fourth-, eighth-, and twelfth-grade students, schools apparently enroll fewer eligible children at higher grade levels, partly because children themselves are less willing to sign up for the program and identify themselves as poor or near-poor. Therefore, only fourth-grade scores can provide reasonably valid indications of the relative performance of poor and near-poor children. There is no expert consensus regarding the validity of the National Assessment Governing Board's cut-off points for "basic" or "proficient" scores. See Richard Rothstein, *The Way We Were? The Myths and Realities of America's Student Achievement* (New York: The Century Foundation Press, 1998), pp. 70–74. But even if the cut-off points are invalid, the relative, properly measured proficiency of poor and near-poor children on the one hand and nonpoor children on the other would probably be similar to that reported.

3. Estimated from data reported in Christopher Jencks and Meredith Phillips, eds., *The Black-White Test Score Gap* (Washington, D.C.: Brookings Institution Press, 1998), p. 3. In 1971, the black-white seventeen-year-old reading score gap was 1.25 standard deviations. In 1996 it was 0.69 standard deviations.

4. David W. Grissmer et al., *Student Achievement and the Changing American Family* (Santa Monica, Calif.: RAND, 1994). It also possible that better-specified background characteristics could explain some additional portion of the gains.

5. U.S. Department of Education, Office of Educational Research and Improvement, *NAEP Trends in Academic Progress*, NCES 97-985, National Center for Education Statistics, 1997, Figures 3.6, 3.8, 5.6, 5.8.

6. Thomas B. Parrish, Christine S. Matsumoto, and William J. Fowler, Jr., *Disparities in Public School Spending, 1989-90*, NCES 95-300, National Center for Education Statistics, 1995.

7. Parrish, Matsumoto, and Fowler do not use the terms "affluent," "moderately affluent," "moderate poverty," and "high poverty." These terms are utilized here for ease of reference. The cut-off points used to categorize them are defined as follows: Affluent districts are those where less than 5 percent of children are poor—such districts enroll 11 percent of the nation's students. Moderately affluent districts are those where from 5 to 15 percent of children are poor—such districts enroll 36 percent of the nation's students. Moderate-poverty districts are

those where from 15 to 25 percent of children are poor—such districts enroll 26 percent of the nation's students. High-poverty districts are those where 25 percent or more of children are poor—such districts enroll 26 percent of the nation's students.

8. Districts with a “large” percentage of students at risk are those where more than 5 percent of students are classified so, constituting 39 percent of the nation's students; districts with a “moderate” share are those where from 3 percent to 5 percent of students are at risk, making up 15 percent of the nation's students; districts with “few” students in this category are those where less than 3 percent of students are at risk, representing 45 percent of the nation's students.

9. Henry M. Levin, “Financing the Education of At-Risk Students,” *Education Evaluation and Policy Analysis* 11, no. 1 (Spring 1989): 47–60.

10. Penny L. Howell and Barbara B. Miller, “Sources of Funding for Schools,” *The Future of Children* 7, no. 3 (Winter 1997): 39–51.

11. Allan Odden, “School Finance Reform in Kentucky, New Jersey and Texas,” *Journal of Education Finance* 18, no. 4 (Spring 1993): 293–317; Allan R. Odden and Lawrence O. Picus, *School Finance: A Policy Perspective* (New York: McGraw-Hill, 1992), Figure 8.1.

12. William H. Clune, “The Shift from Equity to Adequacy in School Finance,” *Educational Policy* 8, no. 4 (December 1994): 376–94; Andrew Reschovsky and Jennifer Imazeki, “The Development of School Finance Formulas to Guarantee the Provision of Adequate Education to Low Income Students,” in William J. Fowler, Jr., ed., *Developments in School Finance, 1997* (Washington, D.C.: National Center for Education Statistics, 1998).

13. See, for example, Thomas A. Downes and Thomas F. Pogue, “Adjusting School Aid Formulas for the Higher Cost of Educating Disadvantaged Students,” *National Tax Journal* 47, no. 1 (March 1994): 89–110.

14. See, for example, John Augenblick, John Myers, and Amy Anderson, “Equity and Adequacy in School Funding,” *The Future of Children* 7, no. 3 (Winter 1997): 63–78.

15. While districts with high poverty concentrations spend 93 percent as much as affluent districts after figures are cost- and need-adjusted, it was noted above that they spend 79 percent as much without such adjustment. These figures relate to district spending comparisons not within states but when all states are lumped together in a single national pool. The cost- and need-adjusted disparity is probably less than the unadjusted disparity because states probably spend their compensatory funds (both federal and state generated) disproportionately in districts, or in schools within districts, with high concentrations of poverty. Thus, even if compensatory funds do not reduce interstate inequality, they could reduce inequality in spending among districts on a national basis.

16. See, for example, Jay Mathews, *Class Struggle: What's Wrong (and Right) with America's Best Public High Schools* (New York: Times Books, 1998); Jeannie

Oakes, *Keeping Track: How Schools Structure Inequality* (New Haven: Yale University Press, 1985); Nicola Alexander, "Race, Poverty, and the Student Curriculum, 1975–1995: Implications for Public Policy," in William J. Fowler, Jr., ed., *Developments in School Finance, 1996* (Washington, D.C.: National Center for Education Statistics, 1997); among others, for discussion of resource differences in tracked schools. Because there is not a true market for teachers, school districts with a uniform salary schedule pay the same price for teachers of varying quality. However, despite the equality in teacher salaries for teachers with similar education and experience, assignment of teachers of greater quality to some students can represent greater real resources applied to the education of those students. This differential application of teacher resources can contribute to Type IV inequalities. It also contributes to Type III inequalities, something that is discussed below.

17. These data are for public elementary and secondary school revenues, not expenditures, because it is not possible to distinguish school expenditures by the source of funds. Even categorical programs mix funds from federal, state, and local sources. However, if school district budgetary carryovers remain fairly constant from year to year, total revenues and total expenditures will be roughly equivalent, and so state and local "revenues" can be deemed equivalent to state and local "expenditures." In the discussion that follows, the words "school spending" should be understood to refer precisely to revenues, not expenditures.

18. How to adjust for regional differences in the cost of education is a matter of great theoretical complexity. Lawrence Mishel and Richard Rothstein, "Measurement Issues in Adjusting School Spending across Time and Place," paper presented at the annual Data Conference of the National Center for Education Statistics, Washington, D.C., July 1997. A common approach is to adjust for differences in teacher salaries, with additional adjustments for differences in consumer prices (see, for example, "Quality Counts: A Report Card on the Condition of Public Education in the 50 States," *Education Week*, January 22, 1997). This method, however, involves problems of endogeneity—salaries for teachers with comparable experience could differ because of regional differences in cost but also because states choose to hire teachers of different quality. In Table 3.1 of this chapter, adjustments for state cost of education differences in column 3 were calculated by adjusting first for differences in "cost of living" between states in 1990, as estimated in Walter W. McMahon, "Intrastate Cost Adjustments," in William J. Fowler, Jr., ed., *Selected Papers in School Finance, 1994* (Washington, D.C.: National Center for Education Statistics, 1995) utilizing census data on population growth, the price of housing, and per capita personal income. (McMahon does not, however, make an adjustment for "amenities of location," leaving open the possibility that the prices of housing in high-price states reflect a higher unmeasured value of

housing location.) Column 3 then inflates McMahon's index numbers for 1990 by changes from 1990 to 1996–97 in the “all services” component of the consumer price index for the census region in which each state was located. U.S. Department of Labor, Bureau of Labor Statistics, “BLS Homepage,” Series ID: CUUS0100SAS; CUUS0200SAS; CUUS0300SAS; CUUS0400SAS, 1999; <http://146.142.4.24/cgi-bin/dsrv>. For a discussion of using a services index for this purpose rather than the full consumer price index, see Richard Rothstein with Karen Hawley Miles, *Where's the Money Gone? Changes in the Level and Composition of Education Spending* (Washington, D.C.: Economic Policy Institute, 1995).

19. Because taxation of a state's residents is the primary source of support for public education, this chapter uses a state's total personal income per pupil, rather than a state's gross product per pupil, as a measure of fiscal capacity. However, this measure is not equally valid for all states. Some states (Alaska and Wyoming, for example) raise revenues primarily from mineral severance taxes, not taxes on individuals. The General Accounting Office estimates a state's fiscal capacity to pay for education by taking into account both personal income and gross state product per enrolled student (see note 22, below). While there is merit to this approach, it also entails some double-counting. The value of oil extracted in Alaska, for example, contributes both to Alaska's gross state product and to the personal income of Alaska oil workers and New York oil executives.

20. The methodology for column 8 is the same as for column 3, except that McMahon's 1990 estimates were inflated for 1996–97 using regional consumer price indices for all goods and services, not for services alone. U.S. Department of Labor, Bureau of Labor Statistics, “BLS Homepage,” Series ID: CUUS0100SA0; CUUS0200SA0; CUUS0300SA0; CUUS0400SA0, 1999; <http://146.142.4.24/cgi-bin/dsrv>.

21. Here and subsequently, “PIPS” refers to cost-adjusted personal income per student, not to nominal personal income per student.

22. There is no single appropriate method for making these calculations and adjustments. In an analysis of 1992 data, the General Accounting Office calculated an “ability to raise revenue for schools,” utilizing a measurement of taxable resources that included both personal income and gross state product per child. U.S. General Accounting Office, *School Finance: Trends in Education Spending*, GAO/HEHS 95-235, September 1995. Unlike the analysis in this chapter, which applies a cost-of-living adjustment to personal income per capita, the GAO analysis accounted for regional differences in the value of the dollar by application of an adjustment to 75.5 percent of its taxable resources measure, utilizing an index derived from relative differences in teacher salaries, adjusted for differences in teacher experience (75.5 percent was the GAO's estimate of the share of school expenditures consumed by personnel resources).

Of course, relative fiscal capacity could have changed substantially from 1989, for which year the GAO report used data, and 1996, the year for data used in this chapter; nonetheless, the GAO's identification of states with low fiscal capacity was similar but not identical to that in Table 3.1, column 9. For example, probably because PIPS does not account for revenue from mineral severance taxes, Table 3.1 shows Alaska has low capacity, while the GAO report does not. GAO's identification of states with high fiscal capacity is also similar to that in Table 3.1, with some exceptions; for example, the GAO included Hawaii in this group, whereas Table 3.1 shows Hawaii to have relatively low fiscal capacity.

23. In a linear regression, the standard error is \$5.

24. In a linear regression, the standard error is \$17.

25. Throughout this chapter, the District of Columbia is referred to as a state. The rankings of "states," therefore, include fifty-one jurisdictions.

26. Having relatively less need for spending does not mean that the state spends "too much." Without a determination about how much spending is the right amount, we cannot make such a judgment. It is possible that all states should spend the amounts spent by states with relatively high spending and relatively little need. However, while many advocates of school spending make this assumption, there is little research evidence to support or refute it.

27. U.S. Department of Education, Office of Educational Research and Improvement, *Statistics in Brief: Revenues and Expenditures for Public Elementary and Secondary Education, School Year 1996-97*, NCES 1999-301, National Center for Education Statistics, 1999; Howell and Miller, "Sources of Funding for Schools," Table 1.

28. Adjustments are limited to between 80 percent and 120 percent of the national average.

29. As noted above, however, great significance should not be attributed to small change or lack of change in rank because each step in rank does not necessarily represent an equal interval. These statistics are only suggestive.

30. Costs were adjusted for regional differences in the cost of living, using the same methodology as that described above for Table 3.1, column 8 (but for 1998, not 1996-97).

31. The adjustment is accomplished by calculating per pupil spending taking an enrollment figure that has been increased above actual enrollment by 50 percent of the total number of children in poverty. This does not imply that 1.5 is the appropriate weight for disadvantaged students. It is used here for illustrative purposes only.

School finance analysts typically use the coefficient of variation to measure spending inequality between jurisdictions. The coefficient of variation of district spending within a state is calculated by taking the standard deviation of spending as a percentage of the mean spending level. The standard deviation

of spending is a measure of how “spread out” the spending levels are; specifically, it is the absolute value of the average variation from the mean (with positive and negative variations treated equally). To calculate the standard deviation, first square the difference of each unit’s spending (in this case, each state’s average per pupil spending) from the mean, and add these differences together. This is the total variance. Then, divide this total variance by the number of observations (states) and take the square root of this result.

A coefficient of variation is conventionally expressed as an absolute value, not as a percent. However, for purposes of clarity, because conceptually the coefficient of variation can be thought of as the average “spread from the mean” as a percent of the mean, this chapter expresses these as percents.

32. Their multivariate analysis reveals similar differences in federal aid received by high-poverty, affluent, moderately affluent, and moderate-poverty districts.

33. In 1989–90, districts at the ninety-fifth percentile of spending distribution in Kentucky spent \$3,520, while districts at the fifth percentile of the spending distribution in Wisconsin spent \$4,289. U.S. General Accounting Office, *School Finance*, Table III-4. (On a cost-adjusted basis, employing the methodology of this chapter, the amounts were \$3,825 and \$4,517.) This analysis includes all spending, from federal as well as state and local funds.

34. These calculations of potential subsidy are not adjusted for geographical cost differences nor for variation in student need (disadvantage) by state.

35. In 1969–70, the state at the twenty-fifth percentile was Texas, and the state at the seventy-fifth percentile was Iowa. These data were adjusted for interstate cost differences using the methodology described in note 18, based on a McMahon index for 1981, except that, because the Bureau of Labor Statistics does not publish regional services indexes for 1970, these indexes were estimated utilizing national services index numbers, adjusted by regional CPI (all items) numbers for the period from 1970 to 1978. Walter W. McMahon and Shao-Chung Chang, “Geographical Cost of Living Differences: Interstate and Intrastate, Update, 1991,” Center for the Study of Educational Finance, Illinois State University, 1991.

36. Sheila Murray, William N. Evans, and Robert Schwab, “Education Finance Reform and the Distribution of Education Resources,” *American Economic Review* 88, no. 4 (September 1998): 789–812, Table 2.

37. U.S. Department of Education, Office of Educational Research and Improvement, *120 Years of American Education: A Statistical Portrait*, NCES 93-442, National Center for Education Statistics, 1993, Table 21.

38. U.S. Department of Education, Office of Educational Research and Improvement, *Statistics in Brief*, Figure 1, <http://nces.ed.gov/pubs99/1999301.pdf>.

39. Michael Heise, “State Constitutions, School Finance Litigation, and the ‘Third Wave’: From Equity to Adequacy,” 68 *Temple Law Review* 1151–76, 1995.

40. Discussions of school finance conventionally refer to this U.S. Supreme Court decision as the “Rodriguez” case. However, because another important school finance case, discussed extensively below, is also conventionally referred to as the “Rodriguez” case, in this chapter the 1973 Supreme Court ruling will be referred to as the *San Antonio* decision. The second case, *Rodriguez v. LAUSD*, settled in Los Angeles County Superior Court in 1992, will be referred to as the “LAUSD” case or the “LAUSD consent decree.”

41. The Supreme Court in the *San Antonio* decision described the “rights of speech” and “full participation in the political process” as fundamental rights. Therefore, a school system that failed to provide each child with the skills necessary to exercise these rights might be constitutionally inadequate. But unequal outcomes above this minimum would not be constitutionally suspect, and there have been no subsequent successful challenges to school finance systems under this theory. Another possible constitutional lever to improve resources for disadvantaged students was suggested by a 1984 Federal Eleventh Circuit decision, *Debra P. v. Turlington* (730 F. 2d 1405). Here, the court concurred that if a state requires passage of a minimum competency test to receive a high school diploma, it must show that it “actually taught” minority students the skills necessary to pass this test. However, the court found that the state of Florida had complied with this standard, and no remedy was required. The substantial resource inequalities within Florida did not alter the court’s reasoning—indeed, they were not considered. Because a minimum competency test is a fairly low standard, and because “actually teaching” skills is a much lower standard than effectively teaching them, the *Debra P.* decision has led to no further federal cases to equalize school resources. However, if the current trend continues of states raising standards for awarding of high school diplomas, it is conceivable that the federal constitutional right implicit in *Debra P.* could become a more powerful lever.

42. Robert Berne, “Equity Issues in School Finance,” *Journal of Education Finance* 14 (Fall 1988): 159–80.

43. In two of these, Hawaii and the District of Columbia, intrastate considerations do not apply, as they are unitary systems.

44. Heise, “State Constitutions, School Finance Litigation, and the “Third Wave.””

45. Deborah A. Verstegen and Terry Whitney, “From Courthouses to Schoolhouses: Emerging Judicial Theories of Adequacy and Equity,” *Educational Policy* 11, no. 3 (September 1997): 330–52.

46. Personal communication with Greg Scieszka, superintendent, Bennington-Rutland Supervisory District, Bennington, Vt., 1999.

47. It is not entirely clear that *Serrano* was responsible, or partly responsible, for the taxpayers’ revolt or if the revolt developed independently. See Peter Schrag, *Paradise Lost: California’s Experience, America’s Future* (New York: New

Press, 1998); William A. Fischel, "How *Serrano* Caused Proposition 13," *Journal of Law and Politics* 12 (Fall 1996): 607–36.

48. Lonnie Harp, "Broad Coalition in Michigan Backing Tax Reform and Finance Amendment," *Education Week*, May 26, 1993.

49. Steve Stecklow and Krystal Miller, "Michigan's Plan for Financing Schools May Spread, but Not to Certain States," *Wall Street Journal*, March 18, 1994; "Rich Are Wary of Michigan's Revolt," *New York Times*, March 23, 1994.

50. Harp, "Broad Coalition in Michigan Backing Tax Reform."

51. With food and heating fuel exempt, the sales tax was not fully regressive, but liberal groups like the teachers' union, allied with the tobacco industry, opposed the sales tax hike in favor of the income tax proposal. William Celis 3d, "Michigan Debates What Tax Is Best to Pay for Education," *New York Times*, March 14, 1994; William Celis 3d, "Michigan Votes for Revolution in Financing Its Public Schools," *New York Times*, March 17, 1994. The field coordinator for the referendum campaign, however, was a teachers' union lobbyist on loan. See Harp, "Broad Coalition in Michigan Backing Tax Reform."

52. "Rich Are Wary of Michigan's Revolt"; "In Michigan, Uncertainty and Unhappiness over New Method to Finance the Schools," *New York Times*, January 18, 1995.

53. "Rich Are Wary of Michigan's Revolt."

54. Calculations include state and local funds only, and state spending was adjusted for estimated regional cost differences in 1969–70 and 1996–97. Inflation was estimated utilizing regional services indices from 1978 to 1996 and the CPI-U from 1970 to 1978.

55. Murray, Evans, and Schwab, "Education Finance Reform." This is an estimate of per capita education spending increase, not per pupil spending increase. Per capita spending increases would differ from per pupil spending increases to the extent that the ratio of children to the general population differed from state to state.

56. G. Alan Hickrod, "The Effect of Constitutional Litigation on Educational Finance: A Further Analysis," in National Center for Education Statistics, *Selected Papers in School Finance, 1995* (Washington, D.C.: Government Printing Office, 1997). Hickrod's analysis not only reflects his judgment about whether a mixed judicial decision is a "victory" or a "loss" for equalization but also is insensitive to the timing of a decision. Thus, a "victory" won in 1989 is presumed to affect 1980–90 spending trends in the group of "victorious" states. This is the same problem as that which limits the significance of Table 3.5.

57. Specifically, they found an increase of 11 percent in districts spending at the fifth percentile of districts in their states and an increase of 8 percent in districts at the fiftieth percentile after court-ordered reform.

58. Jonathan Kozol's *Savage Inequalities: Children in America's Schools* (New York: Crown Books, 1991) highlighted resource inequalities and has given new

impetus to Type II finance litigation. However, the inequalities he described may not reflect a consistent relationship between student and community poverty. The relationship may exist in East St. Louis but not in the South Bronx.

59. For a more extensive discussion of alternative ways of calculating “adequacy,” see James W. Guthrie and Richard Rothstein, “Enabling ‘Adequacy’ to Achieve Reality: Translating Adequacy into State School Finance Distribution Arrangements,” in Ladd, Chalk, and Hansen, *Equity and Adequacy in Education Finance*.

60. Chris Pipho, “Finance Potpourri,” *Phi Delta Kappan*, June 1997, pp. 737–38.

61. John Augenblick, Kern Alexander, and James W. Guthrie, “Report of the Panel of Experts: Proposals for the Elimination of Wealth Based Disparities in Education,” submitted by Ohio chief state school officer Theodore Sanders to the Ohio Legislature, June 1995; John Augenblick, “Recommendations for a Base Figure and Pupil-Weighted Adjustments to the Base Figure for Use in a New School Finance System in Ohio,” School Funding Task Force, Ohio Department of Education, July 17, 1997.

62. Personal communication with Robert Greenwald, Searle Fellow, Department of Education, University of Chicago, March 19–20, 1998.

63. Augenblick, Myers, and Anderson, “Equity and Adequacy in School Funding.”

64. James W. Guthrie et al., *A Proposed Cost-Based Block Grant Model for Wyoming School Finance* (Sacramento: Management Analyst & Planning Associates, L.L.C., May 1997). The author of this paper was a member of Guthrie’s team.

65. *Essential Programs and Services: Equity and Adequacy in Funding to Improve Learning for All Children*, Maine Department of Education, January, 1999.

66. Odden, “School Finance Reform in Kentucky.” Considering these 30 special needs districts and 110 wealthy suburban districts in New Jersey as a group, the coefficient of variation declined by one-third (from 18 percent to 12 percent) from 1991 to 1993. Douglas S. Reed, “Court-ordered School Finance Equalization: Judicial Activism and Democratic Opposition,” in William J. Fowler, Jr., ed., *Developments in School Finance, 1996* (Washington, D.C.: National Center for Education Statistics, 1997), Figure 3.

67. Jennifer Preston, “Ending 28-Year Battle, Court Backs Whitman’s Plan to Improve Urban Schools,” *New York Times*, May 22, 1998; Maria Newman, “Full-Day Preschool for Poor in New Jersey,” *New York Times*, January 9, 1999.

68. This (seven to ten years) seems to be the consensus estimate of education research professionals. There is little solid evidence to confirm this, primarily because research on the relationship between teacher experience and student achievement generally compares a cross section of teachers with different amounts of experience at the same point in time. Such cross-sectional analyses do not generally control for the fact that different cohorts of teachers may

have different levels of initial ability, in part because of differences in the supply and demand for teachers in different years (teacher “vintage effects”). Cross-sectional analyses also do not generally account for the fact that higher-quality teachers may be more likely to leave the cohort to become administrators. One analysis that attempted to control for vintage effects found an increase in teacher effectiveness with experience: “the size of the estimated coefficient, when translated into grade equivalents, implies that children taught by a teacher with five years of experience make three to four months more of progress in acquiring reading skills during a school year than do children taught by a first year teacher.” Richard J. Murnane and Barbara R. Phillips, “Learning by Doing, Vintage, and Selection: Three Pieces of the Puzzle Relating Teaching Experience and Teaching Performance,” *Economics of Education Review* 1, no. 4 (Fall 1981): 453–65.

69. Anemona Hartocollis, “Crew to Close 13 Poorly Performing Schools and Take Control of 43 Others,” *New York Times*, June 24, 1999.

70. Donald L. Horowitz, *The Courts and Social Policy* (Washington, D.C.: Brookings Institution, 1977).

71. For example, the Washington, D.C., schools still had a policy in the mid-1960s of permitting white students to transfer to predominantly white schools if those students claimed that attending school in an integrated setting would cause them “psychological upset.”

72. Peter Schmidt, “L.A. Decree Would Equalize Resources among All Schools,” *Education Week*, December 11, 1991; “News Update,” *Education Week*, March 25, 1992; Ann Bradley, “Equation for Equality,” *Education Week*, September 14, 1994; Amy Pyle, “L.A. Schools Wrestle with Realities of '92 Money Pact,” *Los Angeles Times*, February 14, 1995; Amy Pyle, “More Schools Meeting Spending Decree Goals,” *Los Angeles Times*, March 3, 1998.

73. Richard Rothstein, “Blaming Teachers,” *American Prospect*, December 6, 1999, pp. 40–45.

74. Research evidence here is sparse, however. The “Student-Teacher Achievement Ratio” (STAR) experiment in Tennessee seems to show that reducing class sizes from about twenty-four to about fifteen in the primary grades has a bigger positive impact on disadvantaged than on other children. Alan Krueger found that smaller class sizes from kindergarten to third grade increased third-grade test scores by 0.24 standard deviations for whites and by 0.33 standard deviations for blacks. Alan B. Krueger, “Experimental Estimates of Education Production Functions,” Working Paper no. 379, Industrial Relations Section, Princeton University, May 1997. Nationwide, average elementary class sizes declined from twenty-eight in 1966 to twenty-four in 1996. U.S. Department of Education, Office of Educational Research and Improvement, *Digest of Education Statistics 1998*, NCES 1999-036, National Center for Education Statistics, 1999, Table 70. The increase in

instructional and professional staff has been even greater. Pupils per teacher went from 22.6 in 1970 to 17.1 in 1997, and the use of instructional aides increased by a like percentage. The number of pupils per guidance counselor went from 934 in 1970 to 513 in 1997 (*Digest of Education Statistics*, Table 83). While much of the increase in teachers and instructional staff was devoted to special education, some of the increase, at least in certain school districts, went to specialist teachers, and this may have benefited disproportionately the education of disadvantaged children. See Rothstein and Miles, *Where's the Money Gone?*

75. Barbara Heyns, "Schooling and Cognitive Development: Is There a Season for Learning?" *Child Development* 58, no. 5 (October 1987): 1151-60; Doris Entwisle and Karl L. Alexander, "Summer Setback: Race, Poverty, School Composition, and Mathematics Achievement in the First Two Years of School," *American Sociological Review* 57 (February 1992): 72-84.

76. Rothstein, "Blaming Teachers."

77. Leanna Stiefel et al., *The Effects of Size of Student Body on School Costs and Performance in New York City High Schools* (New York: Institute for Education and Social Policy, New York University, April, 1998).

78. James S. Coleman et al., *Equality of Educational Opportunity* (Washington, D.C.: U.S. Government Printing Office, 1966).

79. Nick Anderson, "With a Gift for Dialogue, Education Chief Gets Congress Talking," *Los Angeles Times*, July 6, 1999.

80. Ulric Neisser et al., "Intelligence: Knowns and Unknowns," *American Psychologist* 51, no. 2 (February 1996): 77-101.

81. In the "Section 8" program, families can receive subsidies equal to the difference between 30 percent of their income and "fair market value" of their rental unit. Participating landlords must charge only the "fair market value."

82. Alan Meyers et al., "Housing Subsidies and Pediatric Undernutrition," *Archives of Pediatrics and Adolescent Medicine* 149 (October 1995): 1079-84.

83. M. C. Wang, G. D. Haertel, and H. J. Walberg, "Educational Resilience in Inner Cities," in Margaret C. Wang and Edmund W. Gordon, eds., *Educational Resilience in Inner-City America: Challenges and Prospects* (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1994).

84. U.S. General Accounting Office, *Elementary School Children: Many Change Schools Frequently, Harming Their Education*, GAO/HEHS 94-45, February 1994, p. 5.

85. David Kerbow, "Patterns of Urban Student Mobility and Local School Reform," *Journal of Education for Students Placed at Risk* 1, no. 2 (1996): 147-69.

86. James Bruno and Jo Ann Isken, "Inter and Intraschool Site Student Transiency: Practical and Theoretical Implications for Instructional Continuity at Inner-City Schools," *Journal of Research and Development in Education* 29, no. 4 (Summer 1996): 239-52.

87. U.S. General Accounting Office, *Elementary School Children*, p. 12.
88. Bruno and Isken, "Inter and Intraschool Site Student Transiency," p. 243.
89. Kerbow, "Patterns of Urban Student Mobility."
90. Jennifer Daskal, "In Search of Shelter. The Growing Shortage of Affordable Rental Housing," Center for Budget and Policy Priorities, Washington, D.C., June 15, 1998, p. 28.
91. U.S. General Accounting Office, *Elementary School Children*; Kerbow, "Patterns of Urban Student Mobility."
92. David B. Schuler, "Effects of Family Mobility on Student Achievement," *ERS Spectrum* (Educational Research Service) 8, no. 4 (Fall 1990): 17–24.
93. Marybeth Shinn et al., "Predictors of Homelessness among Families in New York City: From Shelter Request to Housing Stability," *American Journal of Public Health* 88, no. 11 (November 1998): 1651–57.
94. Daskal, "In Search of Shelter," Table 1.
95. U.S. General Accounting Office, *Section 8 Tenant-Based Housing Assistance: Opportunities to Improve HUD's Financial Management*, GAO/RCED 98-47, February 1998, Table 3.1.

Chapter 4

1. Mary H. Metz, "How Social Class Differences Shape Teachers' Work," in Milbrey W. McLaughlin, Joan E. Talbert, and Nina Bascia, eds., *The Contexts of Teaching in Secondary Schools* (New York: Teachers College Press, 1990), pp. 40–107; Michael S. Knapp and associates, *Teaching for Meaning in High-Poverty Classrooms* (New York: Teachers College Press, 1995); Michael J. Puma et al., *Prospects: Final Report on Student Outcomes* (Cambridge, Mass.: Abt Associates, 1997).
2. Barbara Heyns, *Summer Learning* (New York: Academic Press, 1978), found that 71 percent of the black-white achievement gaps occurs during summer; Doris Entwistle, Karl L. Alexander, and Linda Steffel Olson, *Children, Schools, and Inequality* (Boulder, Colo.: Westview Press, 1997), found that virtually all of the black-white achievement gap occurs during the summer.
3. Michael S. Knapp, "The Teaching Challenge in High-Poverty Classrooms," in Michael S. Knapp and associates, *Teaching for Meaning in High-Poverty Classrooms*, pp. 5–6.
4. Puma et al., *Prospects*.
5. Entwistle, Alexander, and Olson, *Children, Schools, and Inequality*.
6. *Ibid.*, pp. 69–70.
7. Robert Dreeben and Adam Gamoran, "Race, Instruction, and Learning," *American Sociological Review* 51, no. 5 (1986): 660–69.

8. Entwistle, Alexander, and Olson, *Children, Schools, and Inequality*; J. S. Coleman et al., *Equality of Educational Opportunity* (Washington, D.C.: U.S. Government Printing Office, 1966); C. L. Jencks et al., *Inequality: A Reassessment of the Effects of Family and Schooling in America* (New York: Basic Books, 1972).

9. Tom Loveless, *The Tracking and Ability Grouping Debate* (Washington, D.C.: Fordham Foundation, 1998).

10. Jeannie Oakes, Adam Gamoran, and Reba N. Page, "Curriculum Differentiation: Opportunities, Outcomes, and Meanings," in P. W. Jackson, ed., *Handbook of Research on Curriculum* (New York: Macmillan, 1992), pp. 570–608.

11. Brian Rowan and Andrew J. Miracle, Jr., "Systems of Ability Grouping and the Stratification of Achievement in Elementary Schools," *Sociology of Education* 56, no. 3 (1983): 133–44.

12. Rebecca Barr and Robert Dreeben, *How Schools Work* (Chicago: University of Chicago Press, 1983).

13. Adam Gamoran, "Instructional and Institutional Effects of Ability Grouping," *Sociology of Education* 59, no. 4 (1986): 185–98.

14. Emile J. Haller and Sharon Davis, "Does Socioeconomic Status Bias the Assignment of Elementary School Students to Reading Groups?" *American Educational Research Journal* 17, no. 4 (1980): 409–18; Emile J. Haller, "Pupil Race and Elementary School Ability Grouping: Are Teachers Biased Against Black Children?" *American Educational Research Journal* 22, no. 4 (1985): 456–83; Dreeben and Gamoran, "Race, Instruction, and Learning"; Adam Gamoran, "Rank, Performance, and Mobility in Elementary School Grouping," *Sociological Quarterly* 30, no. 1 (1989): 109–23; for a contrary view see Ray Rist, "Student Social Class and Teacher Expectations: The Self-Fulfilling Prophecy in Ghetto Education," *Harvard Educational Review* 40, no. 3 (1970): 411–51.

15. Robert E. Slavin, "Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis," *Review of Educational Research* 57, no. 3 (1987): 293–336.

16. Oakes, Gamoran, and Page, "Curriculum Differentiation."

17. Coleman et al., *Equality of Educational Opportunity*; Jencks et al., *Inequality*; Entwistle, Alexander, and Olson, *Children, Schools, and Inequality*.

18. Philip Kaufman and Denise Bradby, *Characteristics of At-Risk Students in NELS:88*, NCES 92-042 (Washington, D.C.: U.S. Department of Education, 1992).

19. Kaufman and Bradby, *Characteristics of At-Risk Students in NELS:88*, author's computations based on Table 2.3, p. 8.

20. David H. Monk and Emile J. Haller, "Predictors of High School Academic Course Offerings: The Role of School Size," *American Educational Research Journal* 30, no. 1 (1993): 3–21.

21. Jeannie Oakes, *Multiplying Inequalities* (Santa Monica, Calif.: RAND, 1990), p. 32, emphasis in the original.

22. Julie Smith, "Does an Extra Year Make a Difference? The Impact of Early Access to Algebra on Long-Term Gains in Mathematics Attainment," *Educational Evaluation and Policy Analysis* 18, no. 2 (1996), 141–53; Richard Riley, "Mathematics Equals Opportunity" (Washington, D.C.: U.S. Department of Education, 1997).

23. Oakes, *Multiplying Inequalities*, p. 49.

24. *Ibid.*

25. Mary Metz, "Real School: A Universal Drama amid Disparate Experience," *Politics of Education Association Yearbook* (1989): 75–91.

26. *Ibid.*, p. 78.

27. Adam Gamoran, "The Stratification of High School Learning Opportunities," *Sociology of Education* 60, no. 3 (1987): 135–55.

28. Oakes, Gamoran, and Page, "Curriculum Differentiation."

29. Alan C. Kerckhoff, "Effects of Ability Grouping in British Secondary Schools," *American Sociological Review* 51, no. 6 (1986): 842–58; Adam Gamoran and Martin Nystrand, "Tracking, Instruction, and Achievement," *International Journal of Educational Research* 21, no. 2 (1994): 217–31; Thomas Hoffer, "Middle School Ability Grouping and Student Achievement in Science and Mathematics," *Educational Evaluation and Policy Analysis* 14, no. 3 (1992): 205–28.

30. National Center for Education Statistics, *Curricular Differentiation in Public High Schools*, NCES 95-360 (Washington, D.C.: U.S. Department of Education, 1994).

31. Adam Gamoran, "The Stratification of High School Learning Opportunities," *Sociology of Education* 60, no. 3 (1987): 135–55.

32. Robert E. Slavin, "Achievement Effects of Ability Grouping in Secondary Schools: A Best-Evidence Synthesis," *Review of Research in Education* 60, no. 3 (1990): 471–99.

33. Adam Gamoran, "Organization, Instruction, and the Effects of Ability Grouping: Comment on Slavin's 'Best-Evidence Synthesis,'" *Review of Educational Research* 57, no. 3 (1987): 341–45.

34. Adam Gamoran, "The Variable Effects of High School Tracking," *American Sociological Review* 57, no. 6 (1992): 812–28.

35. Adam Gamoran, "The Stratification of High School Learning Opportunities."

36. *Ibid.*

37. Jeannie Oakes, *Keeping Track* (New Haven: Yale University Press, 1985); Adam Gamoran, "Alternative Uses of Ability Grouping in Secondary Schools: Can We Bring High-Quality Instruction to Low-Ability Classes?" *American Journal of Education* 101, no. 1 (1993): 1–22.

38. Adam Gamoran and William J. Carbonaro, "High School English: A National Portrait" (paper presented at the annual meeting of the American Educational Research Association, San Diego, April 1998).

39. Jeannie Oakes, *Keeping Track*; Adam Gamoran et al., "An Organizational Analysis of the Effects of Ability Grouping," *American Educational Research Journal* 32, no. 4 (1995): 687–715.

40. Adam Gamoran and Mark Berends, "The Effects of Stratification in Secondary Schools: Synthesis of Survey and Ethnographic Research," *Review of Educational Research* 57, no. 4 (1987): 415–435; Oakes, Gamoran, and Page, "Curriculum Differentiation," pp. 570–608.

41. Gamoran et al., "An Organizational Analysis of the Effects of Ability Grouping."

42. James Rosenbaum, *Making Inequality* (New York: John Wiley and Sons, 1976).

43. Reba N. Page, *Lower-Track Classrooms* (New York: Teachers College Press, 1991).

44. *Ibid.*, p. 91.

45. Merrilee K. Finley, "Teachers and Tracking in a Comprehensive High School," *Sociology of Education* 57, no. 4 (1984): 233–43.

46. Thomas Hoffer and Adam Gamoran, *Effects of Instructional Differences among Ability Groups on Student Achievement in Middle-School Science and Mathematics* (Madison, Wis.: Center on Organization and Restructuring of Schools, 1993); Oakes, *Multiplying Inequalities*.

47. Oakes, *Multiplying Inequalities*, p. 66.

48. Adam Gamoran and Robert D. Mare, "Secondary School Tracking and Educational Inequality: Compensation, Reinforcement, or Neutrality?" *American Journal of Sociology* 94, no. 5 (1989): 1146–83.

49. Maureen T. Hallinan, "Tracking: From Theory to Practice," *Sociology of Education* 67, no. 2 (1994): 79–84.

50. Gamoran, "The Variable Effects of High School Tracking"; Anthony S. Bryk, Valerie E. Lee, and Peter B. Holland, *Catholic Schools and the Common Good* (Cambridge, Mass.: Harvard University Press, 1993).

51. Bryk, Lee, and Holland, *Catholic Schools and the Common Good*.

52. Adam Gamoran and Matthew Weinstein, "Differentiation and Opportunity in Restructured Schools," *American Journal of Education* 106, no. 3 (1998): 385–415.

53. Paula A. White et al., "Upgrading the High School Math Curriculum: Math Course-Taking Patterns in Seven High Schools in California and New York," *Educational Evaluation and Policy Analysis* 18, no. 4 (1996): 285–307; Adam Gamoran et al., "Upgrading High School Mathematics Instruction: Improving Learning Opportunities for Low-Income, Low-Achieving Youth," *Educational Evaluation and Policy Analysis* 19, no. 4 (1997): 325–38; Paula A. White et al., "Upgrading High School Math: A Look at Three Transition Courses," *NASSP Bulletin* 81 (Fall 1997): 72–83.

54. Hanna Ayalon and Adam Gamoran, "Stratification in Academic Secondary Programs and Educational Inequality: Comparison of Israel and the

United States,” *Comparative Education Review* 44, no. 1 (2000): 54–80. Note that Israeli high schools are also divided into academic and vocational programs, which have the same stratifying effects as American tracking. It is the divisions into levels *within* the academic, examination-oriented program that has beneficial effects.

55. Oakes, Gamoran, and Page, “Curriculum Differentiation.”

56. *Ibid.*

57. Jeannie Oakes, “Can Tracking Research Inform Practice? Technical, Normative, and Political Considerations,” *Educational Researcher* 21, no. 4 (1992): 12–22.

58. Jeannie Oakes and Amy Stuart Wells, “Detracking for High Student Achievement,” *Educational Leadership* 55 (March 1998): 38–41; Jeannie Oakes et al., “Equity Lessons from Detracking Schools,” *ASCD Yearbook 1997* (1997): 43–72; Amy Stuart Wells and Irene Serna, “The Politics of Culture: Understanding Local Political Resistance to Detracking in Racially Mixed Schools,” *Harvard Educational Review* 66, no. 1 (1996): 93–118.

59. Oakes and Wells, “Detracking for High Student Achievement,” p. 41.

60. Tom Loveless, “The Influence of Subject Areas on Middle School Tracking Policies,” *Research in Sociology of Education and Socialization* 10 (1994): 147–75; Gamoran and Weinstein, “Differentiation and Opportunity in Restructured Schools.”

61. Tom Loveless, *The Tracking Wars* (Washington, D.C.: Brookings Institution Press), p. 143.

62. Gamoran and Weinstein, “Differentiation and Opportunity in Restructured Schools.”

63. *Ibid.*, p. 393.

64. *Ibid.*, p. 402.

65. L. Alper et al., “Designing a High School Mathematics Curriculum for All Students,” *American Journal of Education* 106, no. 1 (1997): 148–79; Norman L. Webb, “The Impact of the Interactive Mathematics Program on Student Learning,” in S. L. Senk and D. R. Thompson, eds., *Standards-Oriented School Mathematics Curricula: What Does the Research Say about Student Outcomes?* (Mahwah, N.J.: Lawrence Erlbaum Associates, forthcoming).

66. Norman L. Webb, “The Impact of the Interactive Mathematics Program on Student Learning.”

67. *Equity 2000—Impact* (New York: The College Board, 1999). Available at: http://cbweb1.collegeboard.org/index_this/equity/html/impact.html.

68. Adam Gamoran and Eileen C. Hannigan, “Algebra for Everyone? Benefits of College-Preparatory Mathematics for Students of Diverse Abilities in Early Secondary School,” *Educational Evaluation and Policy Analysis*, forthcoming.

69. Rebecca Herman et al., *An Educators’ Guide to Schoolwide Reform* (Arlington, Va.: Educational Research Service, 1999).

70. Slavin, “Ability Grouping and Achievement in Elementary Schools.”

71. Susan J. Bodilly and Mark Berends, "Necessary District Support for Comprehensive School Reform," in Gary Orfield and Elizabeth H. DeBray, eds., *Hard Work for Good Schools* (Boston: The Civil Rights Project, Harvard University, 1999), pp. 111–19; Mark Berends, "Teacher-Reported Effects of New American Schools' Designs: Exploring Relationships to Teacher Background and School Context," RAND, Washington, D.C., 1999.

72. Herman et al., *An Educators' Guide to Schoolwide Reform*.

73. Bodilly and Berends, "Necessary District Support for Comprehensive School Reform."

74. Elliot W. Eisner, "Standards for American Schools: Help or Hindrance?" *Phi Delta Kappan* 76, no. 10 (1995): 758–60, 762–64.

75. Gary Natriello, "National Standards for Assessments and Performance: Reactions, Knowledge Base, and Recommendations for Research," in K. M. Borman et al., eds., *Implementing Educational Reform: Sociological Perspectives on Educational Policy* (Norwood, N.J.: Ablex, 1996), pp. 65–79.

76. Adam Gamoran, Andrew C. Porter, and Tae-joong Gahng, "Teacher Empowerment: A Policy in Search of Theory and Evidence," in W. J. Fowler, B. Levin, and H. J. Walberg, eds., *Organizational Influences on Educational Productivity*, vol. 5 (Greenwich, Conn.: JAI Press, 1995), pp. 175–93.

77. Kenneth R. Howe, "Standards, Assessment, and Equality of Educational Opportunity," *Educational Researcher* 23, no. 8 (1994): 27–33; Kevin J. Dougherty, "Opportunity to Learn Standards: A Sociological Critique," *Sociology of Education* Special Issue (1996): 40–65.

78. Jomills H. Braddock II and Mary M. Williams, "Equality of Educational Opportunity and the Goals 2000, Educate America Act," in K. M. Borman et al., eds., *Implementing Educational Reform: Sociological Perspectives on Educational Policy* (Norwood, N.J.: Ablex, 1996), pp. 89–109; Dougherty, "Opportunity to Learn Standards."

79. Tom Loveless, "The Politics of National Standards," *Education Week*, October 6, 1993, pp. 40, 31.

80. Andrew C. Porter, "The Uses and Misuses of Opportunity-to-Learn Standards," *Educational Researcher* 24, no. 1 (1995): 21–27.

81. Diane Massell, Michael Kirst, and Margaret Hoppe, *Persistence and Change: Standards-Based Reform in Nine States* (Philadelphia: Consortium for Policy Research in Education, 1997); Diane Massell, *State Strategies for Building Capacity in Education: Progress and Continuing Challenges* (Philadelphia: Consortium for Policy Research in Education, 1998).

82. Andrew C. Porter and associates, *Reform of High School Mathematics and Science and Opportunity to Learn*, document no. RB-13-9/94 (New Brunswick, N.J.: Consortium for Policy Research in Education, 1994); Bruce Wilson and Gretchen Rossman, *Mandating Academic Excellence* (New York: Teachers College Press, 1993).

83. Thomas Hoffer, "High School Graduation Requirements: Effects on Dropping Out and Student Achievement," *Teachers College Record* 98, no. 4 (1997): 584–628.

84. Diane Massell and Susan Fuhrman, *Ten Years of State Education Reform, 1983–1993: Overview with Four Case Studies* (New Brunswick, N.J.: Consortium for Policy Research in Education, 1994); Massell, Kirst, and Hoppe, *Persistence and Change*; Massell, *State Strategies for Building Capacity in Education*.

85. David Grissmer and Ann Flanagan, *Exploring Rapid Achievement Gains in North Carolina and Texas* (Washington, D.C.: National Educational Goals Panel, 1998).

86. John Bishop, "The Power of External Standards," *American Educator* 19, no. 3 (1995): 10–18, 42–43; John Bishop, *Do Curriculum-Based External Exit Exam Systems Enhance Student Achievement?* (Philadelphia: Consortium for Policy Research in Education, 1998).

87. Adam Gamoran, "Curriculum Standardization and Equality of Opportunity in Scottish Secondary Education, 1984–1990," *Sociology of Education* 29, no. 1 (1996): 1–21; Adam Gamoran, "Curriculum Change as a Reform Strategy: Lessons from the United States and Scotland," *Teachers College Record* 98, no. 4 (1997): 608–28.

88. Grissmer and Flanagan, *Exploring Rapid Achievement Gains in North Carolina and Texas*.

89. *Ibid.*, pp. 33–34.

90. Recent criticisms of the validity of rising scores on Kentucky's statewide examinations have raised questions about whether the gains are meaningful; see Dan Koretz and Sheila Barron, *The Validity of Gains in Scores on Kentucky Instructional Results Information System (KIRIS)* (Washington, D.C.: RAND, 1999). However, NAEP scores for Kentucky have also risen (see Table 4.1), and these gains are not subject to the same criticism.

91. Massell, Kirst, and Hoppe, *Persistence and Change: Standards-Based Reform in Nine States*; Jason Shepard, "Only a Test," *Isthmus* (Madison, Wisconsin), May 7, 1999, pp. 9–10.

92. Jane L. David and Patrick M. Shields, "Standards are Not Magic," *Education Week*, April 14, 1999, pp. 40–42.

93. Appalachian Educational Laboratory, "Evolution of the Primary Program in Six Kentucky Schools," *Notes from the Field: Education Reform in Kentucky* 6, no. 1 (1998): 1–11.

94. June Kronholz, "If You Have Brains, You Might Decide to Skip This Test," *Wall Street Journal*, March 28, 1997, p. A1.

95. Massell, Kirst, and Hoppe, *Persistence and Change*.

96. Lake et al., *Making Standards Work*, pp. 11–12.

97. David and Shields, "Standards Are Not Magic."

98. Lake et al., *Making Standards Work*; Kenneth K. Wong et al., "Implementation of an Educational Accountability Agenda: Integrated Governance in the Chicago Public Schools Enters Its Fourth Year" (Chicago: Department of Education, University of Chicago, 1999).

99. David and Shields, "Standards Are Not Magic," 42.

100. Wong et al., "Implementation of an Educational Accountability Agenda"; Kerry A. White, "Chicago Centers Target 8th Graders in Transition," *Education Week*, April 21, 1999, pp.1, 16; Randall C. Archibold, "Without Much Data on Success, Mandatory Summer School Grows," *New York Times*, June 17, 1999, pp. A1, A29.

101. Jay P. Heubert and Robert M. Hauser, *High Stakes: Testing for Tracking, Promotion, and Graduation* (Washington, D.C.: National Research Council, 1999), p. 286.

Chapter 5

1. Recent analyses of data prepared for school finance cases in Alabama, New Jersey, New York, Louisiana, and Texas have found that on every tangible measure—from qualified teachers to curriculum offerings—schools serving greater numbers of students of color have significantly fewer resources than schools serving mostly white students. Not only do funding systems allocate fewer resources to poor urban districts than to their suburban neighbors, but studies consistently show that within these districts schools with high concentrations of low-income and minority students receive fewer instructional resources than others in the same district. In addition, tracking systems exacerbate these inequalities by segregating many low-income and minority students within schools. See Jonathan Kozol, *Savage Inequalities* (New York: Crown, 1991); William L. Taylor and Diane Piche, *A Report on Shortchanging Children: The Impact of Fiscal Inequity on the Education of Students at Risk*, prepared for the Committee on Education and Labor, U.S. House of Representatives (Washington, D.C.: U.S. Government Printing Office, 1991).

2. William L. Sanders and June C. Rivers, "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement" (Knoxville: University of Tennessee Value-Added Research and Assessment Center, November 1996). See also S. Paul Wright, Sandra P. Horn, and William L. Sanders, "Teacher and Classroom Context Effects on Student Achievement: Implications for Teacher Evaluation," *Journal of Personnel Evaluation in Education* 1, no. 11 (1997): 57–67; Heather R. Jordan, Robert L. Mendro, and Dash Weerasinghe, *Teacher Effects on Longitudinal Student Achievement* (Dallas: Dallas Public Schools, July 1997).

3. Sanders and Rivers, "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement."

4. Ronald F. Ferguson, "Paying for Public Education: New Evidence on How and Why Money Matters," *Harvard Journal of Legislation* 28 (Summer 1991): 495–98.

5. Ronald F. Ferguson and Helen F. Ladd, "How and Why Money Matters: An Analysis of Alabama Schools," in Helen Ladd, ed., *Holding Schools Accountable* (Washington, D.C.: Brookings Institution Press, 1996), pp. 265–98.

6. Robert P. Strauss and Elizabeth A. Sawyer, "Some New Evidence on Teacher and Student Competencies," *Economics of Education Review* 5, no. 1 (1986): 41–48.

7. *Ibid.*, p. 47.

8. Rob Greenwald, Larry V. Hedges, and Richard D. Laine, "The Effect of School Resources on Student Achievement," *Review of Educational Research* 66 (Fall 1996): 361–96.

9. Eleanor Armour-Thomas et al., *An Outlier Study of Elementary and Middle Schools in New York City: Final Report* (New York: New York City Board of Education, 1989).

10. National Assessment of Educational Progress, *1992 NAEP Trial State Assessment* (Washington, D.C.: U.S. Department of Education, 1994); *Teachers with Advanced Degrees Advance Student Learning* (Atlanta: Council for School Performance, Georgia State University, 1997); G. A. Knoblock, "Continuing Professional Education for Teachers and Its Relationship to Teacher Effectiveness," Ph.D. diss., Western Michigan University, Dissertation Abstracts International 46(02), 3325A (University Microfilms No. AAC 8529729), 1986; S. L. Sanders, S. D. Skonie-Hardin, and W. H. Phelps, "The Effects of Teacher Educational Attainment on Student Educational Attainment in Four Regions of Virginia: Implications for Administrators," paper presented at the Annual Meeting of the Mid-South Educational Research Association, November 1994.

11. National Assessment of Educational Progress, *1992 NAEP Trial State Assessment*.

12. Patricia Ashton and Linda Crocker, "Does Teacher Certification Make a Difference?" *Florida Journal of Teacher Education* 3 (1986) 73–83; Patricia Ashton and Linda Crocker, "Systematic Study of Planned Variations: The Essential Focus of Teacher Education Reform," *Journal of Teacher Education* 38, no. 3 (1987): 2–8; Linda Darling-Hammond, "Teaching and Knowledge: Policy Issues Posed by Alternate Certification for Teachers," *Peabody Journal of Education* 67, no. 3 (1992): 123–54; Cynthia A. Druva and Ronald D. Anderson, "Science Teacher Characteristics by Teacher Behavior and by Student Outcome: A Meta-Analysis of Research," *Journal of Research in Science Teaching* 20, no. 5 (1983): 467–79; Carolyn Evertson, Willis Hawley, and Marilyn Zlotnick, "Making a Difference in Educational Quality through

Teacher Education," *Journal of Teacher Education* 36, no. 3 (1985): 2–12; James D. Greenberg, "The Case for Teacher Education: Open and Shut," *Journal of Teacher Education* 34, no. 4 (1983): 2–5.

13. Evertson, Hawley, and Zlotnick, "Making a Difference in Educational Quality through Teacher Education," p. 8.

14. For a review, see Linda Darling-Hammond, "Teaching and Knowledge: Policy Issues Posed by Alternate Certification for Teachers," *Peabody Journal of Education* 67, no. 3 (1992): 123–54.

15. Victor A. Perkes, "Junior High School Science Teacher Preparation, Teaching Behavior, and Student Achievement," *Journal of Research in Science Teaching* 6 (1968): 121–26; J. B. Hansen, "The Relationship of Skills and Classroom Climate of Trained and Untrained Teachers of Gifted Students," Ph.D. diss., Purdue University, West Lafayette, Ind., 1988; Parmalee Hawk, Charles R. Coble, and Melvin Swanson, "Certification: It Does Matter," *Journal of Teacher Education* 36, no. 3 (1985): 13–15.

16. Kathy Cater and Walter Doyle, "Teachers' Knowledge Structures and Comprehension Processes," in J. Calderhead, ed., *Exploring Teacher Thinking* (London: Cassell, 1987), pp. 147–60; Walter Doyle, "Content Representation in Teachers' Definitions of Academic Work," *Journal of Curriculum Studies* 18 (1986): 365–79; Eric Cooper and John Sherk, "Addressing Urban School Reform: Issues and Alliances," *Journal of Negro Education* 58, no. 3 (1989): 315–31.

17. Ronald Edmonds, "Effective Schools for the Urban Poor," *Educational Leadership* (October 1979).

18. Ronald Edmonds, cited in G. Weber, *Inner-City Children Can Be Taught to Read: Four Successful Schools* (Washington, D.C.: Council for Basic Education, 1971).

19. Edmonds, "Effective Schools for the Urban Poor," 22.

20. K. D. Peterson and J. L. Martin, "Developing Teacher Commitment: The Role of the Administrator," in P. Reyes, ed., *Teachers and Their Workplace: Commitment, Performance, and Productivity* (Newbury Park, Calif.: Sage Publications, 1990), pp. 225–40.

21. Mark A. Smylie, "Teacher Participation in School Decision Making: Assessing Willingness to Participate," *Educational Evaluation and Policy Analysis* 14, no. 1 (1992): 53–67.

22. Michael Fullan, "Visions that Blind," *Educational Leadership* 49, no. 5 (1992): 19–20; Thomas J. Sergiovanni, *The Principalship* (Boston: Allyn & Bacon, 1987); Thomas J. Sergiovanni, "Why We Should Seek Substitutes for Leadership," *Educational Leadership* 49, no. 5 (1992): 41–45.

23. Elizabeth Ashburn, "The Nature of Teachers' Commitment and Its Relationship to School Workplace Conditions," paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1989.

24. E. Anderman, S. Belzer, and J. Smith, "Teacher Commitment and Job Satisfaction: The Role of School Culture and Principal Leadership," paper presented at the annual meeting of the American Educational Research Association, Chicago, 1991.

25. Eileen M. Sclan, "The Effect of Perceived Workplace Conditions on Beginning Teachers' Work Commitment, Career Choice Commitment, and Planned Retention," Ph.D. diss., Teachers College, Columbia University, New York (University Microfilms No. 9400594).

26. Edmonds, "Effective Schools for the Urban Poor"; Sclan, "The Effect of Perceived Workplace Conditions on Beginning Teachers' Work Commitment, Career Choice Commitment, and Planned Retention"; Anderman, Belser, and Smith, "Teacher Commitment and Job Satisfaction"; Peterson and Martin, "Developing Teacher Commitment."

27. Linda Darling-Hammond and Eileen M. Sclan, "Who Teaches and Why: The Dilemmas of Building a Profession for 21st Century Schools," in John Sikula, ed., *Handbook of Research on Teacher Education* (New York: Macmillan, 1996), pp. 67–101.

28. "America's Teachers: Profile of a Profession, 1993–94," National Center for Education Statistics, U.S. Department of Education, Washington, D.C., 1993, pp. 97–98. About 75 percent of graduates who applied for teaching positions received offers and 90 percent of those who received offers accepted them (about 67 percent of all applicants). Interestingly, a number of recent bachelor's degree recipients who had prepared to teach reported they had not completed all requirements for entering teaching, probably reflecting the fact that many states now require tests and some graduate study before licensure. Of those who prepared to teach in undergraduate school but did not do so in the year after graduation, 33 percent said they had not taken or passed the necessary tests, 24 percent said they needed to obtain more education, and 2 percent felt they were not yet ready.

29. *Ibid.*, Table A8.11.

30. Susan P. Choy et al., *Schools and Staffing in the United States: A Statistical Profile, 1990–91* (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1993) [hereafter *Schools and Staffing Survey, 1990–91*].

31. *Ibid.*

32. In 1994, these statistics included 10.7 percent of newly hired, nontransferring public school teachers (new hires who had not been teaching the year before) who had no license in their main field, plus 16.3 percent who were hired on substandard licenses (emergency, temporary, provisional, or alternative licenses). Tabulations conducted by the National Commission on Teaching and America's Future using data from the *Schools and Staffing Surveys, 1990–91* and Robin R. Henke et al., *Schools and Staffing in the United States: A*

Statistical Profile, 1993–94 (Washington, D.C.: National Center for Educational Statistics, U.S. Department of Education, 1996), “Public School Teacher Questionnaires.”

33. Jeannie Oakes, “Multiplying Inequalities: The Effects of Race, Social Class, and Tracking on Opportunities to Learn Mathematics and Science” (Santa Monica, Calif.: RAND Corporation, 1990).

34. “America’s Teachers,” p. 30.

35. *Ibid.*, Tables 3.5 and A3.

36. *Ibid.*, p. 29.

37. Michael Andrew, “The Differences between Graduates of Four-Year and Five-Year Teacher Preparation Programs,” *Journal of Teacher Education* 41, no. 2 (1990): 45–51; Thomas Baker, “A Survey of Four-Year and Five-Year Program Graduates and their Principals,” *Southeastern Regional Association of Teacher Educators (SRATE) Journal* 2, no. 2 (Summer 1993): 28–33; Michael Andrew and Richard L. Schwab, “Has Reform in Teacher Education Influenced Teacher Performance? An Outcome Assessment of Graduates of Eleven Teacher Education Programs,” *Action in Teacher Education* 17 (Fall 1995): 43–53; Jon J. Denton and William H. Peters, “Program Assessment Report: Curriculum Evaluation of a Non-Traditional Program for Certifying Teachers,” Texas A&M University, College Station, 1988; Hyun-Seok Shin, “Estimating Future Teacher Supply: An Application of Survival Analysis,” paper presented at the annual meeting of the American Educational Research Association, New Orleans, April 1994.

38. Linda Darling-Hammond, “Inequality in Access to Knowledge,” in James Banks and Cherry A. McGee Banks, eds., *Handbook of Research on Multicultural Education* (New York: Macmillan, 1995).

39. *Doing What Matters Most: Investing in Quality Teaching* (New York: National Commission on Teaching and America’s Future, November 1997), Appendix B.

40. Linda Darling-Hammond, “Teacher Quality and Student Achievement: A Review of State Policy Evidence,” *Education Policy Analysis Archives* 8, no. 1 (January 2000).

41. *Doing What Matters Most*, Appendix B.

42. *Schools and Staffing Surveys, 1993–94*, “Public School District Survey,” tabulations conducted by the National Commission on Teaching for America’s Future.

43. F. Howard Nelson and Krista Schneider, *Survey and Analysis of Teacher Salary Trends, 1998* (Washington, D.C.: American Federation of Teachers, 1998).

44. “America’s Teachers.”

45. *What Matters Most: Teaching for America’s Future* (New York: National Commission on Teaching and America’s Future, 1996); Nelson and Schneider, *Survey and Analysis of Teacher Salary Trends*.

46. Adam Gamoran and Richard Mare, "Secondary School Tracking and Educational Inequality: Compensation, Reinforcement or Neutrality?" *American Journal of Sociology* 94 (1989): 1146–83; Jeannie Oakes, *Keeping Track: How Schools Structure Inequality* (New Haven: Yale University Press, 1985); Jeannie Oakes, "Tracking in Secondary Schools: A Contextual Perspective," *Educational Psychologist* 22 (June 1986): 129–54; Adam Gamoran, "The Consequences of Track-Related Instructional Differences for Student Achievement," paper presented at the meeting of the American Educational Research Association, Boston, April 1990.

47. Oakes, *Keeping Track*; Oakes, "Tracking in Secondary Schools"; Thomas B. Hoffer, "Middle School Ability Grouping and Student Achievement in Science and Mathematics," *Educational Evaluation and Policy Analysis* 14, no. 3 (1992): 205–27; C. C. Kulik and J. A. Kulik, "Effects of Ability Grouping on Secondary School Students: A Meta-Analysis of Evaluation Findings," *American Education Research Journal* 19 (1982): 415–28; Robert. E. Slavin, "Achievement Effects of Ability Grouping in Secondary Schools: A Best Evidence Synthesis," *Review of Educational Research* 60, no. 3 (1990): 471–500.

48. Oakes, "Tracking in Secondary Schools"; D. G. Davis, "A Pilot Study to Assess Equity in Selected Curricular Offerings across Three Diverse Schools in a Large Urban School District: A Search for Methodology," paper presented at the meeting of the American Educational Research Association, San Francisco, Calif., 1986; M. K. Finley, "Teachers and Tracking in a Comprehensive High School," *Sociology of Education* 57 (1984): 233–43; J. E. Rosenbaum, *Making Inequality: The Hidden Curriculum of High School Tracking* (New York: John Wiley & Sons, 1976); Joan E. Talbert, "Teacher Tracking: Exacerbating Inequalities in the High School," Center for Research on the Context of Secondary Teaching, Stanford University, Stanford, Calif., 1990; Lorraine M. McDonnell et al., "Discovering What Schools Really Teach: Designing Improved Coursework Indicators," U.S. Department of Education, Washington, D.C., 1990; J. E. Kaufman and J. E. Rosenbaum, "Education and Employment of Low-Income Black Youth in White Suburbs," *Educational Evaluation and Policy Analysis* 14, no. 3 (1992): 229–40; Anne Wheelock, *Crossing the Tracks* (New York: New Press, 1992).

49. Linda Darling-Hammond, *The Right to Learn* (San Francisco: Jossey-Bass, 1997), p. 268.

50. Oakes, *Keeping Track*; Davis, "A Pilot Study to Assess Equity in Selected Curricular Offerings across Three Diverse Schools in a Large Urban School District"; Mary H. Metz, *Classrooms and Corridors: The Crisis of Authority in Desegregated Secondary Schools* (Berkeley: University of California Press, 1978); K. Trimble and R. L. Sinclair, "Ability Grouping and Differing Conditions for Learning: An Analysis of Content and Instruction in Ability-Grouped Classes,"

paper presented at the meeting of the American Educational Research Association, San Francisco, 1986; Cooper and Sherk, "Addressing Urban School Reform."

51. "America's Teachers," Tables A4.15–A4.16.

52. *Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey, 1994–95* (Washington, D.C.: National Center for Educational Statistics, U.S. Department of Education, 1997).

53. *Ibid.*, pp. 6–7.

54. "America's Teachers," p. 109.

55. Low-poverty schools are those with less than 5 percent of their students receiving free or reduced-price lunch. High-poverty schools are those with more than 50 percent of their students receiving free or reduced-price lunch. *Schools and Staffing Surveys*, "Teacher Followup Survey 1994–95," National Center for Education Statistics, tabulations conducted by the National Commission on Teaching and America's Future.

56. "America's Teachers," p. 93.

57. *Ibid.*, p. 90.

58. Susan M. Johnson, *Teachers at Work: Achieving Success in Our Schools* (New York: Basic Books, 1990).

59. Sharon Conley, "Review of Research on Teacher Participation in School Decisionmaking," in Gerald Grant, ed., *Review of Research in Education* (Washington, D.C.: American Educational Research Association, 1991), pp. 225–66.

60. "America's Teachers," p. 53.

61. *The Condition of Teaching, A State-by-State Analysis* (New York: Carnegie Foundation, 1990).

62. Sclan, "The Effect of Perceived Workplace Conditions on Beginning Teachers' Work Commitment, Career Choice Commitment, and Planned Retention."

63. "The American Teacher 1993," Metropolitan Life, New York, 1993.

64. *Schools and Staffing Surveys, 1993–94*, "Public School Teacher Questionnaires," tabulations conducted by the National Commission on Teaching and America's Future.

65. "America's Teachers," Table A4.15.

66. For a review, see Darling-Hammond, *The Right to Learn*.

67. Linda Darling-Hammond, Arthur E. Wise, and Tamar Gendler, "The Teaching Internship: Practical Preparation for a Licensed Profession" (Santa Monica, Calif.: RAND Corporation, 1990).

68. *Schools and Staffing Surveys, 1993–94*, "Public School Teacher Questionnaires," tabulations conducted by the National Commission on Teaching and America's Future.

69. *Schools and Staffing Survey, 1990–91*, p. 8.

70. Linda Darling-Hammond, "Teacher Professionalism: Why and How," in Ann Lieberman, ed., *Schools as Collaborative Cultures: Creating the Future Now* (Philadelphia: Falmer Press, 1990); Linda Darling-Hammond, "Teachers and Teaching: Signs of a Changing Profession," in Robert Houston, Martin Haberman, and John Sikula, eds., *Handbook of Research on Teacher Education* (New York: Macmillan, 1990); A. M. Huberman and Matthew Miles, "Rethinking the Quest for School Improvement: Some Findings from the DESSI Study," *Teachers College Record* 86, no. 1 (1984): 34–54; Ann Lieberman, "Expanding the Leadership Team," *Educational Leadership* 45, no. 5 (1988): 4–8; Lieberman, *Schools as Collaborative Cultures*; Karen S. Louis and Matthew B. Miles, *Improving the Urban High School: What Works and Why* (New York: Teachers College Press, 1990); Milbrey W. McLaughlin et al., "Why Teachers Won't Teach," *Phi Delta Kappan* 67, no. 6 (1986): 420–26.

71. George A. Johanson and Crystal J. Gips, "The Hiring Preferences of Secondary School Principals," *High School Journal* 76 (October/November 1992): 1–16; Susanna W. Pflaum and Theodore Abramson, "Teacher Assignment, Hiring, and Preparation: Minority Teachers in New York City," *Urban Review* 22 (March 1990): 17–31; Martin Haberman, "Selecting 'Star' Teachers for Children," *Phi Delta Kappan* 76 (June 1995): 777–81; Janice Poda, "1994–95 Annual Report for the South Carolina Center for Teacher Recruitment" (Rock Hill: South Carolina Center for Teacher Recruitment, 1995); Beverly A. Browne and Richard J. Rankin, "Predicting Employment in Education: The Relative Efficiency of National Teacher Examinations Scores and Student Teacher Ratings," *Educational and Psychological Measurement* 46 (Spring 1986): 191–97; Arthur E. Wise, Linda Darling-Hammond, and Barnett Berry, *Effective Teacher Selection, from Recruitment to Retention* (Santa Monica, Calif.: RAND Corporation, 1987); P. C. Schlechty, "Reform in Teacher Education: A Sociological View," American Association of Colleges for Teacher Education, Washington, D.C., 1990.

72. Wise, Darling-Hammond, and Berry, *Effective Teacher Selection*.

73. Ibid.

74. Ibid.

75. Jon Snyder, *New Haven Unified School District: A Teaching Quality System for Excellence and Equity* (New York: National Commission on Teaching and America's Future, 1999); Wise, Darling-Hammond, and Berry, *Effective Teacher Selection*, 1987.

76. J. Norris, personal communication with Barnett Berry, May 22, 1998.

77. Barnett Berry, *Keeping Talented Teachers: Lessons Learned from the North Carolina Teaching Fellows*, commissioned by the North Carolina Teaching Fellows Commission (Raleigh, N.C.: Public School Forum, 1995).

78. Ferguson, "Paying for Public Education."

79. James E. Bruno, "Teacher Compensation and Incentive Programs for Large Urban School Districts," *The Elementary School Journal* 86, no. 4 (March 1986): 441.

80. *Doing What Matters Most*.

81. *Ibid.*

82. Snyder, *New Haven Unified School District*

83. For a vivid illustration of the problem, see the John Merrow report featuring Oakland and nearby New Haven, California, *Teacher Shortages: False Alarm?* videocassette, Minow Reports, New York, 1999.

84. *Schools and Staffing Survey, 1990-91*.

85. For citations see Leslie Huling-Austin, "Research on Learning to Teach: Implications for Teacher Induction and Mentoring Programs," *Journal of Teacher Education* 43, no. 3 (May-June 1992): 174.

86. Thomas J. Buttery, Martin Haberman, and W. Robert Houston, "First Annual ATE Survey of Critical Issues in Teacher Education," *Action in Teacher Education* 12, no. 2 (Summer 1990): 1-7.

87. Metropolitan Life Survey of Teachers, 1991.

88. Sandra J. Odell and Douglas P. Ferraro, "Teacher Mentoring and Teacher Retention," *Journal of Teacher Education* 43, no. 3 (May-June 1992): 203. See also Joel A. Colbert and Diana E. Wolff, "Surviving in Urban Schools: A Collaborative Model for a Beginning Teacher Support System," *Journal of Teacher Education* 43, no. 3 (May-June 1992): 193-99; Leslie Huling-Austin and S. C. Murphy, "Assessing the Impact of Teacher Induction Programs: Implications for Program Development," paper presented at the meeting of the American Educational Research Association, Washington, D.C., 1987; S. Odell, "Induction Support of New Teachers: A Functional Approach," *Journal of Teacher Education* 37, 26-30; David P. Wright, Mark McKibbin, and Priscilla Walton, *The Effectiveness of the Teacher Trainee Program: An Alternate Route into Teaching in California* (Sacramento, California: Commission on Teacher Credentialing, 1987).

89. See for example, Linda Darling-Hammond with Eileen Sclan, "Policy and Supervision," in Carl Glickman, ed., *Supervision and Transition* (Alexandria, Va.: Association for Supervision and Curriculum Development, 1992); Judith Warren Little, "Teachers as Colleagues," in Virginia Richardson-Koehler, ed., *Educator's Handbook: A Research Perspective* (New York: Longman, 1987), pp. 491-518; Susan J. Rosenholtz, "Effective Schools: Interpreting the Evidence," *American Journal of Education* 93, no. 3 (1985): 352-88.

90. Gayle A. Wilkinson, "Support for Individualizing Teacher Induction," *Action in Teacher Education* 16, no. 2 (Summer 1994): 52-61.

91. *Ibid.*, p. 59.

92. Terry M. Wildman et al., "Teacher Mentoring: An Analysis of Roles, Activities, and Conditions," *Journal of Teacher Education* 43, no. 3 (May-June 1992): 212.

93. Joan M. Hofmann and Harriet Feldlaufer, "Involving Veteran Teachers in a State Induction Program," *The Clearing House* 66, no. 2 (November/December 1992): 101–3.
94. *Ibid.*, p. 102.
95. *Ibid.*
96. Huling-Austin, "Research on Learning to Teach," 175.
97. *Ibid.*
98. *Ibid.*
99. *Ibid.*, p. 177; Wildman et al., "Teacher Mentoring," 210.
100. Colbert and Wolff, "Surviving in Urban Schools," 193–99.
101. *Ibid.*, p. 194.
102. *Ibid.*, p. 197.
103. *Ibid.*, pp. 193–99.
104. *Ibid.*, p. 197.
105. *What Matters Most*, p. 97.
106. *Ibid.*
107. Emil J. Haller, "High School Size and Student Discipline: Another Aspect of the School Consolidation Issue?" *Educational Evaluation and Policy Analysis* 14, no. 2 (1992): 145–56; Emil J. Haller, "Small Schools and Higher-Order Thinking Skills," *Journal of Research in Rural Education* 9, no. 2 (1993): 66–73; William J. Fowler, "What Do We Know about School Size? What Should We Know?" paper presented at the meeting of the American Educational Research Association, San Francisco, Calif., April 1992; Craig B. Howley and Gary Huang, "Extracurricular Participation and Achievement: School Size as Possible Mediator of SES Influence among Individual Students," *Resources in Education* (July 1991); Craig B. Howley, "Synthesis of the Effects of School and District Size: What Research Says about Achievement in Small Schools and School Districts," *Journal of Rural and Small Schools* 4, no. 1 (1989): 2–12; G. Green and W. Stevens, "What Research Says about Small Schools," *Rural Educators* 10, no. 1 (1988): 9–14; P. Lindsay, "The Effect of High School Size on Student Participation, Satisfaction, and Attendance," *Educational Evaluation and Policy Analysis* 4 (1982): 57–65; P. Lindsay, "High School Size, Participation in Activities, and Young Adult Social Participation: Some Enduring Effects of Schooling," *Educational Evaluation and Policy Analysis* 6, no. 1 (1984): 73–83; D. Oxley, "Smaller Is Better," *American Educator* (Spring 1989): 28–31, 51–52; R. Pittman and P. Haughwout, "Influence of High School Size on Dropout Rate," *Educational Evaluation and Policy Analysis* 9 (1987): 337–43; J. Garbarino, "The Human Ecology of School Crime: A Case for Small Schools," in E. Wenk, ed., *School Crime* (Davis, Calif.: National Council on Crime and Delinquency, 1978), pp. 122–33.
108. National Institute of Education, *Violent Schools—Safe Schools: The Safe School Study Report to Congress* (Washington, D.C.: National Academy Press, 1977); Gary D. Gottfredson and D. C. Daiger, "Disruption in 600 Schools,"

Center for Social Organization of Schools, Johns Hopkins University, Baltimore, 1979.

109. For a review see Valerie E. Lee, Anthony Bryk, and Julia B. Smith, "The Organization of Effective Secondary Schools," in Linda Darling-Hammond, ed., *Review of Research in Education* 19 (Washington, D.C.: American Educational Research Association, 1993), pp. 171–267.

110. Valerie E. Lee and Julia B. Smith, "Effects of High School Restructuring and Size on Gains in Achievement and Engagement for Early Secondary School Students" (Madison: Wisconsin Center for Education Research, University of Wisconsin, 1995).

111. Darling-Hammond, *The Right to Learn*.

112. Ibid.

113. Richard F. Elmore with Deanna Burney, *Investing in Teacher Learning: Staff Development and Instructional Improvement in Community School District #2* (New York: National Commission on Teaching and America's Future and the Consortium for Policy Research in Education, 1997).

114. Elmore, *Investigating Teacher Learning* p. 6.

Chapter 6

1. Gary Orfield, "Public Opinion and School Desegregation," *Teachers College Record* 96, no. 4 (1995): 654–70.

2. *Time to Move On* (Washington, D.C.: Public Agenda, 1998).

3. Amy Stuart Wells and Robert L. Crain, "Perpetuation Theory and the Long-term Effects of School Desegregation" *Review of Educational Research* 64, no. 4 (1994): 531–55.

4. Ibid.

5. Gary Orfield et al., "Deepening Segregation in American Public Schools," Harvard Project on School Desegregation Report, Harvard University, 1997.

6. Darcia Harris Bauman, "South Carolina Charter School Law Still in Limbo," *Education Week*, July 12, 2000, p. 28.

7. Geoff Whitty, "Creating Quasi-Markets in Education: A Review of Recent Research on Parental Choice and School Autonomy in Three Countries," *Review of Research in Education*, vol. 22 (1997): 3–47.

8. See, for example, Bruno V. Manno et al., "How Charter Schools Are Different: Lessons and Implications from a National Study," *Phi Delta Kappan* 79, no. 7 (March 1998): 488–98; Louann Bierlein, "Charter Schools: A New Approach to Public Education," *NASSP Bulletin* 79, no. 572 (September 1995): 12–20.

9. See Roselyn Tantraphol, "Debater Says School Choice Is a Question of Civil Rights," *The Union-News*, March 2, 2000, <http://www.massline.com>;

Nina Shokraii, "Free at Last: Black American Signs up for School Choice," *Policy Review* 80 (November–December 1996): 20–26; Lynn Schnaiberg, "Justice Department Accused of Obstructing Charter Schools" *Education Week* October 20, 1999.

10. See, for example, Gregg Vanourek et al., *Charter Schools in Action: Charter Schools as Seen by Those Who Know Them Best: Students, Teachers, and Parents* (Washington, D.C.: The Hudson Institute, June 1997), <http://www.edexcellence.net/chart/chart2html>; *The State of Charter Schools: Third-year Report 1999*, conducted by RPP International (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, May 1999), <http://www.ed.gov/pubs/charter3rdyear/title.html>.

11. We draw from a number of independently conducted studies of charter schools in various states. Thus, we have excluded reports by partisan think tanks that simultaneously support charter school reform. The problem with this analysis is that each of these studies was designed to answer a different set of research questions, each draws from a different body of data, and employs different definitions and measures. For instance, in some reports the researchers did not consider a charter school's enrollment to be racially or ethnically distinct from that of the state or district enrollment unless they differed by 20 percent or more. Other researchers considered charter school to be distinct if their enrollments in one or more racial/ethnic category differed by only 10 percent. Also, depending on the way in which the data are presented in the reports, it was often impossible to reanalyze them to make the findings more uniform. Still, we have made the effort to contrast and compare the information in each report as best we can.

12. A total of 927 of the 975 open charter schools during the 1998–99 school year responded to the survey.

13. *The State of Charter Schools 2000: Fourth-year Report*, conducted by RPP International (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, February 2000), p. 33.

14. *The State of Charter Schools 2000*.

15. *Ibid.* According to the report, only the twenty-three states that had three or more charter schools during the 1998–98 school year were included in this part of the analysis. It is not always clear why the authors sometimes chose to focus on these twenty-three states and sometimes on all twenty-seven states in this report. We chose, therefore, to examine the data from the twenty-one states with charter school enrollments of more than one thousand. It seemed more appropriate to focus on enrollments than on the number of schools given that we believe what matters most is how this reform impacts the lives of students. Also, the average enrollments per school vary widely across states; thus, some states with more than three charter schools had smaller overall charter school enrollments than did states with less than three charter schools.

16. A scatter plot of all twenty-one states examined in this chapter shows a weak relationship between the percentage of white students in the public schools and the percentage of white students in the charter schools (the correlation coefficient is 0.43). Thus, the regression analysis indicates that only 18.5 percent of the variance in the percentage of white students in charter schools in any given state is explained by the percentage of white students in the public schools in general. Still, a close look at the demographics in each state reveals evidence of a trend toward states with more white students in general enrolling more students of color in charter schools, particularly in many of the states with the highest charter school enrollments.

17. California, Arizona, Georgia, Colorado, District of Columbia, New Mexico, Alaska, and Kansas.

18. This depends on which total charter school enrollment numbers you use. When using the Department of Education's Fourth-Year Report numbers cited in Table 1 of this chapter, the percentage of charter school students in California and Arizona is about 46 percent.

19. The thirteen states, in order of the number of students they enroll in charter schools, are: Michigan, Texas, Florida, Massachusetts, North Carolina, Pennsylvania, Minnesota, New Jersey, Illinois, Ohio, Wisconsin, Connecticut, and Louisiana. The only three states that have a higher percentage of students of color in charter schools and a less than 60 percent white general public school population are Texas, Florida, and Louisiana. We used 60 percent as our cut-off for "predominantly" white because, according to the Department of Education's Fourth-Year Report, 59 percent was the average for white enrollment in the twenty-seven states with charter schools during the 1998–99 school year. It is also close to the national average of the percent of all students enrolled in public schools who are "white," which is 66 percent.

20. These eight include the District of Columbia, which is an anomaly due to its extremely small white population. About 5 percent of the students in the District of Columbia public schools were white, and only 1 percent of the students enrolled in charter schools there were white. Still, it fits this larger category of jurisdictions in which the white population in charter schools is either equal to (within five percentage points) or greater than the white population in the public schools in general.

The seven states, in order of their charter school enrollment size, are: California, Arizona, Georgia, Colorado, New Mexico, Alaska, and Kansas.

21. For instance, in New Jersey, the overall public school population is about 63 percent white, 19 percent African American, and 14 percent Latino. But the charter schools in New Jersey are only 29 percent white, 30 percent African American, and about 36 percent Latino. In fact, of the ten states in which white students are underrepresented in charter schools, seven contain charter schools in which both African-American and Latino students are

overrepresented. In the other three states, African-American students only are overrepresented and the Latino charter school enrollments are either equal to or slightly lower than the general public school population.

22. The picture from Florida is a little less clear-cut because white students are only slightly underrepresented—by about 7 percent—in charter schools, while Latino students are also slightly underrepresented.

23. See Gary Orfield and Susan Eaton, *Dismantling Desegregation*, the Harvard Project on School Desegregation (New York: New Press, 1996), pp. 15, 60.

24. Obviously, the District of Columbia does not fit this theme, given its very small white enrollment in charter or regular public schools. Still, the hypothesis is worth exploring in the seven states that fit this profile.

25. *The State of Charter Schools 2000*. Although the report does not provide any specific information about how many charter schools were considered in this particular analysis or what year the data are from, it appears as though this analysis is based on data from 920 out of the 975 charter schools open during the 1998–99 school year.

26. *A National Study of Charter Schools: Second-year Report*, conducted by RPP International (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1998).

27. *The State of Charter Schools 2000*.

28. *A National Study of Charter Schools*.

29. Carol Ascher, Robin Jacobowitz, and Yolanda McBride, *Charter School Access: A Preliminary Analysis of Charter School Legislation and Charter School Students* (New York: Institute for Education and Social Policy, New York University, 1999).

30. We acknowledge the shortcomings in comparing the racial balance of individual charter schools to those of an entire school district. We realize that many school districts may be racially, ethnically, and socioeconomically diverse but that there is a great deal of segregation within these districts and that individual public schools are generally less diverse than the districts as a whole. Still, we think that these analyses of charter school and district-level data provide us with yet another layer of information and that the findings here are as valuable as those related to aggregated state and national data.

31. Ascher, Jacobowitz, and McBride, *Charter School Access*.

32. While the separate state-level reports are extremely important, as we mentioned above they oftentimes present very different data, making cross-state comparisons difficult.

33. *Evaluation of Charter School Effectiveness*, prepared for the State of California Office of Legislative Analyst (Menlo Park, Calif.: SRI International, 1997).

34. *Ibid.*

35. *A Study of Charter Schools: First-year Report*, conducted by RPP International (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1997).

36. Carol Muth Crockett, "California Charter Schools: The Issue of Racial/Ethnic Segregation," Ph.D. diss., Arizona State University, 1999, p. 37.

37. Clayton Foundation, *1998 Colorado Charter Schools Evaluation Study* (Denver, Colo.: Colorado Department of Education, January 1999).

38. It is too early to draw conclusions about the racial/ethnic makeup of charter school enrollments as compared to those of other public schools in Michigan because the data have not yet been analyzed fully in that way. In fact, each of the three reports relies on slightly different data and each research team analyzed the available data differently.

39. Jerry Horn and Gary Miron, "Evaluation of the Michigan Public School Academy Initiative" (Kalamazoo, Mich.: The Evaluation Center, Western Michigan University, 1999).

40. Public Sector Consultants, Inc., and Maximus, Inc., *Michigan's Charter School Initiative: From Theory to Practice* (Lansing, Mich.: Department of Education, 1999).

41. The authors note that the charter school data are from the 1997–98 school year, while the district data are from the 1995–96 school year.

42. *Minnesota Charter Schools Evaluation*, final report (Minneapolis: Center for Applied Research and Educational Improvement, College of Education and Human Development, University of Minnesota, 1998).

43. The Department of Education *Third-year Report* and the University of Minnesota report differ somewhat in their reporting of the percentage of white students in the public schools in general and in charter schools total for Minnesota. The Department of Education report lists the overall statewide white enrollment as 86 percent and the charter school white enrollment as 53 percent. The University of Minnesota report lists the statewide white enrollment as 84 percent and the charter school white enrollment as 55 percent. Such small discrepancies between the U.S. Department of Education report and the various state reports are common.

44. *Minnesota Charter Schools Evaluation*, p. 4, Section Five.

45. Gregory Weiher et al., *Texas Open-Enrollment Charter Schools: Third Year Evaluation* (Arlington, Tex.: School of Urban and Public Affairs, University of Texas at Arlington, 2000).

46. *The Massachusetts Charter School Initiative 1998 Statistical Portrait*, (Boston: Massachusetts State Department of Education, 1998), <http://www.doe.mass.edu/cs.www/report98/stats.html>; Jennifer Wood, *An Early Examination of the Massachusetts Charter School Initiative* (Amherst, Mass.: Donahue Institute, University of Massachusetts, 1999). This finding could also be related to the smaller, more homogeneous make-up of Massachusetts school districts.

47. Ascher, Jacobowitz, and McBride, *Charter School Access*.
48. Ibid.
49. Ibid., p. 9.
50. Crockett, "California Charter Schools."
51. Casey D. Cobb and Gene V. Glass, "Ethnic Segregation in Arizona Charter Schools," *Educational Policy Analysis Archives* 7, no. 1 (1999).
52. Ibid., p. 16.
53. Ibid., p. 17.
54. Ibid., pp. 22–23.
55. Ibid., p. 29.
56. Ascher, Jacobowitz, and McBride, *Charter School Access*, p. 10.
57. This section of the Ascher report is based on data from 483 charter schools and 314 school districts. The second-year Department of Education report is based on data from 225 charter schools and their surrounding districts, the number of which is not revealed.
58. Ascher, Jacobowitz, and McBride, *Charter School Access*.
59. Ibid., p. 11.
60. Ibid., p. 12.
61. Clayton Foundation, *1998 Colorado Charter Schools Evaluation Study*, p. 27.
62. *The Massachusetts Charter School Initiative 1998 Statistical Portrait*; Wood, *An Early Examination of the Massachusetts Charter School Initiative*.
63. Horn and Miron, *Evaluation of the Michigan Public School Academy Initiative*; Public Sector Consultants, Inc., and Maximus, Inc., *Michigan's Charter School Initiative*.
64. Ascher, Jacobowitz, and McBride, *Charter School Access*, p. 13.
65. *Beyond the Rhetoric of Charter School Reform: A Study of Ten California School Districts* (Los Angeles: UCLA Graduate School of Education and Information Studies, 1998). This was a two-and-a-half-year study of ten California school districts engaged in charter school reform.
66. David Arsen, David N. Plank, and Gary Sykes, *School Choice Politics in Michigan: The Rules Matter* (East Lansing: Michigan State University, 1999).
67. Lori A. Mulholland, "Arizona Charter School Progress Evaluation," Morrison Institute for Public Policy, Tucson, Ariz., March 1999.
68. Weiher et al., *Texas Open-Enrollment Charter Schools*.
69. Monique Campbell et al., *NJ Charter School Law in Implementation: 1st Year Case Study* (New York: Robert F. Wagner Graduate School of Public Service and the Institute for Education and Social Policy, New York University, 1998).
70. Powell, *Evaluation of Charter School Effectiveness*.
71. Ibid.
72. Arsen, Plank, and Sykes, *School Choice Politics in Michigan*.
73. Ibid.
74. Campbell et al., *NJ Charter School Law in Implementation*, p. 16.

75. Ibid., p. 8.

76. *Beyond the Rhetoric of Charter School Reform*.

77. Cobb and Glass, "Ethnic Segregation in Arizona Charter Schools."

78. Ibid., p. 23.

79. Weiher et al., *Texas Open-Enrollment Charter Schools*.

80. *Beyond the Rhetoric of Charter School Reform*. Also see Janelle Scott and Jennifer Jellison Holme, "Private Resources, Public Schools: The Role of Social Networks in California Charter School Reform," AERA Conference Paper, San Diego, Calif., 1998. Also Amy Stuart Wells and Janelle Scott, "Privatization and Charter School Reform: The Rich Get Richer," in Henry M. Levin, ed., *Setting the Agenda for the National Center for the Study of Privatization in Education* (San Francisco: Westview Press, forthcoming).

81. Ibid.

82. See, for example, Arsen, Plank, and Sykes, *School Choice Politics in Michigan*; also Ascher, Jacobowitz, and McBride, *Charter School Access*.

83. *Beyond the Rhetoric of Charter School Reform*.

84. Ibid.

85. Crockett, "California Charter Schools."

86. Ascher, Jacobowitz, and McBride, *Charter School Access*.

87. This is not to say that the legislation does not matter, particularly in areas of funding and governance. Rather, we are suggesting that there is less of a direct link between the legislation as it is currently written and who has access to charter schools.

88. See the Center for Education Reform's website for information on their state ranking system: http://edreform.com/charter_schools/laws/ranking.htm.

Chapter 7

1. Phillip Kaufman et al., *Indicators of School Crime and Safety, 1998*, NCES 98-251/NCJ-172215, U.S. Departments of Education and Justice, Washington, D.C., 1998.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. *The Metropolitan Life Survey of the American Teacher, 1999: Violence in America's Public Schools: Five Years Later* (New York: MetLife, 1999), p. 51.

7. Ibid.

8. Ibid.

9. Ibid.

10. Ibid.

11. Paul E. Barton, Richard J. Coley, and Harold Wenglinsky, "Order in the Classroom: Violence, Discipline, and Student Achievement," Educational Testing Service, Princeton, N.J., October 1998.

12. National Education Longitudinal Survey, National Center for Education Statistics (conducted in 1988, with subsequent follow-up surveys) [hereafter NELS:88].

13. Robin R. Henke et al., *Schools and Staffing in the United States: A Statistical Profile, 1993-94* (Washington, D.C.: National Center for Educational Statistics, U.S. Department of Education, 1996), pp. 120-21.

14. Richard M. Ingersoll, Mei Han, and Sharon Bobbitt, *Teacher Supply, Teacher Qualifications, and Teacher Turnover: Aspects of Teacher Supply and Demand in the U.S., 1990-91* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1995).

15. Summer D. Whitener et al., *Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey: 1994-95*, NCES 97-450 (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1997), p. 13.

16. *Ibid.*, p. 15.

17. *The Metropolitan Life Survey of the American Teacher*, p. 51.

18. American Federation of Teachers, *AFT School Discipline Resource Manual* (Washington, D.C., 1997).

19. Letter from Judy Hale and Bob Brown to the West Virginia Federation of Teachers, January 16, 1998.

20. Remarks of Texas Federation of Teachers president John Cole, Safe Schools Press Conference, November 19, 1996.

21. Testimony of Brenda Williams, Broward, Florida, Teachers Union/American Federation of Teachers, before the House Subcommittee on Early Childhood, Youth and Families Committee on Education and the Workforce, March 9, 1999.

22. In *What Works in Teaching and Learning*³⁰, no. 15, July 29, 1998 (newsletter).

23. This description is drawn from a presentation made by H. Jerome Freiberg, Professor of Education at the University of Houston, at the National Education Association Conference, March 1999.

24. Information taken from the fiscal year 1999 budget request of the United States Department of Education to the Congress of the United States.

25. "Evaluation of the Maryland Partnership in Character Education," One Year Report, West Mesa Associates, Inc., Hardy, Va., January 19, 1999.

26. This description is taken from a "Forum Brief" provided by the American Youth Policy Forum, Washington, D.C., January 15, 1999.

27. The description provided here is drawn from the testimony of Wesley C. Mitchell, Chief of Police, Los Angeles School Police Department, before the House Committee on Education and the Workforce, May 1999.

28. Materials supplied by George Krupanski, Executive Director, Boys and Girls Clubs of America.

29. This discussion draws from a presentation by Mark L. Rosenberg of the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Department of Health and Human Services, before the House Subcommittee on Early Childhood, Youth and Families, March 11, 1999. Unless otherwise noted, all information used in this section comes from Rosenberg's presentation.

30. Education Commission of the States, *Youth Violence: A Policymaker's Guide*, Denver, Colo., March 1996.

31. The data used here is derived from the assessments of the National Assessment of Educational Progress for the years 1992, 1996, and 1998. NAEP is a project of the National Center for Education Statistics of the U.S. Department of Education. The data used here can be found on the Center's website at <http://nces.ed.gov/>.

32. Statement provided by the American Federation of Teachers, April 22, 1999.

33. Statement of Elizabeth Metcalf before the House Committee on Education and the Workforce, Subcommittee on Early Childhood, Youth and Families, March 9, 1999.

34. *Youth Violence*.

35. Sheila Heaviside et al., "Violence and Discipline Problems in U.S. Public Schools, 1996-97," NCES 98-030, U.S. Department of Education, National Center for Education Statistics, Washington, D.C., 1998.

36. Barton, Coley, and Wenglinsky, "Order in the Classroom," pp. 11-19.

37. NELS:88.

Chapter 8

1. July 1998 Peter Hart/Shell Oil poll.

2. Judging from a related data series about confidence in the public schools, the real decline in the public's ratings of the nation's public schools occurred in the 1970s and early 1980s; since then there has been relatively little overall change. Tom Loveless, "The Structure of Public Confidence in Education," *American Journal of Education* 105 (February 1997): 127-59.

3. This too appears to be a sentiment of long standing. For example, a question in the 1998 Shell poll asked how people rated public schools in the area or neighborhood where they lived; the response was 12 percent excellent, 40 percent good, 26 percent only fair, and 15 percent poor. This is virtually identical to responses to the same question asked by Gallup in 1972 (13 percent excellent, 40 percent good, 26 percent only fair, and 13 percent poor).

4. It is also worth noting that this long-standing gap between ratings of the nation's and local community schools has widened since 1988. See the detailed discussion in Loveless, "Structure of Public Confidence in Education."

5. Lawrence R. Jacobs and Robert Y. Shapiro, "Public Opinion and Health Care: Individualism, Government and the Market," paper presented at the annual meeting of the American Political Science Association, September 2–5, 1993.

6. This essentially duplicates the result of the 1997 Gallup/PDK poll, where the same question was asked.

7. Peter Harris/Recruiting New Teachers (RNT) poll, 1998, cited in David Haselkorn and Louis Harris, *The Essential Profession: A National Survey of Public Attitudes toward Teaching, Educational Opportunity and School Reform* (Belmont, Mass.: Recruiting New Teachers, Inc., 1998).

8. However, note that the question was worded differently in the 1996 reading, possibly accounting for the unusually lopsided result in that year.

9. Note, however, that public endorsement of a national test to set standards does not imply a high comfort level with the federal government as the creator and administrator of the test. For example, a March 1997 NBC/*Wall Street Journal* poll found the public split on a question that explicitly mentions the federal government as creator of a national reading/math test and poses the arguments both for and against such a proposition. And a 1999 National Public Radio/Kaiser Family Foundation poll found little support, in general, for the federal government having primary responsibility for developing standardized tests. This suggests that a national standardized test may need to be, in one way or another, somewhat disassociated from the federal government, perhaps through a quasi-independent agency or commission.

10. Public Agenda poll, October 1997.

11. Two 1999 polls also asked about public school choice, though they used radically different question wording and are not included in the table. The Penn, Schoen, Berland/Democratic Leadership Council poll framed public school choice as a method of forcing competition among schools, while the Public Agenda poll counterposed free choice by parents to retention of some control by the school district. In each case, however, the polls still recorded majority (54 percent) support for public school choice.

12. Note that the choice is framed exclusively in terms of blacks and whites; but since the most incendiary controversies are precisely about blacks and whites this should, if anything, bias the question conservatively (that is, toward the display of racial bias).

13. See cross-tabular data cited in Jennifer Hochschild and Bridget Scott, "The Polls—Trends: Governance and Reform of Public Education in the United States," *Public Opinion Quarterly* 62 (1998): 79–120.

14. For example, Donald Kinder and Lynn Sanders, *Divided by Color: Racial Politics and Democratic Ideals* (Chicago: University of Chicago Press, 1996).

15. Michael J. Alves and Charles V. Willie, "Controlled Choice Assignments: A New and More Effective Approach to School Desegregation," *The Urban Review* 19, no. 2 (1987): 67–88.

16. However, oddly enough, poor teacher quality does not typically rank very high in the public's rankings of problems that currently bedevil the public schools.

17. Note, however, that a stronger version of teacher accountability, where teacher pay is tied directly to student performance, received only weak support (33 percent) in the same poll.

18. According to data cited in Hochschild and Scott, "Polls—Trends," pp. 110–11. Note, however, that their most recent data on this issue comes from 1992. More recently a 1998 Peter Harris/RNT poll found 70 percent of the public characterizing teachers as "just adequately paid" or "inadequately paid." Unfortunately, the survey report provides no breakdown between these two responses.

19. See the section on spending later in this chapter for more detail.

20. See Stanley Elam, *How America Views Its Schools: The PDK/Gallup Polls, 1969–1994* (Bloomington, Ind.: Phi Delta Kappa Educational Foundation, 1995), p. 41, and Hochschild and Scott, "Polls—Trends," Table A7.

21. Of course, the closer the issue gets to the specific question of safety within schools, the more it is, in fact, an end in itself. In the 1998 Gallup/PDK poll, about one-third of respondents reported fearing for the safety of their oldest child at school (though note that 31 percent also feared for the safety of that child when just playing in their local neighborhood). In the wake of the Littleton, Colorado, school massacre, parents' fears about school safety have gone up substantially from the level just cited, but, as these events recede, it is probable that fears will recede to something like their 1998 levels.

22. Public Agenda poll, April 1998.

23. 1991 poll cited in Elam, *How America Views Its Schools*, p. 47.

24. February 1997 poll cited on Public Agenda website, <http://publicagenda.org>.

25. A much broader question in the 1999 PSB/DLC poll finds 54 percent opposition to and 45 percent support for "lengthening the school year to year-round schooling."

26. See data in Hochschild and Scott, "Polls—Trends," Tables D6 and D7.

27. Respondents were asked this question only in reference to the components of this package, which they had previously said they supported.

28. Luntz Research poll, January 1999.

29. Greenberg Research/Tarrance Group/American Federation of Teachers/National Education Association poll, January 1998.

30. Jennifer Hochschild and Deidre Kolarick, "Public Involvement in Decisions about Public Education," unpublished manuscript prepared for the National Academy of Sciences, 1997, provides data along these lines for the somewhat similar Texas case.

31. It also is worth noting that the 1999 Public Agenda poll establishes, fairly definitively, that most Americans still know relatively little about vouchers and how they work in the real world.

32. Reported in *On Thin Ice: How Advocates and Opponents Could Misread the Public's Views on Vouchers and Charter Schools* (New York: Public Agenda, 1999).

33. However, note that in the very short term (1998 to 1999) the Gallup/PDK data do show a slight increase in opposition to vouchers (see Tables 8 and 9 and the report on the 1999 Gallup/PDK survey on the PDK website, <http://www.pdkintl.org>). On the other hand, the 1999 Joint Center for Political and Economic Studies poll shows an increase in support for vouchers over the same time period.

34. 1997 Gallup/PDK poll.

35. Based on the 1999 Gallup/PDK poll and the 1999 Joint Center for Political and Economic Studies poll.