Sources for Additional Class-Size Information

The national debate over reduced class size continues to be a hot topic. The following sources are by no means an exhaustive list of class-size publications. Some of the works included in this section do not specifically address the topic of class size, but have indirect implications related to the issue. If you know of additional sources, or you find errors in the references listed, please e-mail us at heros@telalink.net.

☆: Denotes first author was affiliated with Tennessee's Student/Teacher Achievement Ratio Project (STAR).

ARTICLES

☆ Achilles, C.M. (1995, November). More light on project STAR. Phi Delta Kappan, 77(3), 261.

☆ Achilles, C.M. (1996, February). Students achieve more in smaller classes. Educational Leadership, 53(5), 76-77.

☆ Achilles, C.M., (1997, October). Small classes, big possibilities. The School Administrator, 54(9), 6-15.

☆ Achilles, C.M., Finn, J.D., & Bain, H.P. (1998, January). Using class size to reduce the equity gap. Educational Leadership, 55(4), 40-43.

☆ Achilles, C.M., Harman, P., & Egelson, P. (1995). Using research results on class size to improve pupil achievement outcomes. Research in the Schools, 2(2), 23-30.

☆ Achilles, C.M., Nye, B.A., & Bain, H.P. (1993-94). The test-score "value" of kindergarten for pupils in three class conditions at grades 1, 2, and 3. National Forum of Educational Administration and Supervision Journal, 12(1), 3-15. Reprinted in National Forum of Teacher Education Journal, 5(1), 25-32.

☆ Achilles, C.M., Nye, B.A., Zaharias, J.B., & Fulton, B.D. (1993, November). Creating successful schools for all children: A proven step. Journal of School Leadership, 3(6), 606-621.

Allinder, R.S. (1995, July). An examination of the relationship between teacher efficacy and curriculum-based measurement and student achievement. Remedial and Special Education (RASE), 16(4), 247.

Anderson, G.J. & Herbert, J.W. (1972, December). Class size and the social environment of Learning: A replication. The Alberta Journal of Educational Research, 18, 277-286.

Anderson, K.E. (1950, June). The relationship between teacher load and student achievement. School Science and Mathematics, 50, 468-470.

Averill, L.A. & Mueller, A.D. (1925). Size of class and reading efficiency, The Elementary School Journal, 25, 682-691.

☆ Bain, H.P., & Achilles, C.M. (l986, May). Interesting developments on class size. Phi Delta Kappan, 67, 662-665.

☆ Bain, H., Achilles, C.M., Dennis, B., Parks, M., & Hooper, R. (1988, Fall). Class size reduction in Metro-Nashville: A three-year cohort study. ERS Spectrum, 6, 30-36.

☆ Bain, H.P.& Jacobs, R. (1990). The case for smaller classes and better teachers. Streamlined Seminar, 9(1).

☆ Bain, H.P., Zaharias, J.B. & Fulton, B. D. (1990). Tennessee's project STAR proves that class size makes a difference. School Governance and Administration, 9(4), 1-5.

Baker, L.H. (1936). Class size does make a difference. The Nation's Schools, 27, 27-28.

Balow, I.H. (1969, February). A longitudinal evaluation of reading achievement in small classes. Elementary English, 46, 184-187.

Bates, Daniel A. (1929). The relation of the size of class to the efficiency of teaching. Secondary School Principals Bulletin, 24, 22-3.

Batten, P. E. (1992, Winter). Is the world an orderly place? A review of teacher comments and student achievement. The Journal of Experimental Education, 60(2), 161.

Bausell, R., Moody, W.B., & Walze, F.N. (1972). A factorial study of tutoring versus classroom instruction, American Educational Research Journal, 9, 591-598.

Bloom, B. S. (1984, May). The 2 sigma problem: The search for methods of group instruction as effective as one-on-one tutoring. Educational Research, 13, 4-16.

Bloomfield, L.S. (1930). Class size in senior American history. Secondary School Principals Bulletin, 26, 6-9.

Bourke, S. (1986, Winter). How smaller is better: Some relationships between class size, teaching practices, and student achievement. American Educational Research Journal, 23, 558-571.

☆ Boyd-Zaharias, J. (1995, Fall). The effect of random class assignment on elementary students' reading and mathematics achievement. Research in the Schools, 2(2), 7-14.

Boyer, P.A. (1914). Class size and school progress. Psychological Clinic, 8, 82-90.

Bozzomo, L.E. (1978, January). Does class size matter? National Elementary Principal, 57, 78-81.

Bracey, G. (1995, September). Research oozes into practice: The case of class size. Phi Delta Kappan, 77(1), 89-90.

Breed, F.S. & McCarthy, G.D. (1916). Size of class and efficiency of teaching. School and Society, 4 , 965-971.

Brown, A.E. (1932). The effectiveness of large classes at the college level: An experimental study involving the size variable and size-procedure variable. University of Iowa Studies in Education, 7, 1-66.

Burnstall, C. (1979, Autumn). Time to mend the nets: A commentary on outcomes of class size research. Trends in Education, 3, 27-33.

Cacha, F. B. (1982). Class size and achievement controversy. Contemporary Education, 54, 13-17.

Cahen, L.S. & Filby, N. (1979, March). The class size/achievement issue: New evidence and research plan. Phi Delta Kappan, 60, 492-495.

Cahan, S. & Davis D. (1987, Spring). A between-grade-levels approach to the investigation of the absolute effects of schooling on achievement. American Educational Research Journal, 24(1), 1-12.

Cannon, G. M. (1966, September). Kindergarten class size--A study. Childhood Education, 43, 9-11.

Chandler, T.A. (1988). Here's what to try when you can't shrink class size enough to matter. American School Board Journal, 175, 33, 51.

Chavez, R.C. (1984). The use of high-inference measures to study classroom climates: A review. Review of Educational Research, 54, 237-261.

Class size and the classroom teacher: Researchers prove what teachers know. (1980). NJEA Review, 54, 16-18.

Cornman, O.P. (1909). Size and school progress. Psychological Clinic, 3, 206-212.

Cunningham, M.S. (1931/32). An experimentation in class size in B-9 algebra. California Journal of Secondary Education, 7 ,19-26.

Danowski, C. E. (1965). Individualization of instruction: A functional definition. IAR Research Bulletin, 5, 8.

Davis, C.O. (1923). The size of classes and the teaching load in the high schools accredited by the north central association. The School Review, 31, 412-429.

Davis, E. & Goldizen, M. (1930). A study of class size in junior high school history. The School Review, 38, 360-367.

Dawes, H.C. (1934). The influence of size of kindergarten group upon performance. Child Development, 5, 295-303.

DeCecco, J.P. (1964). Class size and co-ordinated instruction. British Journal of Educational Psychology, 34, 65-74.

Dixon, A. (1980, Summer). Small is beautiful. Forum for the Discussion of New Trends in Education, 22, 70-72.

Doyle, R. P. (1989, November). The resistance of conventional wisdom to research evidence: The case of retention in grade. Phi Delta Kappan. 71 (3), 215-220.

Dyer, P. C. (1992, Winter). Reading recovery: A cost-effectiveness and educational-outcomes analysis. ERS Spectrum, 10(1), 10-19.

Eastburn, L.A. (1936). The relative efficiency of instruction in large and small classes on three ability levels. Journal of Experimental Education, 5, 17-22.

Edmonson, J.B. & Mulder, F.U. (1924). Size of class as a factor in university instruction. Journal of Educational Research, 9, 1-12.

Educational Research Services (1980a, December). ERS response to Glass Rebuttal. Phi Delta Kappan, 62, 244.

Educational Research Services (1980b, December). Class size research: A critique of recent meta-analyses. Phi Delta Kappan, 70, 239-241.

Educational Research Service Staff Report.(1985, Fall). Teachers and class size: Their problems and views. ERS Spectrum, 17.

Ehrenberg, R. G., Ehrenberg, R. A., & Rees, D. I. (1991, Winter). School district leave policies, teacher absenteeism, and student achievement. The Journal of Human Resources, 26(1), 72-87.

Ellis, T.I. (1985, April). Class size. NAESP Research Roundup, 1, 1-4.

Ellson, D.G., Barber, L., Engle, T.L., & Kampwerth, L. (1965). Programmed tutoring: A teaching aid and a research tool. Reading Research Quarterly, 1, 77-127.

Ellson, D.G., Harris, P., & Barber, L. (1968). A field test of programmed and directed tutoring. Reading Research Quarterly, 3, 307-367.

Entwisle, D.R., Alexander, K.L., Cadigan, D., & Pallas, A. (1986, Winter). The schooling process in first grade: Two samples a decade apart. American Educational Research Journal, 23, 587-613.

☆ Evertson, C., & Burry, J. (1989). Capturing classroom context: The observation system as lens for assessment. Journal of Personnel Evaluation in Education, 2, 297-320.

☆ Evertson, C.M., & Randolph, C.H. (1989). Teaching practices and class size: A new look at an old issue. Peabody Journal of Education, 67 (1), 85-105. (Issue published in 1992).

☆ Finn, J. D. (1989, Summer). Withdrawing from school. Review of Educational Research, 59(5), 117-142.

☆ Finn, J. D., & Achilles, C. M. (1990, Fall). Answers and questions about class size: A statewide experiment. American Educational Research Journal, 27(3), 557-577.

☆ Finn, J. D., Achilles, C. M., Bain, H. P., Folger, J., Johnston, J., Lintz, M. N., & Word, E. (1990). Three years in a small class. Teaching and Teacher Education, 6(2), 127-136.

☆ Finn, J. D., & Cox, D. (1992, Spring). Participation and withdrawal among fourth-grade pupils. American Educational Research Journal, 29(1), 141-162.

☆ Finn, J. D., Fulton, D., Zaharias., J., & Nye, B. (1989, Fall). Carry-over effects of small classes. Peabody Journal of Education, 67(1), 75-84.

☆ Finn, J. D., & Voelkl, K. E. (1993). School characteristics related to student engagement. Journal of Negro Education, 62, 249-268.

Flinker, I. (1972, April). Optimum class size: What is the magic number? Clearing House, 46, 471-473.

☆ Folger, J. (Ed). (1989, Fall). Project STAR and class size policy. Issue devoted to class-size research. Peabody Journal of Education. 67(1). (Issue published in 1992).

Forness, S.R. & Guthrie, D. (1977). Stability of short-term classroom observations. Psychology in the Schools, 14, 116-120.

Forness, S. R. & Kavale, K.A. (1985, Fall). Effects of class size on attention, communication, and disruption of mildly mentally retarded children. American Educational Research Journal, 22, 403-412.

French, N. C. (1993, Winter). Elementary teacher stress and class size. Journal of Research and Development in Education, 36(2), 66.

Frymier, J. R. (1964, November). The effect of class size upon reading achievement in first grade. The Reading Teacher, 18, 90-93.

Fullan, M. (1985). Change processes and strategies at the local level. The Elementary School Journal, 85, 391-422.

Gallup, G. (1971, September). Third annual survey of the public's attitudes toward the public schools. Phi Delta Kappan, 53, 33-47.

Gallup, G. (1972, September). Fourth annual survey of the public's attitudes toward the public schools. Phi Delta Kappan, 54, 33-46.

Gallup, G. (1973, September). Fifth annual survey of the public's attitudes toward the public schools. Phi Delta Kappan, 55, 38-51.

Gallup, G. (1974, September). Sixth annual Gallup poll of the public's attitudes towards the public schools. Phi Delta Kappan, 56, 20-32.

Gallup, G. (1975, December). Seventh annual Gallup poll of the public's attitudes toward the public schools. Phi Delta Kappan, 57, 227-241.

Gallup, G. (1976, October). Eighth annual Gallup polls of the public's attitudes toward the public schools. Phi Delta Kappan, 58, 187-201.

Gallup, G. (1977, September). Ninth annual Gallup poll of the public's attitudes toward the public schools. Phi Delta Kappan, 59, 33-48.

Gansneder, B. M., Strezepek, J., & Caritj, W. (1978). Relationships between teaching load and selected factors. Virginia English Bulletin, 28, 46-50.

Glass, G. V. (1976, November). Primary, secondary and meta-analysis of research. Educational Researcher, 5, 3-8.

Glass, G.V. (1980, December). On criticism of our class size/student achievement research: No points conceded. Phi Delta Kappan, 62, 242-244.

Glass, G. V., Cahen, L.S., Smith, M.L. & Filby, N.N. (1979, April-May). Class size and learning: New interpretation of the research literature. Today's Education, 68, 42-44.

Glass, G. V. & Down, A. G. (1979, November). Does class size make a difference? Instructor, 4, 22.

Glass, G. V., & Smith, M. L. (1979). Meta-analysis of research on class size and achievement. Educational Evaluation and Policy Analysis, 1, 2-16.

Glickman, C. (1991, April). Pretending not to know what we know. Educational Leadership, 48(8), 4-10.

Greenwald, R., Laine, R. D., & Hedges, L. V. (1996, February). The school finding controversy: Reality bites. Educational Leadership, 53(3), 78-79.

Greer, J., & Barnes, D.L. (1989). Do your aides aid instruction?: A tool for assessing the use of paraprofessionals as instructional assistants. Teacher-Educator, 24(3), 2-9.

Haberman, M., & Larson, R.G. (1968, February). Would cutting class size change instruction? The National Elementary Principal, 47, 18-19.

Haertel, S.D., Walberg, H.J., & Haertel, E.H. (1981). Socio-psychological environments and learning: A quantitative synthesis. British Educational Research Journal, 7 (1), 27-36.

Haertter, L.D. (1928). An experiment of the efficiency of instruction in large and small classes in plane geometry. Educational Administration and Supervision, 14, 580-590.

Haller, E. J., & Davis, S.A. (1980, Winter). Does socioeconomic status bias the assignment of elementary school students to reading groups? American Educational Research Journal, 17, 409-418.

Hallinan, M. T., & Sorensen, A.B. (1985, Winter). Ability grouping and student friendships. American Educational Research Journal, 22, 485-499.

Hand, H.C. & Smith, J.W. (1934). Effectiveness of instruction in a class of one hundred pupils. The School Review, 42, 751-754.

Hanushek, E. A. (1995, November). Moving beyond spending fetishes. Educational Leadership, 53(3), 60-64.

Hanushek, E. A. (1986). The economics of schooling: Production and efficiency in public schools. Journal of Economic Literature, 24, 1141-1177.

Haskell, S. (1964, September). Some observations on the effect of class size upon pupil achievement in geometrical drawing. Journal of Educational Research, 58, 27-30.

Hazzard, J. (1989). Reducing class size: Affordable? Efficient? Education Week, 22, 21.

Hebbleler, K. (1985, Fall). An old and a new question on the effects of early education for children from low income families. Educational Evaluation and Policy Analysis, 7, 207-216.

Hedges, L. V., Laine, R.D., & Greenwald, R. (1994, April). Does money matter? A meta-analysis of studies of the effects of differential school inputs on student outcomes. Educational Researcher, 23, 5-14.

Hedges, L. V. & Stock, W. (1983, Spring). The effects of class size: An examination of rival hypotheses. American Educational Research Journal, 20, 63-85.

Hennebry, H.M. (1965). Sixteen students too many. Science Education, 49, 259-261.

Hodgkinson, H. (1991, September). Reform vs. reality. Phi Delta Kappan, 73(1), 8-16.

Hodgkinson, H. L. (1995, October). What should we call people? Phi Delta Kappan, 77(2), 173-179.

Holland, B.G. (1928). The effect of class size on scholastic acquirement in educational psychology. School and Society, 27, 668-670.

Holmes, T.C., & Matthews, K. M. (1984). The effects of non-promotion on elementary and junior high school pupils: A meta-analysis. Review of Educational Research, 54, 225-236.

Janko, E. (1989, Spring). The “naive world” of the classroom teacher. The College Board Review, 151, 2.

Johnson, D.W., Johnson, R.T., & Scott, L. (1978). The effects of cooperative and individualized instruction on student attitudes and achievement. Journal of Social Psychology, 104, 207-216.

Johnson, M., & Scriven, E. (1967, Autumn). Class size and achievement in seventh- and eighth-grade English and mathematics. The School Review, 75, 300-310.

Johnson, R. H., & Lobb, M. D. (1961, January). Jefferson County, Colorado completes three-year study of staffing, changing class size, programming and scheduling. Bulletin of the National Association of Secondary School Principals, 45, 57-77.

Johnson-Fedoruk, G. M. (1991). Student characteristics implicated in early school achievement: Kindergarten teacher validated. Child Study Journal, 21(4), 235.

Klein, K.R. (1985, April). Practical applications of research: Class size. Phi Delta Kappan, 66, 578-580.

Krueger, A.B. (1998, March). Reassessing the view that American schools are broken. FRBNY Economic Policy Review, 29-43.

Kulik, J.A., Kulik, C.C., & Cohen, P.A. (1979). A meta-analysis of outcome studies of Keller's personalized system of instruction. American Psychologist, 34, 307-318.

Kumar, K (1992, June). Does class size really make a difference? Exploring classroom interaction in large and small classes. RELC Journal, 23(1), 29.

Levin, H.M., Glass, G.V. & Meister, G. (1986, September). The political arithmetic of cost-effectiveness analysis. Phi Delta Kappan, 68, 69-72.

Levin, H.M., Leitner, D., & Meister, G. (1987). Cost effectiveness of computer assisted instruction. Evaluation Review, 11, (1), 50-72.

Levin, H.M.,& Meister, G. (1986, June). Is CAI cost-effective? Phi Delta Kappan, 67, 745-749.

Lewit, E.M., & Baker, L.S. (1997, Winter). Class size. The Future of Children: Financing Schools, 7(3), 112-121.

Light, R. J. (1979, October). Capitalizing on variation: How conflicting research findings can be helpful for policy. Educational Researcher, 8, 7-14.

Lindsay, P. (1982, Spring). The effect of high school size on student participation, satisfaction, and attendance. Educational Evaluation and Policy Analysis, 6(1), 57-65.

Lindsay, P. (1984, Spring). High school size, participation in activities, and young adult social participation: Some enduring effects of schooling. Educational Evaluation and Policy Analysis, 6(1), 73-83.

Little, A., Mabey, C., & Russell, J. (1971). Do small classes help a pupil? New Society, 18, 768-771.

Madden, J. V. (1968, October). An experimental study of students achievement in general mathematics in relation to class size. School Science and Mathematics, 68, 619-622.

Madden, N. A., Slavin, R. E., Karweit, N. L., Dolan, L. J., & Wasik, B. A. (1993, Spring). Success for all: Longitudinal effects of a restructuring program for inner-city elementary schools. American Educational Research Journal, 30(1), 123-148.

Marklund, S. (1963, November). Scholastic achievement as related to size and homogeneity of classes. Educational Research, 6, 63-67.

Marsh, H.W. (1986, Spring). Verbal and math self-concepts: An internal/external frame of reference model. American Educational Research Journal, 23(1), 129-149.

Massachusetts Association of School Counselors (1972, October). Class size debate. NASC Bulletin, 6, 8.

McCluskey, L., & Smith, F.L. (1975, November). The issue of class size. Associated Public School Systems Know How, 27, 1-4.

McGiverin, J., Gilman, D., & Tillitski, C. (1989, September). A meta-analysis of the relation between class size and achievement. The Elementary School Journal, 90(1), 47-56.

McKenna, B. H., & Pugh, J. B. Jr. (1965). Performance of pupils and teachers in small classes compared to large. IAR Research Bulletin, 5, 1-8.

Mitchell, B. M. (1969, July). Small class size: A panacea for educational ills. Peabody Journal of Education, 47, 32-35.

Moody, W. B. and others (1973). The effect of class size on the learning of mathematics: A parametric Study. Journal of Research in Mathematics, 4, 170-176.

Mosteller, F. (1995, Summer/Fall). The Tennessee study of class size in the early school grades. The Future of Children: Critical Issues for Children and Youths, 5(2), 113-125.

Mueller, D. J., Chase, C. I., & Walden, J. D. (1988). Effects of reduced class sizes in primary classes. Educational Leadership, 45(5), 48-50.

National Education Association (1973). Major problems of teachers. NEA Research Bulletin, 49, 103-108.

National Education Association (1973, April). Teacher opinion poll: Class size. Today's Education, 62, 11.

National Education Association (1975, January/February). Teacher opinion poll: Class size. Today's Education, 64, 109.

National Education Association (1975, November/December). Teacher opinion poll: Class size. Today's Education, 64, 14.

Niemiec, R. P., Blackwell, M.C. & Walberg, H.J. (1986, June). CAI can be doubly effective. Phi Delta Kappan, 67, 750-751.

Nye, B.A., Achilles, C.M., Boyd-Zaharias, J., Fulton, B.D. & Wallenhorst, M.P. (1994). Small is far better. Research in the Schools, 1(1), 9-20.

Nye, B. A., Achilles, C. M., Zaharias, J. B., Fulton, B. D., & Wallenhorst, M. P. (1993, Winter). Tennessee's bold experiment: Using research to inform policy and practice. Tennessee Education, 22(3), 10-17.

Nye, B.A. & Zaharias, J. (1991). Student achievement. Inside OSBA's Briefcase, 22(49), 1.

Nye, B.A. & Zaharias, J. (1992). Study affirms small class advantages. IASB Update, 15(1), 2.

Odden, A. (1990). Class size and student achievement: Research-based policy alternatives. Educational Evaluation and Policy Analysis, 12 (2), 213-227.

Olson, M. N. (1971, September). Ways to achieve quality in school classrooms: Some definitive answers. Phi Delta Kappan, 53, 63-65.

Orlich, D. (1991, April). Brown v. Board of Education: Time for a reassessment. Phi Delta Kappan, 72(8), 631-632.

☆ Pate-Bain, H., Achilles, C.M., Boyd-Zaharias, J. & McKenna, B. (1992, November). Class size does make a difference. Phi Delta Kappan, 74(3), 253-256.

Peterson, S. E., DeGracie, J. S., & Ayabe, C.R. (1987, Spring). A longitudinal study of the effects of retention/promotion on academic achievement. American Educational Research Journal, 24(1), 107-118.

Phi Delta Kappan (1979). Glass links small class size to increased student achievement. Phi Delta Kappan, 60, 411.

Pillemer, D. B. & Light, R. J. (1980, May). Synthesizing outcomes: How to use research evidence from many studies. Harvard Educational Review, 50, 176-195.

Robinson, G. E. (1990, April). Synthesis of research on the effects of class size. Educational Leadership, 47(7), 80-90.

Rogeness, G. A. (1974, July). Smaller classes and a stable teaching staff can significantly improve the behavior of inner-city students. American Journal of Orthopsychiatry, 44, 497-502.

Rubin, S.E. & Spady, W.G. (1984, May). Achieving excellence through outcome-based instructional delivery. Educational Leadership, 41, 37-44.

Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. Review of Educational Research, 57, 101-121.

Schunm, W. R., Jurich, A. P., & Bollman, S. R. (1988, August). Teachers' base pay, student/teacher ratio, and pre-student expenditures as predictors of communities average satisfaction with local school systems. Psychological Reports, 63(1), 193.

Shane, H.H. (1961). Class size and human development. National Educational Association Journal, 50, 30-32.

Shapiro, S. (1975, April). Some classroom ABCs: Research takes a closer look. Elementary School Journal, 75, 437-441.

Shapson, S. M., Wright, E. N., Eason, G., & Fitzgerald, J. (1980, Spring). An experimental study of the effects of class size. American Educational Research Journal, 17, 141-152.

Shaver, J.P. & Nuhn, D. (1971). The effectiveness of tutoring under-achievers in reading and writing. Journal of Educational Research, 65, 107-112.

Simpson, S. N. (1980 May/June). Comments on meta-analysis of research on class size and achievement. Educational Evaluation and Policy Analysis, 2, 81-83.

Simpson, S. N. (December 1980/January 1981). Wrong questions, wrong tools. American Teacher, 65, 9.

Sindelar, P. T., Rosenberg, M. S., Wilson, R.J. & Bursuck, W. D. (1984, January/February). The effects of group size and instructional method on the acquisition of mathematical concepts by fourth grade students. Journal of Educational Research, 77, 178-183.

Slavin, R. E. (1984, October). Meta-analysis in education: How has it been used? Educational Researcher, 13, 6-15, 20-21, 25-26.

Slavin, R. E. (1990, Fall). Class size and student achievement: Is smaller better? Contemporary Education, 62(1), 6-13.

Slavin, R. E., & Karweit, N.L. (1985, Fall). Effects of whole class, ability grouped, and individualized instruction on mathematics achievement. American Educational Research Journal, 22, 351-367.

Slavin, R., & Madden, N. (1989). What works for students at risk: A research synthesis. Educational Leadership, 46 (5), 4-13.

Slavin, R. E., Madden, N. A., Karweit, N. J., Livermon, B. J., & Dolan, L. (1990, Summer). Success for all: First-year outcomes of a comprehensive plan for reforming urban education. American Educational Research Journal, 27(2), 255-278.

Smith, M.L., & Glass, G.V. (1980, Winter). Meta-analysis of research on class size and its relationship to attitudes and instruction. American Educational Research Journal, 17, 419-433.

Thomas, G. (1987). Extra people in the primary classroom. Educational Research, 29(3), 173-81.

Tillitski, C., Gilman, D. Mohr, A., & Stone, W. (1988, Fall). Class size reduction in North Gibson school corporation: A three year cohort study. ERS Spectrum, 6, 37-40.

Tomlinson, T. M. (1989). Class size and public policy: Politics and panaceas. Educational Policy, 3, 261-273.

Tomlinson, T. M. (1990, Fall). Class size and public policy: The plot thickens. Contemporary Education, 62(1), 17-23.

Trickett, E.J., & Moos, R.H. (1973). Social environment of junior high and high school classrooms. Journal of Educational Psychology, 65, 93-102.

Varble, M. A. (1990, Fall). Smaller class size = higher achievement scores? Contemporary Education, 62(1), 38.

Veenman, S. (1984). Perceived problems of beginning teachers. Review of Educational Research, 54(2), 143-178.

Verducci, F.M. (1969). Effects of class size upon the learning of a motor skill. Research Quarterly, 40, 391-395.

Vincent, W.S. (1968, November). Further clarification of the class size question. Institute of American Research Bulletin, 9, 1-3.

Walberg, H. J. (1969, October). Class size and the social environment of learning. Human Relations, 22, 465-75.

Walberg, H.J. (1984, May). Improving the productivity of America's schools. Educational Leadership, 41, 19-30.

Walberg, H. J., & Rasher, S. P. (1974, September). Public School Effectiveness and equality: New evidence and implications. Phi Delta Kappan, 56, 3-9.

Walberg, H. J. & Rasher (1977, May). The ways schooling makes a difference. Phi Delta Kappan, 58, 703-707.

Wang, M.C., Haertel, G.D., & Walberg, H.J. (1993). Toward a knowledge base for school learning. Review of Educational Research, 63 (3), 249-294.

Warburton, J. T. (1961, November). An experiment in large group instruction. Journal of Secondary Education, 36, 430-432.

Ward, W. H., Jr. (1976, March). A test of the association of class size to student's attitudes toward science. Journal of Research in Science Teaching, 13, 137-143.

Weitzman, D.C. (1965). Effect of tutoring on performance and motivation ratings in secondary school students. California Journal of Educational Research, 16, 108-115.

Weldon, D. E., Loewry, J. H., Winer, J. T., & Elkin, D. (1981, Spring). Crowding and classroom learning. Journal of Experimental Education, 49, 160-176.

Whittington, E. H., Bain, H. & Achilles, C. M. (1985, Fall). Effects of class size on first-grade students. ERS Spectrum, 3(4), 33-39.

Winston, S. (1987, November/December). Lower class size: Does it or doesn't it matter? Thrust, 16-17.

Withall, J. (1949). The development of a technique for the measurement of social-emotional climate in classrooms. Journal of Experimental Education, 17, 347-361.

Woodson, M. S. (1968, February). Effect of class size as measured by achievement test criterion. IAR Research Bulletin, 8, 6.

Yeany, R. Jr. (1976, May). A study of the correlation between elementary school teachers' selection of science teaching strategies and average class ability and size. Journal of Research in Science Teaching, 13, 249-252.

MEETING & SYMPOSIA PAPERS

☆ Achilles, C. M. (1998, February). Small-class research supports what we all know. So, why aren't we doing it? (Draft) Paper presented at the annual convention of the American Association of School Administrators, San Diego, CA.

☆ Achilles, C. M. (1998, April). If not before, at least now. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

☆ Achilles, C. M., Bain, H. P., & Finn, J. D. (1990, February). Why won't class-size issues just go away?: Tennessee's student teacher achievement ratio (STAR) project. Paper Received the American Association of School Administrators (AASA) Outstanding Research Award. Paper presented at the annual AASA convention, San Francisco, CA.

☆ Achilles, C.M., Fulton, B.D., Zaharias, J.B. & Nye, B.A. (1993, April). Tennessee lasting benefits research supports national school restructuring policies. Paper presented at the meeting of the Southeastern Symposium on School Restructuring, Nashville, TN.

☆ Achilles, C. M., Harman, P., and Egelson, P., (1995, February). A local district's commitment to use research results. Paper presented at the annual convention of the American Association of School Administrators, New Orleans.

☆ Achilles, C.M., Kiser-Kling, K., Aust, A. & Owen, J. (1994, November). Success starts small. Paper presented at the meeting of the Mid-South Educational Research Association, Nashville, TN.

☆ Achilles, C.M., & Nye, B.A. (1998, February). Attempting to understand the class size and pupil-teacher ratio (PTR) confusion: A pilot study. Paper presented at the annual convention of the American Association of School Administrators, San Diego, CA.

☆ Achilles, C.M., Nye, B.A., Bain, H.P., Zaharias, J.B. & Fulton, B.D. (1993, November). Success starts small. Paper presented at the annual meeting of the Southern Association of Colleges & Schools, Atlanta, GA.

☆ Achilles, C.M., Nye, B.A., Boyd-Zaharias, J. Fulton, B.D. & Cain, V.A. (1994, November). Multiple benefits of class size research: A review of STAR's legacy. Paper presented at the meeting of the Mid-South Educational Research Association, Nashville, TN.

☆ Achilles, C.M., Nye, B.A. & Zaharias, J.B. (1993, August). Small classes: Prevention or remediation? Paper presented at the annual meeting of the National Council of Professors of Educational Administration, Palm Springs, CA.

☆ Achilles, C. M., Nye, B. A., Zaharias, J. B., Bain, H. P. & Fulton, B. D. (1995, June). Class size: Lessons from United States research. Paper presented at the meeting of the United Kingdom Class Size Conference, London Institute of Education, University of London, England.

☆ Achilles, C.M., Nye, B.A., Zaharias, J.B. & Fulton, B.D. (1992, November). Magic bullets come in different sizes: Restructuring is for class sizes too. Paper presented at the National Conference on School Restructuring, Atlanta, GA.

☆ Achilles, C.M., Nye, B.A., Zaharias, J.B. & Fulton, B.D. (1992, November). Small is far better: Preliminary results on three class-size initiatives--Tennessee's student teacher achievement ratio project, lasting benefits study, and project challenge as a policy application. Paper presented at the meeting of the Mid-South Educational Research Association, Knoxville, TN.

☆ Achilles, C.M., Nye, B.A., Zaharias, J.B. & Fulton, B.D. (1993, February). Substantial and long-term cooperation in research leads to class-size reductions in Tennessee. Paper presented at the meeting of the American Association of School Administrators (AASA), Orlando, FL.

☆ Achilles, C.M., Zaharias, J.B., Fulton, B.D., Nye, B.A., Harvey, B., Bingham, S. & Nye, K.E. (1994, March). Don't quit! Database reanalyses provide interesting results. Paper presented at the annual meeting of the North Carolina Association for Research in Education, Greensboro, NC.

Acland, H. (1975, May). Comment on the class size question. A critique of chapters 5 and 6. In D. W. Ryan and T. B. Greenfield, The class size question (Toronto: Ministry of Education, Ontario, l975). Presented at the Seminar on Class Size Research, Ontario Institute for Studies in Education, Toronto.

☆ Bain, H.P. (1990a, November). Tennessee's project STAR class-size study K-3 results. Paper presented at the National Education Association's National Urban Education Association Conference, Phoenix, AZ.

☆ Bain, H.P. (1990b, November). Effective teaching practices from Tennessee's project STAR class-size study. Paper presented at the National Education Association's National Urban Education Association Conference, Phoenix, AZ.

☆ Bain, H.P. (1991). Tennessee's project STAR class-size study K-3 results. Paper presented at the meeting of the Northeastern Regional Education Association Conference, Bennington, VT (January), the Missouri Association of Elementary Principals Conference, Tim-Pora, MO (March), and the Pennsylvania Education Association Conference, Hershey, PA (March).

☆ Bain, H. P., Achilles, C. M., & Witherspoon-Parks, M. (1988, November). Three-year longitudinal study of small class size: The Metro-Nashville Public Schools Study: 1984-1987. Paper presented at the annual conference of the Mid-South Educational Research Association, New Orleans.

Bainer, D.L. (1988, February). The influence of context variables on teacher problems. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, New Orleans.

☆ Boyd-Zaharias, J. (1994, November). The effect of random class assignment on elementary students' reading and mathematics achievement. Paper presented at the meeting of the Mid-South Educational Research Association, Nashville, TN.

☆ Boyd-Zaharias, J., Achilles, C.M., Nye, B.A., Bain, H.P. & Fulton, B.D. (1994, April). Quality schools build on a quality start. Paper presented at the third annual National Conference on Creating the Quality School, Oklahoma City, OK.

☆ Boyd-Zaharias, J., Achilles, C.M., Nye, B.A. & Cain, V.A. (1994, March). The effects of heterogeneous class assignment on student achievement: A project STAR subsidiary study. Paper presented at the annual meeting of the North Carolina Association for Research in Education, Greensboro, NC.

☆ Boyd-Zaharias, J., Achilles, C.M., Nye, B.A. & Fulton, B.D. (1994, February). Collaborative class-size research leads to a subsidiary study of heterogeneous class assignment. Paper presented at the annual meeting of the American Association of School Administrators, San Francisco, CA.

☆ Everston, C. M., & Folger, J. K. (1989, March). Small class, large class: What do teachers do differently? Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

☆ Evertson, C.M., & Folger, J., Breda, C., & Randolph, C. (1990). How does in-service training affect teachers' instruction in small, regular and regular/aide classes? Paper presented at the annual meeting of the American Educational Research Association, Boston, MA.

☆ Finn, J.D., & Achilles, C.M. (1998, April). Tennessee's class-size study: Questions answered, questions posed. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Hargreaves, L., Galton, M., & Pell, A. (1997, March). The effects of major changes in class size on teacher-pupil interaction in elementary school classes in England. Does research merely confirm the obvious? Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Hawkins, W. & Taylor, S. (1972). Teacher reactive behavior related to class size and to the teaching of mathematics, social studies, and english. Paper presented at the meeting of the Australian Association for Research in Education, Canberra, AU.

Hines, C.V., Mann, M.L., Swarzman, J.B. & Homan, S. P. (1988, February). Perceived problems of elementary and secondary teachers: How have they changed after a decade of reform? Annual Meeting of the Association of Teacher Educators, San Diego.

☆ Johnston, J.M. (1988, February). Voices from inside the black box: Teaching in small classes and teaching with aides. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, New Orleans, LA.

☆ Johnston, J.M. (1990, April). Relations between reduced class size and reduced teacher/pupil ratio and developmentally appropriate practice in kindergarten through third grade. Paper presented at the annual meeting of the American Educational Research Association, Boston.

☆ Johnston, J.M.& T.M. Davis. (1989, April). Inside the black box: The effects of class size on quality of work life for teachers and children. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.

Leitner, D. W. & Tracz Susan M (1984, September). The meta-analysis of the effect of class size on achievement: A secondary analysis. Paper presented at the annual meeting of the Mid-Western Educational Research Association, Chicago, IL.

Miklos, D. (1975, May). Comment on the framework proposed by Ryan and Greenfield from research on class size: A critique of chapters 5 and 6 in D. W. Ryan and T. B. Greenfield, The class size question (Toronto: Ministry of Education, Ontario, 1975). Presented at the Seminar on Class Size Research, Ontario Institute for Studies in Education, Toronto.

Mueller, D. J. and others. (1987, April). Effects of small class size: The Indiana and Tennessee experiments. Paper presented at the meeting of American Educational Research Association, Washington, DC.

Nye, B.A., Achilles, C.M., Winiski, S. & Landeau, R. (1993, December). Success starts small & grows: Low student/teacher ratios. Paper presented at the meeting of the Southern Association of Colleges & Schools 98th Annual Conference, Atlanta, GA.

Nye, B.A., Achilles, C.M., Zaharias, J.B. & Fulton, B.D. (1993, April). Small is far better: A report on three class-size initiatives--Tennessee's student teacher achievement ratio project (8/85-8/89), lasting benefits study (9/89-7/92), and project challenge (7/89-7/92) as a policy application (preliminary results). Paper presented at the meeting of the American Educational Research Association (AERA), Atlanta, GA.

Nye, B. A., Achilles, C. M., Zaharias, J. B., Bain, H. P. & Fulton, B. D. (1995, June). Lasting benefits study and STAR ancillary studies research design, analysis, & interpretation. Paper presented at the meeting of the United Kingdom Class Size Conference, London Institute of Education, University of London, England.

Nye, B. A., Fulton, B. D. & Zaharias, J. B. (1992, February). Five years of small-class research: A collaborative effort. Paper presented at the meeting of the American Association of School Administrators, San Diego, CA.

BOOKS • MONOGRAPHS • REPORTS

☆ Achilles, C. M. (no date). Summary of recent class-size research with an emphasis on Tennessee's project STAR and its derivative research studies (Monograph). Nashville: Tennessee State University, Center of Excellence for Research and Policy on Basic Skills.

☆ Achilles, C., Bain, H.P., Bellott, F., Folger, J., Johnston, J., & Lintz, N. (1987). Project STAR technical report for kindergarten: Year one. Nashville: Tennessee State Department of Education.

☆ Achilles, C., Bain, H. P., Folger, J., Johnston, J., & N., Lintz. (1988). Project STAR technical report for first grade: Year two. Nashville: Tennessee State Department of Education.

☆ Achilles, C. M., Harman, P., and Egelson, P. (1995). Recent findings of class-size research: Focus on North Carolina (Monograph). Greensboro, NC: SouthEastern Regional Vision for Education (SERVE).

☆ Achilles, C. M., Kiser-Kling, K., Owen, J., & Aust, A. (1994). Success starts small: Life in a small class. Final Report. Greensboro, NC: University of North Carolina At Greensboro.

☆ Achilles, C. M., Nye, B. A. & Bain, H. P. (1995). The test-score "value" of kindergarten for pupils in three class conditions at grades 1, 2 and 3. In E.W. Chance (Ed.), Creating the quality school (pp. 97-106). Madison, WI: Magna Publications, Inc.

☆ Achilles, C. M., Nye, B. A., Zaharias, J. B., Fulton, B. D. & Wallenhorst, M. P. (1993). Class size is a reasonable policy alternative for educational excellence—or is it? In J.R. Hoyle (Ed.), The first yearbook of the National Council of Professors of Educational Administration. Lancaster, PA: Technical Publishing Co., Inc.

☆ Achilles, C. M. & Smith, P. (1993). Stimulating the academic performance of pupils. In L.W. Hughes (Ed.), The principal as leader (pp. 251-285). New York, NY: Macmillan College Publishing Company.

Bennett, W.S., & Folk, R.F. (1970). New careers and urban schools: A sociological study of teacher and teacher aide roles. New York: Holt, Rinehart and Winston.

Berrueta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein, A. A., & Weikart, D. P. (1984). Changed lives: The effects of the Perry preschool program on youths though age 19. Ypsilanti, MI: High/Scope.

Bingham, C. S. (1994). White-minority achievement gap reduction and small class-size: A research and literature review (Monograph). Nashville, TN: Tennessee State University, Center for Research & Policy on Basic Skills.

Bossert, S.T., & Barnett, B.G. (1981). Grouping for instruction: A catalog of arrangements. San Francisco, CA: Far West Laboratory.

☆ Boyd-Zaharias, J., Achilles, C. M. & Pate-Bain, H. (1995). Quality schools build on a quality start. In E.W. Chance (Ed.), Creating the quality school (pp. 116-123). Madison, WI: Magna Publications, Inc.

☆ Boyd-Zaharias, J., Achilles, C. M., Nye, B. A. & Cain, V. A. (1995). Random class assignment and student achievement: A project STAR ancillary study. In E.W. Chance (Ed.), Creating the quality school (pp. 367-377). Madison, WI: Magna Publications, Inc.

☆ Boyd-Zaharias, J., & Pate-Bain, H. (1998). Teacher aides and student learning: Lessons from Project STAR (Monograph). ERS Relevant Research for School Decisions (Stock #0271). Arlington, VA: Educational Research Service.

Bredekamp, S. (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.

Burke County (NC) Public Schools (1992). Reduced class size: Pilot project. Morganton, NC: Author.

Burke County (NC) Public Schools (1993). Reduced class size: Grades 1 and 2. Morganton, NC: Author.

Cahen, L. S., Filby, N., McCutchen, G., & Kyle, D. W. (1983). Class size and instruction. New York: Longman.

Casbon, C., Egelson, P., Harman, P., & Nalley, D. (Eds.). (1998). Reducing class size: Strategies and implications for Mississippi. Greensboro, NC: University of North Carolina at Greensboro, Southeastern Regional Vision for Education (SERVE).

Chase, C. I., Mueller, D. J. & Walden, J. D. (l986, December). Prime Time: Its impact on instruction and achievement. Indianapolis, IN: Indiana Department of Education.

Clark, E.C. (1963). International studies in class size (Research paper number 90). Burbank, CA: Burbank Unified School District.

Clarke, S.C.T. & Richel, S. (1963). The effect of class size and teacher qualifications on achievement (Research Monograph No. 5). Edmonton, Alberta: Alberta Teachers Association.

Cole, J. C. (1980). Class size committee recommendations to the school board. Stevens Point, WI: Stevens Point Area Public Schools District.

Cook, J.J. & Blessing, K.R. (1970). Class size and teacher aides as factors in the achievement of the educable mentally retarded: Final report. Madison, WI: Wisconsin State Department of Public Instruction, Division of Handicapped Children.

Counelis, J. S. (1970). First grade students in the Hunters Point Bayview SEED Project: A diagnostic review. San Francisco, CA: University of San Francisco.

Cypher, T. W. (1995). School size and the quality of education. In E.W. Chance (Ed.), Creating the quality school (pp. 384-387). Madison, WI: Magna Publications, Inc.

Doncaster, J.R. (1985, Fall). A review of the class size literature bearing directly on the Tennessee class size demonstration project. Knoxville: University of Tennessee.

Doolittle, F. (1995). Second-chance programs for youth. In Flaxman & Passow (Eds.). Changing populations: Changing schools (pp. 124-142). Chicago, IL: University of Chicago Press.

Doucette, J. & St. Pierre, R. (l977). Anchor test study: School, classroom, and pupil correlates of fifth-grade reading achievement. Washington, DC: National Center for Educational Statistics.

Educational Research Service (1978). Class size: A summary of research. Arlington, VA: Author.

Educational Research Services. (1980). Class size research: A critique of recent meta-analyses. Arlington, VA: Author.

Educational Research Service (1983). Effective schools: A summary of research. Arlington, VA: Author.

Egelson, P., Harman, P., & Achilles, C.M. (1996). Does class size make a difference? Recent findings from state and district initiatives. Greensboro, NC: University of North Carolina at Greensboro, Southeastern Regional Vision for Education (SERVE).

Ellis, T. I. (1984). Class size. A digest prepared for ERIC-CEM. Eugene, OR: ERIC-CEM.

Engstrom, E. R. (1963). A study of large group instruction in first year algebra. (U.S. Department of Health, Education and Welfare, Bulletin 12). Washington, D.C.: Government Printing Office.

Erickson, D. (1976). How are we gonna keep the customer buyin' Ryan? In D. W. Ryan and T. B. Greenfield (Eds.), Clarifying the class size question (pp. 9-24). Toronto: Ontario Ministry of Education.

☆ Evertson, C. (1987, April). Classroom Activity Record (CAR): Observation record for Project STAR. Nashville, TN: Vanderbilt University, Institute for Public Policy Studies.

Filby, N., Cahen, L., McCutcheon, G., & Kyle, D. (1980, January). What happens in smaller classes? A summary report of a field study. San Francisco, CA: Far West Laboratory for Research and Development.

☆ Finn, J. D. (1993, August). School engagement and students at risk (Monograph). Washington, D.C.: US Department of Education, Office of Educational Research and Improvement. NCES 93-470.

☆ Finn, J. D. (1998, April). Class size and students at risk. What is known? What is next? (Monograph). Washington, D.C.: US Department of Education, Office of Educational Research and Improvement. AR 98-7104.

☆ Finn, J. D., & Voelkl, K. E. (1992, February). Class size: An overview of research. (Occasional Paper, 92-1). Buffalo, NY: State University of New York at Buffalo.

Flake, J. (1995). Class size: An issue whose time has come-- and gone. Phoenix, AZ: The Goldwater Institute.

Flanders, N.A. (1970). Analyzing teacher behavior. Reading, MA: Addison-Wesley.

Flaxman, E., Burnett, G., & Ascher, C. (1995). The unfulfilled mission of federal compensatory education. In Flaxman & Passow (Eds.), Changing populations: Changing schools (pp.102-123). Chicago, IL: University of Chicago Press.

☆ Folger, J. (1986, March). Examining the way small class effects are produced. Working paper. Nashville, TN: Vanderbilt University.

Forness, S.R. (1978). Classroom observation: A procedures manual for gathering research or clinical data on children in ongoing classroom situations. Culver City, CA: Bradley.

Fox, D. (1967). Expansion of more effective schools program. New York: Center for Urban Education.

Furno, O. F., Collins, G. J. (1967). Class size and pupil learning. Baltimore, MD: Baltimore City Public Schools.

Glass, G.V. (1988). At last--a better way to measure class size: A step-by-step guide for local associations. Washington, DC: National Education Association.

Glass, G.V., Cahen, L.S., Smith, M.L., & Filby, N.N. (1982). School class size: Research and policy. Beverly Hills, CA: Sage .

Glass, G.V., McGaw, B., & Smith, M.L. (1981). Meta-analysis in social research. Beverly Hills, CA: Sage.

Glass, G. V. & Smith, M. L. (1978, September). Meta analysis of research on the relationship of class-size and achievement. San Francisco, CA: Far West Laboratory of Educational Research and Development.

Geary, S. (1988). Class size: Issues and implications for policymaking in Utah. Salt Lake City: University of Utah, Graduate School of Education, (Occasional Policy Paper sponsored by the FOCUS Project).

Gilman, D. A. (1985, June). The educational effects of project Prime Time. Terra Haute: Indiana State University.

Hall, E. T. (1972). The hidden dimension. New York; Doubleday.

Hall, E. T. (1976). Beyond culture. New York: Anchor Press, Doubleday.

Hamburg, D. A. (1992). Today's children. New York: Time Books, Random House.

Handley, H. (1986a). Process evaluation of the assistant teacher program during its third year of operation. Starkville, MS: Mississippi State University, Bureau of Educational Research and Evaluation.

Handley, H. (1986b). Achievement gains associated with implementation of the assistant teacher program in the first three grades. Starkville, MS: Mississippi State University, Bureau of Educational Research and Evaluation.

Harvey, B. (1994). Retention: A narrative review of 100 years of practice. What are the alternatives? (Monograph). Nashville, TN: Tennessee State University, Center of Excellence for Research in Basic Skills.

Heim, J. & Perl, L. (1974, June). The education production function: Implications for educational manpower policy. (IPE Monograph No. 4). Ithaca, NY: Cornell University, Institute of Public Employment, New York School of Industrial and Labor Relations.

Herriott, R. E., & St. John, N. H. (1966). Social class and the urban school. New York: John Wiley and Sons, Inc.

Hodgkinson, H. L. (1992, June). A demographic look at tomorrow. Washington, D.C.: Institute for Educational Leadership.

Howell, J., Burnes, C., & Hill, C.(1958) Teacher assistants: A report of the Yale Fairfield study of elementary teaching. New Haven: Yale University.

Huberman, M., & Miles, M. (1984). Innovation up close. New York: Plenum Press.

Hughs, M. (1959). Development of the means for the assessment of the quality of teaching in elementary schools. Salt Lake City: University of Utah Press.

Indiana Department of Education (1986, July). Prime Time: The relationship between class size and achievement for first grade students in Indiana 1984-85. Indianapolis, IN: Author.

Jarvis, C. H., Schulman, R., Gumpert, R. D., & Whitehurst, B. (1987). Final report: First-grade reduced class size to 15 program in 99 selected schools, 1985-86. New York: Office of Educational Assessment, New York City Board of Education.

Johnson, J. (1987). Instructional aide program: Final evaluation report. Columbus, OH: Ohio Department of Evaluation Services.

☆ Johnston, J.M. (1989a). First grade teacher interviews, 1986-87: A Project STAR progress report. Memphis, TN: Memphis State University.

☆ Johnston, J.M. (1989b). Second grade teacher interviews, 1987-88: A Project STAR progress report. Memphis, TN: Memphis State University.

Kagan, S. L. (1995). Normalizing preschool education: The elusive imperative. In Flaxman & Passow (Eds.), Changing populations: Changing schools (pp. 84-101). Chicago IL.: University of Chicago Press.

Katzman, M. T. (1971). The political economy of urban schools. Cambridge, MA: Harvard University Press.

Kean, M. H., Summers, A. A., Raivetz, M. J., & Farber, I. J. (1979). What works in reading. Philadelphia, PA: School District of Philadelphia, Office of Research and Evaluation.

Keenan, J.M. (1985, Fall). An investigation of the relationship between socioeconomic status and academic achievement and the influence of class size on that relationship. Knoxville: University of Tennessee.

Laine, R.D., Greenwald, R., & Hedges, L.V. (1995). Money does matter: A research synthesis of a new universe of education production function studies. In L. O. Picus & J. L. Wattenbarger (Eds.), Where does the money go? Resource allocation in elementary and secondary schools (pp. 44-70). Thousand Oaks, CA: Corwin Press.

Levin, H.M., Glass, G.V., & Meister, G. (1984). Cost effectiveness of four interventions. (Project Report 84-A11). Stanford, CA: Stanford University, Center for Education Research.

Lindbloom, D. H. Class size as it affects instructional procedures and educational outcomes. Minneapolis, MN: Educational Research and Development Council of the Twin Cities Metropolitan Area, Inc.

Litwak, E., & Meyer, H.J., (1974). School, family, and neighborhood: The theory and practice of school-community relationships. New York: Columbia University.

Lowe, R. & Kantor, H. (1995). Creating educational opportunity for African Americans without upsetting the status quo. In Flaxman & Passow (Eds.), Changing populations: Changing schools (pp. 186-208). Chicago IL: University of Chicago Press.

Madden, N., & Slavin, R. (1987). Effective pull-out programs for students at risk. Baltimore, MD: Johns Hopkins University, Center for Research on Elementary and Middle Schools.

McKenna, B.H. (1977). Some philosophical, organizational, and definitional considerations. Class size. Washington, DC: National Education Association.

Meredith, V.H., Johnson, L.M., & Garcia-Quintana, R.A. (1978). South Carolina first grade pilot project 1976-77: The effects of class size on reading and mathematics achievement. Columbia, SC: South Carolina Department of Education.

Mitchell, D., Carson, C., & Badarak, G. (1989). How changing class size affects classrooms and students. Riverside: University of California, California Educational Research Cooperative.

Mollenkopf, W. G. & Melville, S. D. (1956). A study of secondary school characteristics as related to test scores. (Research Bulletin, 56-6). Princeton, NJ: Educational Testing Service.

Molnar, A. (1996). Giving kids the business. The commercialization of America's schools. Boulder, Co: Westview Press.

Mueller, D. J. (1987). Project Prime Time. Final report of Indiana's class-size experiment. Bloomington, IN: Indiana University.

Murnane, R. J. (1975). The impact of school resources on the learning of inner-city children. Cambridge, MA: Ballinger Publishing Co.

National Education Association (1968). Class size. Washington, DC: Author.

National Education Association (1959). Estimates of school statistics, 1958-59. Washington, DC: Author.

National Education Association (1970). Estimates of school statistics, 1969-70. Washington, DC: Author.

National Education Association (1977). Class size. Washington, DC: Author.

National Education Association (1980). Estimates of school statistics, 1970-80. Washington, DC: Author.

National Education Association (1986). Estimates of school statistics, 1985-86. Washington, DC: Author.

Nelson, D.E. (1984). The relationship between research on school class size and Utah's program to enhance educational productivity. Salt lake City, UT: State Office of Education, Evaluation and Assessment Unit.

New England School Development Council (1975). Class size and teacher load. Newton, MA: New England School Development Council.

Northwest Regional Laboratory (1984, April). Effective schooling practices: A research synthesis. Portland, OR: Author.

Nye, B.A., Achilles, C.M., Boyd-Zaharias, J., & Fulton, B.D. (1995). Project challenge: An initial evaluation of the Tennessee Department of Education's at-risk student/teacher ratio reduction project in seventeen counties. Fifth-year preliminary, executive summary, and summary report. Nashville, TN: Tennessee State University, Center for Research & Policy on Basic Skills. (Also 1994, 1993, 1992 and 1991 for fourth, third, second, and first-year reports.)

Nye, B. A., Boyd-Zaharias, J., Fulton, B. D., Achilles, C. M., & Pate-Bain, H. (1995). The lasting benefits study: A continuing analysis of the effects of small class size in kindergarten through third grade on student achievement test scores in subsequent grade levels. Grade 8, Fifth-year report. Nashville: Tennessee State University, Center of Excellence for Research in Basic Skills. (Also 1994, 1993, 1992, and 1991 for fourth, third, second, and first year reports).

Pallas, A. M., Natriello, G., & McDill, E. L. (1995). Changing students/changing needs. In Flaxman & Passow (Eds.), Changing populations: Changing schools (pp. 30-58). Chicago, IL: University of Chicago Press.

☆ Pate-Bain, H., Boyd-Zaharias, J., Cain, V.A., Word, E., Binkley, M.E. (1997). The student/teacher achievement ratio (STAR) project: STAR follow-up studies, 1996-1997. Lebanon, TN: Health & Education Research Operative Services (HEROS), Inc.

Pinnell, G. S., DeFord, D. E., & Lyons, C. A. (1988). Reading recovery: Early intervention for at-risk first graders. Arlington, VA: Educational Research Service (ERS).

Prothero, W. (1986). Class size study, 1986-87. Salt Lake City, UT: Utah Education Association.

Pugh, J. B., Jr. (1965). Performance of teachers and pupils in small classes. New York, NY: Teachers College, Columbia University, Institute of Administrative Research.

Rasp, A. & MacQuarrie, D. (1987). Remedial assistance program. Annual report and evaluation. Olympia: Washington State Legislature.

Reissman, F. (1962). The culturally deprived child. New York: Harper and Brothers.

Robinson, G.E. & Wittebols, J.H. (1986). Class size research: A related cluster analysis for decision making. (Research Brief). Arlington, Virginia: Educational Research Service.

Ross, D. H., & McKenna, B. (1955). Class size: The million-dollar question. Study No. 11. New York, NY: Teachers College, Columbia University, Institute for Administrative Research.

Rossi, P. H. (1971). Evaluating educational programs. In F. G. Caro (Ed.), Readings in evaluation research (p.97-99). New York, NY: Russell Sage Foundation.

Ryan, D.W. (1985). Class size and administration. In Husen, T, & Postethwaite, T.N., (Eds.) International encyclopedia of education, Oxford, England: Pergamon Press.

Ryan, D.W. & Greenfield, T. B. (1975). Review of class size research. The class size question. Ontario, Toronto: Ministry of Education.

Sarason, S. B. (1992). Letters to a serious education president. Newbury Park, CA: Corwin.

Scholfield, D. (1974). Class size. Arlington, VA: National Association of Elementary School Principals.

Shaw, R. R. & Sheane, K. E. (1995). Rescues "96: Research in education as small class uncovers educational success. Phoenix, AZ: Arizona House of representatives.

Shepard, L., & Smith, M. (1989). Flunking grades research and policies on retention. London: Falmer Press.

Slavin, R. E. (1989). Achievement effects of substantial reductions in class size. In R. E. Slavin (Ed.), School and classroom organization, (pp. 274). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.

Slavin, R. E., Karweit, N. L., & Wasik, B. A. (1993). Preventing early school failure: What works? Boston, MA: Allyn and Bacon.

Slavin, R. E. & Madden, N. A. (1995). Success for all: Creating schools and classrooms where all children can read. In Oakes & Quartz (Eds.), Creating new educational communities (pp.70-86). Chicago IL: University of Chicago Press.

Smith, M. L., & Glass, G. V. (1979). Relationship of class-size to classroom processes, teacher satisfaction and pupil affect: A meta-analysis. San Francisco, CA: Far West Laboratory of Education Research and Development.

Snow, M. (1993). The 1993 class size education evaluation study. Carson City, NV: Nevada Department of Education.

Swan, E. (1985). The educational effects of a state supported reduced class size program. Indiana: Indiana State University.

Tomlinson, T. M. (1988). Class size and public policy: Politics and panaceas. Washington, D. C.: US Department of Education, Office of Educational Research and Improvement.

Walberg, H.J. (Ed). (1970). Educational environments and effects: Evaluation, policy and productivity. Berkeley, CA: McCutchan.

Wehlage, B., Rutter, R., Smith, G. A., Lesko, N., & Fernandez, R. (1982). Reducing the risk: Schools as communities of support. London: Palmer Press.

Wenglinsky, H. (1997). When money matters: How educational expenditures improve student performance and how they don't. Princeton, NJ: Educational Testing Service, Policy Information Center.

☆ Word, E., Johnston, J., Bain, H., Fulton, B., Zaharias, J., Lintz, N., Achilles, C. M., Folger, J., & Breda, C. (1990). Student/teacher achievement ratio (STAR): Tennessee's K-3 class size study. (Final report and final summary report). Nashville, TN: State Department of Education.

Wright, E. N., Shapson, S.M., Eason, G., & Fitzgerald, J. (1977). Effects of class size in the junior grades. Ontario, Toronto: Ministry of Education.

DISSERTATIONS

Bartley, l.D. (1957). Class size in the classified public high school districts of Missouri, 1955-56. Dissertation Abstracts International, 17, 2190.

Beditz, J. F. (1983). The Effects of class size on student achievement in high school science. Unpublished doctoral dissertation, Florida State University, Tallahassee.

Bernstein, S. N. (1973). The Effects of class size and practice upon mini-lesson tests of teacher effectiveness. Dissertation Abstracts International, 41, 7082.

Binion, S. (1954). An analysis of the relationship of pupil-teacher ratio to school quality. Unpublished doctoral dissertation, Teachers College, Columbia University, New York.

Bostrom, E.A. (1969). The effects of class size on critical thinking skills. Dissertation Abstracts International, 29, 2032.

☆ Boyd-Zaharias, J. (1993). The effects of random class assignment on elementary students' reading and mathematics achievement. Unpublished doctoral dissertation, Tennessee State University, Nashville.

Buczek, M. L. (1981). The effects of reduced class size on pupil attitudes, pupil self concept and teacher morale. Unpublished doctoral dissertation, University of Toledo, Ohio.

Blake, H. W. (1954). Class size: A summary of selected studies in elementary and secondary schools. Unpublished doctoral dissertation, Teachers College, Columbia University, New York.

Coble, H. M. (1969). An analysis of the relationship between selected classroom variables and a criterion score obtained on indicators of quality. Unpublished doctoral dissertation, Teachers College, Columbia University, New York.

Cone, F. D. (1978). The effects of class size on student outcome variables: A review and synthesis. Unpublished doctoral dissertation, University of Missouri, Columbia.

Culliton, T.E. (1961). Group size in relation to the discussion tasks in learning. Dissertation Abstracts International, 23, 948.

Dennis B. D., (1986). Effects of small class size (1:15) on the teaching/learning process in grade two. Unpublished doctoral dissertation, Tennessee State University, Nashville.

Eldridge, J.W. (1988). A study of the relationship between class size and teacher absence. Unpublished doctoral dissertation, Tennessee State University, Nashville.

Furtwengler, C. B. (1980). A review and synthesis of selected class size research in grades kindergarten through twelve in United States public schools, 1955-77. Unpublished doctoral dissertation, Peabody College for Teachers, Nashville, TN.

Good, G. A. (1970). The Effects of class size on skills acquired in typing. Dissertation Abstracts International, 31, 2790.

Harvey, B. (1993). An analysis of grade retention for pupils in K-3. Unpublished doctoral dissertation. University of North Carolina, Greensboro.

Hilleary, H.W. (1958). An experimental investigation concerning class size. Unpublished doctoral dissertation, University of Southern California, Los Angeles.

Hughes, R. G. Jr. (1969). The reactions of ninth grade students of different ability levels to social studies instruction in multi-sized groups. Dissertation Abstracts International, 30, 2801-2.

Jacobs, R. (1987). The effect of class sizes of 1:15, 1:25, and 1:25 plus full-time aide on kindergarten reading readiness achievement. Unpublished doctoral dissertation, Tennessee State University, Nashville.

Johnson, L. I. (1969, April). Class size and its relationship to change in the child's self concept. Dissertation Abstracts International, 30, 1363.

Kiser-Kling, K. (1995). A comparative study of life in first-grade classrooms of 1:14 and 1:23 teacher pupils ratios. Unpublished doctoral dissertation, University of North Carolina, Greensboro.

McDermott, H. T. (1977). The effect of a reduction in class size on achievement among first and second grade students. Unpublished doctoral dissertation, Texas Woman's University, Denton.

McKenna, B. H. (1955). Measures of class size and numerical staff adequacy related to a measure of school quality. Unpublished doctoral dissertation, Columbia University, New York.

Manaf, Z.B.A. (1987). A validation study of classroom related problems of elementary school teachers using a shorter version of the Teacher Problems Checklist. Unpublished doctoral dissertation, Ohio State University, Columbus.

Mazareas, J. (1981). Effects of class size on the achievement of first grade pupils. Unpublished doctoral dissertation, Boston University.

Menniti, D. J. (1964). A study of the relationship between class size and pupil achievement in the Catholic Elementary School. Unpublished doctoral dissertation, Catholic University of America, Washington, D.C.

Miglionica, M. B. (1958). A study of differences and relationships between educational achievement and class size in 26 selected high schools in the Archdiocese of Los Angeles. Unpublished doctoral dissertation, University of Southern California, Los Angeles.

Manos, P. G. (1975). Relationship among class size, selected school and teacher characteristics and reading improvement made by low achieving grade 4 pupils. Dissertation Abstracts International, 35, 7618.

Lansing, K. M. (1956). The effects of class size and room size upon the creative drawings of fifth grade children. Dissertation Abstracts International, 17, 276.

Nye, K. (1995). Do small classes help ameliorate the generally negative effects of large schools on pupils' achievement, K-3?. Unpublished doctoral dissertation. University of Tennessee, Knoxville.

Parks, M. W. (1988). Effects of small class size (1:15) on the teaching/learning process in grade three. Unpublished doctoral dissertation, Tennessee State University, Nashville.

Passarella, L. A. (1977). The relationship of class size to teacher morale and to teachers' perceptions of their own educational effectiveness. Unpublished doctoral dissertation, Rutgers University, New Brunswick.

Richman, H. (1955). Educational practices as affected by class size. Unpublished doctoral dissertation, Teachers College, Columbia University, New York.

Riser, V. M. (1981). Secondary school teacher perceptions of an effective optimal class size for a given teaching strategy. Unpublished doctoral dissertation, University of Minnesota, Minneapolis.

Scott, J. L. (1972). The effect of class size on student verbal interaction in five English classes. Unpublished doctoral dissertation, Rutgers University, New Brunswick.

Smith, D. I. (1974). Effects of class size and individualized instruction on the writing of high school juniors. Unpublished doctoral dissertation, Florida State University, Tallahassee.

Takanishi-Knowles, R.N. (1973). Relationships among instructional group size, student engagement, and teacher strategies. Unpublished doctoral dissertation, Stanford University.

Wagner, E. (1981). The effects of reduced class size upon the acquisition of reading skills in grade two. Unpublished doctoral dissertation University of Toledo, Ohio.

Williams, C. M. (1962). An exploratory investigation of the effects of class size and scheduling related to achievement and motivational outcomes. Unpublished doctoral dissertation, Michigan State University, East Lansing.

Witsitt, Robert C. (1955). Comparing the individualities of large secondary school classes with small secondary school classes through the use of structured observation schedule. Unpublished doctoral dissertation, Teachers College, Columbia University, New York.

Whittaker, V. A. (1990). A comparison of second and third grade teachers whose classes made the greatest gain scores in Project STAR with a comparable number of teachers whose class gain scores fell below 50 percent. Unpublished doctoral dissertation, Tennessee State University, Nashville.

Whittington, E.H., (1985). Effects of small class size (1:15) on the teaching/learning process in grade one. Unpublished doctoral dissertation, Tennessee State University, Nashville.

ERIC DOCUMENTS

☆ Achilles, C. M. (1987, November). Some Analyses of kindergarten results in a statewide study of class size: Project STAR, Tennessee, 1985-1986 (Draft). Paper presented at the Annual Meeting of the Mid-South Educational Research Association, Mobile, AL. (ERIC Document Reproduction Service No. ED 303 232)

☆ Achilles, C. M., Nye, B. A., Zaharias, J. B. & Fulton, B. D. (1993) The lasting benefits study in grades 4 and 5: A legacy from Tennessee's four-year K-3 class-size study, project STAR. Paper presented at the North Carolina Association for Research in Education, Greensboro, NC. (ERIC Document Reproduction Service No. ED 356 559)

☆ Achilles, C.M., Nye, B.A., Bain, H.P., Zaharias, J.B. & Fulton, B.D. (1993, November). The teacher aide puzzle: Student achievement issues, an exploratory study. Paper presented at the annual meeting of the Mid-South Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED 363 956)

Albritten, T. (1984). A review of recent literature on the effects of class size, with implications for English and language arts instruction. Bethesda, MD. (ERIC Document Reproduction Service No. ED 248 517)

☆ Bain, H.P. & Jacobs, R. (1990). Project STAR research synopsis: The effect of reduced class-size on kindergarten reading readiness. (ERIC Document Reproduction Service No. ED 325 235)

☆ Bain, H.P., Lintz, N. & Word, E. (1990). A study of first grade effective teaching practices from the project STAR class-size research. (ERIC Document Reproduction Service No. ED 321 887)

Berger, M. A. (1982). Class size is not the issue. Paper presented at the annual meeting of the National School Boards Association. (ERIC Document Reproduction Service No. ED 231 061)

Boozer, M. & Rouse, C. (1995, June). Intraschool variation in class size: Patterns and implication. (Working Paper No. 344). Washington, DC: National Bureau of Economic Research, Industrial Relations Section. (ERIC Document Reproduction Service No. ED 385 935)

Carrington, A. T. & others (1981, August). Class size project 1980-81, Final Report. Virginia Beach, VA: Virginia Beach Public Schools. (ERIC Document Reproduction Service No. ED 237 521)

Castiglione, L. V. & Wilsberg, M. (1968). The reduction of pupil-teacher ratios in grades 1 and 2 and the provisions of additional materials: A Program to Strengthen Early Childhood Education in Poverty Area Schools. New York: Board of Education. (ERIC Document Reproduction Service No. ED 034 003)

Doss, D., & Holley, F. (1982). A cause for national pause. Title I schoolwide projects. Austin, TX: Austin Independent School District, Office of Research and Evaluation (ERIC Document Reproduction Service No. ED 214 996)

Edmonds, R, B. & Fredricksen, J. R. (1979). Search of effective schools: The identification and analysis of city schools that are instructionally effective for poor children. (ERIC Document Reproduction Service No. ED 170 396)

Fetters, W. B., Collins, E. F., Smith, J. W. (1968). Characteristics differentiating under- and over-achieving elementary schools. Washington, D.C.: National Center for Education Statistics, Division of Data Analysis and Dissemination. (ERIC Document Reproduction Service No. ED 021 318)

Gajewsky, S. (l973). Class size: A review of the literature and selected annotated bibliography. Bethesda, MD. (ERIC Document Reproduction Service No. ED 093 055)

Glass, G.V., & Smith, M.L. (1978). Meta-analysis of research on the relationship of class size and achievement. (Class Size and Instruction Project). Bethesda, MD. (ERIC Document Reproduction Service No. ED 168 129)

Hill, W.C. (1981). The distribution of teacher-pupil interaction and its relationship to class size. Bethesda, MD. (ERIC Document Reproduction Service No. ED 225 646)

Indiana State Department of Pupil Instruction. (1983). Project Prime Time: l982-83 Report. Bethesda, MD. (ERIC Document Reproduction Service No. ED 239 765)

Jeffs, G.A. & Cram, B.M. (1968). The Influence of class size on academic attainment and student satisfaction. Las Vegas, NV: Ed W. Clark High School (ERIC Document Reproduction Service No. ED 021 252)

Katz, L.G. (1985). Dispositions in early childhood education. Trends and issues in education 1986-1987. (ERIC Document Reproduction Service No. ED 218 908)

Madison Metropolitan School District (1976, September). Effects of class size on reading achievement in grades 1-3 in the Madison Metropolitan School District (1974-76). Madison Metropolitan School District, Instructional Serves Division. (ERIC Document Reproduction Service No. ED 140 256)

Maryland Department of Education (1978). Process evaluation: A comprehensive study of outliers. Baltimore, MD: Maryland State Department of Education, Center of Educational Research and Development, University of Maryland. (ERIC Document Reproduction Service No. ED 160 644)

Mayhew, H. C. (1983). Related research on class size. Bethesda, MD. (ERIC Document Reproduction Service No. ED 237 480)

Mayeske, G. W. and others (1969). A study of our nation's schools, a working paper. Washington, DC: U.S. Office of Education. (ERIC Document Reproduction Service No. ED 036 477)

New York State Education Department (1976, March). Three Strategies for studying the effects of school processes: An expanded edition of which Factors Contribute to Learning? Albany, NY: State Education Department, Bureau of School Programs Evaluation. (ERIC Document Reproduction Service No. ED 126 572)

Nye, B.A., Achilles, C.M., Zaharias, J.B. & Fulton, B.D. (1993). Class-size research: From experiment to field study to policy application. Nashville, TN: Tennessee State University, Center for Research in Basic Skills. Paper presented at the meeting of the Mid-South Educational Research Association (MSERA), Atlanta, GA. (ERIC Document Reproduction Service No. 356 558)

Nye, B. A., Fulton, B. D. & Zaharias, J. B. (1992, April). Five years of small class research: Student benefits derived from reduced student/teacher ratios. Nashville, TN: Tennessee State University, Center for Research in Basic Skills. Paper presented at the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 344-344)

Nye, B.A., Achilles, C.M., Zaharias, J.B., Fulton, B.D. & Wallenhorst, M.P. (1992). Project challenge: An initial evaluation of the Tennessee department of education at-risk student/teacher ratio reduction project in seventeen counties (Prelim. Rep. No. 2). Nashville, TN: Tennessee State University, Center for Research in Basic Skills. (ERIC Document Reproduction Service No. 352-180)

Nye, B.A. Zaharias, J.B., Fulton, B.D., Achilles, C.M. & Hooper, R. (1991) The lasting benefits study: Continuing analysis of the effect of small class size in kindergarten through third grade on student achievement test scores in subsequent grade levels. Fourth-grade report. (Tech. Rep. No. 1). Nashville, TN: Tennessee State University, Center for Research in Basic Skills. (ERIC Document Reproduction Service No. ED 338-440)

Nye, B.A., Achilles, C.M., Boyd-Zaharias, J., Fulton, B.D. & Wallenhorst, M.P. (1993). The lasting benefits study: A continuing analysis of the effects of small class size in kindergarten through third grade on student achievement test scores in subsequent grade levels Sixth-grade report. (Tech. Rep. No. 3). Nashville, TN: Tennessee State University, Center for Research in Basic Skills. (ERIC Document Reproduction Service No. 354 992)

Shapson, S.M. (1972). Optimum class size? A review of the literature. Bethesda, MD. (ERIC Document Reproduction Service No. ED 070 757)

Stern, D. (1987, April). Teachers' salaries, class size, and student achievement in grades 3 and 6: Some new evidence. Paper presented at the annual meeting of the American educational research association. (ERIC Document Reproduction Service No. ED 288 241)

Welch, W.W. (1971). Evaluating the Small Group as a Component of Modular Schedules. (ERIC Document Reproduction Service No. ED 064 216)