Recent Research on Intergovernmental Relations in Education Policy

MICHAEL W. KIRST

Educational Researcher, Vol. 24, No. 9, pp. 18-22

he history of intergovernmental relations in education policy has been dominated by regulations, categorical programs, and technical assistance by higher levels of government to stimulate or require lower levels to make changes in policy and practice (Kirst & Jung, 1986). There have been many metaphors to depict education policy within intergovernmental relations including marble cake or a picket fence. The marble cake recognizes that the federal, state, and local levels are not distinct, and policy spills over from one level to another. The picket fence metaphor is based on categorical programs like Title I or special education whereby the federal and state levels try to mandate or stimulate specific local programs. Each picket in the fence includes administrators (e.g., vocational education) at all levels of government, and auditors to ensure that federal/state funds are spent within a separate picket.

Intergovernmental policies have more to do with legitimating change or with structure than with the nature of teaching or classroom practice. A useful metaphor is that of an "ecology of games" that are largely separate, but do interact and provide inputs to each intergovernmental unit. For example, there is a state legislative game, a state administrative game, a district and school administration game, and a teaching game (Firestone, 1989). Each game has separate players, rewards, inputs to other games, and provides outcomes to other games. Programs from higher levels are just one of many influences on the local school district and classroom game. State programs interact with local demands, local taxes, and needs of local board members, local employees, and community groups.

Winning the local game for some players focuses on obtaining state categorical and general aid to create more local programs. But many local administrators are not particularly rewarded in the intergovernmental game, so they tend to tune out signals from the state or federal levels. Teachers see their successes in terms of student learning or just getting through the day. The publicity surrounding the passage of an omnibus state or federal reform package is not central to teachers' lives. Consequently, this research review highlights the limited influence of intergovernmental policy on classroom practice.

This ecology of games in education policy is one appropriate concept for the succession of attempts by higher levels of government to leverage and change lower levels. It is easier to use state regulatory policies to influence administrators at the local level rather than change classroom teaching. Some state policies employ mandates that outrun the state's existing technology and capacity at local classroom levels. For example, attempts to require businessoriented budget systems like Program Planning and Management by Objectives have left scant residue at the local level (Tyack and Cuban, 1995). In sum, each governmental level tries to maximize its sphere of influence by seizing opportunities or rejecting higher level policies.

General Findings From a Decade of Research on Intergovernmental Relations

Over the last 10 years, researchers have reached general conclusions about intergovernmental relations.

(a) Power and influence in education intergovernmental relations is not a zero-sum game whereby one level gains and another level loses the ability to influence policy (Elmore & Fuhrman, 1990b). For example, state curricular frameworks can galvanize more local curriculum policy making and leadership at the local level, so that the policy making impact of all governance levels can increase simultaneously. For instance, state graduation standards in the 1980s became a required floor beyond which many LEAs added courses. The dominant concept, then, is mutual influence among education policy levels, not zero-sum.

Some state mandates, for example, requiring a semester of economics for high school students, are strongly directive of local behavior. But mandates and rules have not been the main strategy for states to guide or influence local curricular content. California curricular policies in science and social studies, for example, are not mandates and provide a framework rather than prescribe a detailed list of content to be taught. Moreover, many local districts use the state curricular framework as a springboard for their solution to a particular local context. Much state policy is characterized by low enforcement, imprecise policy directives, and local initiatives. Many local districts not only complied with California's 1983 reform law (SB 813), but also were building on the state-based mandates to add new policies of their own (Kirst & Yee in Massell & Fuhrman, 1994). In their

18 EDUCATIONAL RESEARCHER

MICHAEL W. KIRST is Professor of Education and Business Administration at Stanford University, School of Education, Mail Code 3096, Stanford, CA 94305. He is also a faculty affiliate with the Department of Political Science, has a courtesy appointment with the Graduate School of Business, is Co-Director of Policy Analysis for California Education (consortium of Stanford, UC-Berkeley, and USC, a California state education policy research group funded by the Hewlett Foundation), and is a member of the management and research staff of CPRE.

study of six states (including California), researchers at the Consortium for Policy Analysis in Education found that:

Local activism in reform has been noted in several studies of the reform movement. . . . This local activism takes a variety of forms: staying ahead of the state and of peers by enacting policies in anticipation of higher state policies to meet specific needs, and using state policies as a catalyst for achieving district objectives. (Fuhrman & Elmore, 1990).

(b) Deregulation per se (perhaps even including abolishing state codes) does not result in widespread significant local policy change (Fuhrman & Elmore, 1994). Additional policies and capacity building usually are needed to utilize the flexibility and creativity that deregulation may stimulate. This implies that elimination of state code sections should be supplemented with other policies such as technical assistance. Changes in state or federal regulatory policy interact with wide variations in local capacity and context. The impact of deregulation will vary depending on many local factors, and there may be no central tendency of local responses.

Different policy designs, however, can alter local responses. For example, blanket waivers have more potential impact than rule-by-rule waivers. Blanket waivers broaden the local horizon for change (Fuhrman & Elmore, 1992). Often LEAs are unaware that some desired local changes do not require a state waiver. In South Carolina, for example, one half of the changes undertaken in the wake of a flexibility program could have been implemented prior to deregulation (CPRE, 1992). But automatic sweeping deregulation may stimulate change because it broadens the horizon for planning change, and removes constraints more thoroughly than rule-by-rule waivers.

(c) States use differential regulatory strategies whereby some districts are granted more or less regulation depending on performance indicators and fiscal problems. The consequences of state differential treatment strategies are highly dependent on their designs and the local context. The less successful schools may be the most in need of deregulation, but some states restrict waivers to high performing schools (CPRE, 1992). The takeover of low-performing local districts by states has had little direct impact on schools (Fuhrman & Elmore, 1992). The consequences of state takeover depend in part on the capacity of the state agency, and whether it can assist or broker meaningful help. State takeover of local school districts like Jersey City, New Jersey, does provide better fiscal control and solvency in LEAs that have been near bankruptcy or using questionable fiscal practices. But unless the intervention is specifically designed to focus on instruction, the state presence is typically not felt beyond the central office. In sum, deregulation supporters assume particular types of local responses, but not much is known about the impact of large-scale block grants or massive repeal of state codes.

(d) Several states and localities have attempted to use sanctions and incentives to stimulate desired change or performance. But incentive systems are still in the trialand-error stage. It is very difficult to obtain sufficient political support for sanctions on teachers or schools, such as decreasing teacher pay or removing categorical funds. Using state assessment systems for rewards or sanctions at the school level has raised serious questions about the reliability and validity of state assessments for such purposes (Olsen, 1995; Elmore, Abelmann, & Fuhrman, in press). Teacher salary schedules have not changed in decades and continue to include academic credits beyond the BA and years of service. In sum, intergovernmental incentive systems are exceedingly complex to design if policymakers desire to have consistent effects on schools and students (Odden, 1995).

(e) Many recent curricular reforms (e.g., NCTM standards) are not clearly specified in terms of expected LEA and school implementation. State standards and frameworks have been promulgated in general terms with considerable local latitude (see the standards statements under U.S. Department of Education grants). Though teachers may complain that such general policies fail to give sufficient guidance for instruction (e.g., see Elmore, Fuhrman, and Abelmann, forthcoming), they still may have an effect on practice by shaping attitudes about content and performance. For example, state curricular policies can change the local discussion and inject new concepts and thinking into local policies. This is another example of how intergovernmental relations need not be a zero-sum game. State policies can provide knowledge that creeps into local practice over time such as the use of student portfolios in Vermont (Cohen & Spillane, 1993). Curricular reform networks that are started and supported by government, but not part of government, have changed classroom practice (Floden, 1995; O'Day, 1995; Murnane, in press). These reform networks such as the California Science Improvement Network (CSIN) can build teacher capacity, reorient staff development, and seep into the classroom (CPRE, 1994; Elmore & Fuhrman, 1994). Policymakers get more impact by using "push" factors like assessments and frameworks in conjunction with "pull" factors like incentives and demonstrations. Some package of these policies has more potential than stand-alone policies to help classroompractice.

The context of teachers is very different in reality from how many policymakers view intergovernmental impact on classroom practice (McLaughlin & Talbert, 1993). Consequently, policy needs to be designed from a view inside the classroom looking outward rather than from top/down intergovernmental structures. This classroom context/practice view indicates that capacity-building policies such as staff development are crucial if they provide teachers with coaching, follow-up, and professional communities for mutual assistance (McLaughlin & Talbert, 1993).

(f) State and local education agencies are slow to adapt to new policy goals. State Education Agencies (SEAs) are not well structured or well prepared to help implement and sustain systemic reform (Lusi, 1994). SEAs are organized primarily along categorical or special-purpose units that inhibit policy alignment and comprehensive approaches. These segmented organizations need to be recast into shared understandings, roles, and tasks that flatten the hierarchy. Comprehensive reform requires policy coherence and treatment of holistic problems, so SEA teamwork and collaboration are crucial. Because even aligned state policies cannot be expected to have consistent local effects, adjustments will be needed for diverse local contexts.

Most local central offices suffer from the same fragmented structural and operational problems as SEAs (El-

DECEMBER 1995

19

more, 1995). Until the effective-schools movement in the 1970s, local central offices paid scant attention to curriculum and instruction. District structures resemble geological accretions over many years, and are not monolithic (Cohen, 1982). State policy is just one of many influences, and LEA central subunits react differentially to policies from higher levels. In some LEAs, Title I central units are leading new practice, but in others they are a dominant unit that inhibits attention to new state assessments or curricular framework. Some central offices are strong in science standards leadership, but weak in math or some other subject.

Districts find it difficult to work intensively on all subject-matter areas at once. Moreover, districts are beginning to reduce reliance on staff development that is not aligned with subject-matter reform concepts. Districts report more interaction with intrastate and interstate teaching and subject-matter networks such as the Urban Math Collaborative (Floden, 1995). Some SEAs have utilized their support of these networks as a way to amplify their impact and compensate for lack of highly qualified SEA employees. These teacher networks have considerable promise for changing classroom practice, but they often need sustenance from federal or state funds. For instance, California Science Improvement Network (CSIN) was started by the California State Department of Education and is now nurtured by the University of California. This network helps elementary teachers improve their science instruction including coaching and follow-up among local teacher colleagues, as well as science experts from around the state.

Current Intergovernmental Issues

Much current debate, particularly at the federal level, focuses on replacing categorical grants for special purposes (e.g., vocational education) with block grants that state and local authorities could use for any purpose. Categoricals developed largely in isolation of each other, which rapidly led to a local and state disease called "hardening of the categories." Most of the categoricals initially were not directed at the core classroom technology for curriculum and instruction. Special education and Title I, for example, relied significantly on "pull out" programs that were not integrated well with core subject instruction (Doyle & Cooper, 1988).

Some states in the 1970s followed the 1965–1970 federal categorical growth by creating many of their own. SEAs became more regulation oriented as they enforced the federal and their own categoricals. Categorical policymakers and administrators became adept over time in finding enforcement and influence techniques that helped federal/ state grants come closer to their intended local purposes (Kirst & Jung, 1986). Such techniques included federal/ state field audits, law suits, socialization of state and local administrators hired with categorical funds, and gradual infusion of categorical purposes within the standard operating procedures of schools. There was a proliferation of regulations, rules, monitoring, and auditing. This trend periodically resulted in agitation for deregulation, waivers, and block grants as evidenced in the Reagan education program.

As this categorical enforcement "success" was becoming more evident, concern shifted to the alleged negative cumulative and aggregative impact of the totality of categorical grants. But studies by SRI and others indicated that LEAs had become "accustomed" to handling the numerous federal categories and were not overburdened by regulations (Knapp, 1983). The Reagan Administration attempted to consolidate most federal categoricals, but was rebuffed by the Democratic Congress, and ended up with only minor consolidations (Finn, 1983).

Categorical issues and regulation began to recede from the spotlight of intergovernmental concern around 1983 when the state reforms featured higher academic standards for all pupils and the core curriculum. Later in the 1980s, categorical programs became a concern because they were not well integrated or aligned with high academic standards and systemic reform. Categorical restructuring and deregulation was a major focus of the 1994 ESEA reauthorization, and currently is being discussed by Republican Congressional leaders through block grant legislation.

The Clinton Administration has tried to link and align categoricals with national academic standards. For example, Title I achievement gains are to be measured using more challenging state assessments rather than nationally normed basic skills tests. But national Republican leaders have emphasized eliminating categoricals altogether through flexible block grants to states or localities. The current pro/con arguments about categorical programs are many sided. Supporters contend that categorical grants protect client groups that states and localities tend to neglect, and decategorization has historically been linked with funding cuts because there are few special interests that support untied funding. Opponents stress that categorical grants fragment the approach to cross-cutting problems like education standards, prevent the reallocation of funds from ineffective programs, involve excess overhead costs, and lead to excessive federal and state intrusion in local decisions.

What enlightenment can research provide this political and conceptual debate? Categorical grants can have a lasting impact upon local schools (Kirst, 1982; Elmore & Fuhrman, 1990; Fuhrman & Elmore, 1990). For example, policies can promote change in organizational structure including added personnel layers (e.g., vocational specialists or aides) or "pull out" teaching structures under Chapter I. These instruction methods or organizational changes require a new layer of specialists that can be organized into a constituency for maintenance of the "program." Categorical grants also have a strong influence on pupil classification and the definition of specialities in teaching. For instance, certificates for teaching remedial reading or bilingual education differentiate the specialist from the regular classroom teacher. They are necessary to assure federal funds are used for special programs and constituencies.

On the other extreme, categorical programs have little influence on the extent and nature of curricular coverage of specific topics or on teaching methods or strategies—e.g., individualization of instruction or inquiry methods. A study found that new math concepts and science inquiry methods promoted by the federal government in the 1960s had vanished from the vast majority of schools (Stake & Easley, 1978). Teachers initiate most classroom talk and orchestrate classroom interaction around brief factual questions (Goodlad, 1984).

20 EDUCATIONAL RESEARCHER

These probable low-impact areas are the most difficult for federal and state governments to monitor or create political constituencies for program maintenance. Other dimensions such as federally sponsored in-service training could have some impact or leave a residue, but have been small scale since NSF programs in the mid-1960s.

The school-level impact of block grants is more difficult to discern because unrestricted dollars cannot be easily identified. They become part of the general support base of an organization and will free up dollars for other purposes. In 1981, the Reagan Administration succeeded in consolidating 28 federal categorical programs into a Chapter 2 ESEA block grant. Field studies indicate that Chapter 2 was used for nonrecurring expenditures like computers that were not part of an articulated school improvement effort (Kirst & Jung, 1986). This small block grant (\$800 million) did reduce local administrative burden, but local parents had less influence on spending decisions than under categorical grants. Classroom impact is unknown, but recent studies suggest that increased local flexibility over small amounts of money not accompanied by local capacity building is unlikely to have much school or classroom impact. Larger block grants may have more potential for changing practice, but there are no data to support either a positive or negative case.

Conclusion

It is a long way from a federal or state grant to thousands of classrooms. Policies create a skeleton or shell within which classroom practice can change, but much more than policy is needed to alter instruction for most classes (see the Cohen and Elmore articles in this issue). Moreover, policies need to be much more robust and sophisticated than most traditional approaches that stress solely either regulation or deregulation and block grants. Policymakers must also not lose sight of the realities and context of the classroom teacher. Intergovernmental policies can help establish favorable conditions for teachers who are operating in their own varied contexts, but policy is only one of many influences concerning how teachers respond to students in their classrooms.

References

- Cohen, D. (1982). Policy and organization. *Harvard Education Review*, 52(4), 474–499.
- Cohen, D., et. al. (1994). The progress of instructional reform in schools for disadvantaged children. Unpublished paper.
 Cohen, D. K., & Spillane, J. P. (1993). Policy and practice: The relations
- Cohen, D. K., & Spillane, J. P. (1993). Policy and practice: The relations between governance and instruction. In S. H. Fuhrman (Ed.), *De*signing coherent education policy: Improving the system. San Francisco: Jossey-Bass.
- Cohen, M. (1994). *Update on Goals 2000 implementation*. Speech to American Educational Research Association and Institute for Educational Leadership Policy Luncheon, September 23, 1994.
- Consortium for Policy Research in Education. (1992). Ten lessons about regulation and schooling. *CPRE Policy Briefs*. New Brunswick, NJ: Author. Note: All papers that refer to CPRE are published by the Consortium for Policy Research in Education at Eagleton Institute of Politics, Rutgers University.
- Doyle, D., & Cooper, B. (1988). Federal aid to the disadvantaged. New York: Falmer.
- Elazar, D., et al., (1969). Cooperation and conflict: Readings in American federalism, Itasca, IL: F. E. Peacock.
- Elmore, R. F. (1983). Education and federalism: Doctrinal, functional, and strategic views. Stanford, CA: Institute for Research on Educational Finance and Governance.

- Elmore, R. F. (1991). The role of local school districts in instructional improvement. New Brunswick, NJ: Center for Policy Research in Education, Rutgers University.
- Elmore, R. F., Abelmann, C. H., & Fuhrman, S. H. (in press). The new accountability in state education policy. In H. Ladd (Ed.) Performance-based strategies for improving schools. Washington, DC: The Brookings Institution.
- Elmore, R. F., & Fuhrman, S. H. (1990). The national interest and federal role in education. *Publius*, 20, 149–163.
- Elmore, R. F., & Fuhrman, S. H. (Eds.). (1994). The governance of curriculum. Alexandria, VA: Association for Supervision and Curriculum Development.
- Elmore, R. F., & McLaughlin, M. (1982). Strategic choice in federal education policy: The compliance-assistance trade off. In A. Lieberman & M. McLaughlin, (eds.) *Policymaking in education* (Chicago: University of Chicago Press), pp. 175.
- Finn, C. Jr. (1983). Reflections on the "disassembly of the federal educational role." Education and Urban Society, 15(3), 389–396.
- Firestone, W. A. (1989). Education policy as an ecology of games. Educational Researcher, 18(7), 18-24.
- Firestone, W. A., & Nags, G. (forthcoming). Differential regulation. Educational Evaluation and Policy Analysis.
- Floden, R. E. (1995). Portfolios for capacity building: Systemic reform in Vermont. In M. E. Goertz, R. E. Floden, & J. O'Day (Coauthors), Studies of education reform: Systemic reform. Volume II: Case Studies. New Brunswick, NJ: Rutgers University, Consortium for Policy Research in Education.
- Fuhrman, S. H. (1994). Evaluation of performance in the United States: Changes in accountability. OECD, working draft.
- Fuhrman, S. H., & Elmore, R. F. (1994). Ruling out rules: The evolution of deregulation in state education policy. New Brunswick, NJ: Consortium for Policy Research in Education, Rutgers, The State University of New Jersey, Eagleton Institute of Politics.
- Fuhrman, S. H., & Elmore, R. F. (1990). Understanding local control in the wake of state education reform. *Educational Evaluation and Policy Analysis*, 12, 82–96.
- Fuhrman, S. H., & Elmore, R. F. (1992). Takeover and deregulation. New Brunswick, NJ: Consortium for Policy Research in Education, Rutgers, The State University of New Jersey, Eagleton Institute of Politics.
- Gardner, S. (1995). Reform options in the intergovernmental funding system. Washington, DC: The Finance Project.
- Gold, S. (1995). The impact of new federal policies on state governments. Albany, NY:, SUNY.
- Goodlad, J. (1984). A place called school. New York: McGraw Hill.
- Grodzin, M. (1966). The American system: A new view of government in
- the United States. Chicago: Rand McNalley. Hargreaves, A. Changing teachers, changing times. London: Cassell, 1994.
- Kirst, M. W. (1983). Teaching policy and federal categorical programs. In L. Shulman & G. Sykes (Eds.), *Handbook of teaching and policy* (pp 426–448). New York: Longman.
- Kirst, M. W., & Jung, R. (1986). Beyond mutual adaptation, into the bully pulpit. Educational Administration Quarterly, 17–33.
- Kirst, M. W., & Yee, G. (1994). An examination of the evolution of California state education reform, 1983–1993. In D. Massell & S. H. Fuhrman (Eds.), *Ten years of state education reform* (pp. 158–171). New Brunswick, NJ: Rutgers, The State University of New Jersey, Eagleton Institute of Politics: Consortium for Policy Research in Education.
- Knapp, M. (1983). Cumulative effects of federal education policies on schools and districts. Menlo Park, CA: SRI International.
- Lusi, S. (1994). Systemic reform: Challenges faced by state departments of education. Washington, DC: ASCD Yearbook.
- McDonnell, L., & McLaughlin, M. (1982). Education policy and the role of the states. Santa Monica, CA: Rand.
- McLaughlin, M., & Talbert, J. (1993). *Contexts that matter for teaching*. Stanford, CA: Center for Research on the Context of Secondary School Teaching.
- Murnane, R. (in press). Teaching to new standards. In S. H. Fuhrman & J. O'Day (Eds.), *Rewards and reform: Creating educational incentives that work.* San Francisco: Jossey-Bass.
- O'Day, J. (1995). Systemic reform in California. In M. E. Goertz, R. E. Floden, & J. O'Day (Coauthors), *Studies of education reform: Systemic reform. Volume II: Case Studies.* New Brunswick, NJ: Rutgers University, Consortium for Policy Research in Education.

DECEMBER 1995

21 •

- Orland, M. (1994). From picket fence to chain link fence: National goals and federal aid to the disadvantaged. In K. Wong & M. Wang (Eds.), *Rethinking policy for at-risk students*. Berkeley: McCutchan, pp 179-196.
- Odden, A. (in press). The story of the educational dollar: No fiscal academy awards and no fiscal smoking guns. *Phi Delta Kappan*.
- Peterson, P., Rabe, B., & Wong, K. (1986). When federalism works. Washington, DC: Brookings Institution.
- Peterson, P., & Wong, K. (1985). Toward a differentiated theory of federalism: Education and housing policy in the 1980's. *Research in Urban Policy*, 1, 301–24.
- Rothman, R. (1995). Measuring up. San Francisco: Jossey Bass.
- Smith, M., & O'Day, J. (1991). Systemic school reform. In S. H. Fuhrman & B. Malen (Eds.), The politics and curriculum of testing. Philadelphia: Falmer.
- SERVE. (1995). Overcoming barriers to school reform in the southeast.
- Stake, R., & Easley, J. (1978). Case studies in science education. Washington, DC: National Science Foundation.
- Sundquist, J. (1968). Politics and policy. Washington, DC: Brookings.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia*. Cambridge: Harvard.
- U.S. Department of Education, Improving American schools act. Washington: Author.
- Ways, M. (1966). Creative federalism and the great society. Fortune.
- Weiss, C. (1979). The many meanings of research utilization. Public Administration Review, 39, 5, 426-31.
- Wirt, F. (1991). The missing link in instructional leadership: The superintendent, conflict, and maintenance. Advances in Educational Administration, 2, 159–189.
- Wohlstetter, P., & Mohrman, S. (1994). School-based management: Promise and process. New Brunswick, NJ: Consortium for Policy Research in Education, Rutgers, The State University of New Jersey, Eagleton Institute of Politics.
- Wright, D. S. (1982). Understanding intergovernmental relations. Monterey, CA: Brooks/Cole.

Received October 5, 1995 Accepted October 17, 1995

Continued from p. 10

- presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Odden, A., & Odden, E. (1995). Educational leadership for America's schools. New York: McGraw Hill.
- Odden, A., & Picus, L. O. (1992). School finance: A policy perspective. New York: McGraw Hill.
- Odden, E., & Wohlstetter, P. (1995). Making school-based management work. *Educational Leadership*, 52(5), 32–36.
- Odden, A., Wohlstetter, P., & Odden, E. (1995). Key issues in effective school-based management. *School Business Affairs*, 61(5), 4–16.
- Osterman, P. (1994). How common is workplace transformation and who adopts it? Industrial and Labor Relations Review, 47(2), 173-188.
- Picus, L. O. (1993a). The allocation and use of educational resources: District level analysis from the schools and staffing survey. Madison, WI: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education–The Finance Center.
- Picus, L. O. (1993b). The allocation and use of educational resources: School level analysis from the schools and staffing survey. Madison, WI: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education-The Finance Center.
- Picus, L. O. (1994). The local impact of school finance reform in four Texas school districts. *Educational Evaluation and Policy Analysis*, 16, 391–404.
- Picus, L. O., & Bhimani, M. (1993). Determinants of pupil-teacher ratios at school sites: Evidence from the schools and staffing survey. Madison, WI: University of Wisconsin, Wisconsin Center for Education Re-

search, Consortium for Policy Research in Education-The Finance Center.

- Picus, L. O., Hertert, L., & Tetreault, D. (1995). The allocation and use of education dollars at the districts and school level in California. Madison, WI: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education Finance Center.
- Picus, L. O. (1995). Texas school finance after Edgewood. Madison, WI: University of Wisconsin, Wisconsin Center for Eduation Research, Consortium for Policy Research in Educaton Finance Center.
- Porter, A. C. (1993). Opportunity to learn. *Educational Researcher*, 22(5), 24–30.
- Porter, A. C., Kirst, M. W., Osthoff, E. C., Smithson, J. L., & Schneider, S. A. (1993). *Reform up close: An analysis of high school mathematics and science classrooms*. Madison, WI: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education.
- Raimondo, H. J. (1994). How much for administration? Expenditure priorities across New Jersey school districts, FY90–91. New Brunswick, NJ: Rutgers, The State University of New Jersey, Eagleton Institute of Politics.
- Ravitch, D. (1995). National standards in American education. Washington, DC: Brookings Institution.
- Robertson, P. J., Wohlstetter, P., & Mohrman, S. A. (1995). Generating curriculum and instructional innovations through school-based management. *Educational Administration Quarterly*, 31(3), 375–404.
- Rossmiller, R. (1983). Resource allocation and achievement: A classroom analysis. In A. Odden & L. D. Webb (Eds.), School finance and school improvement: Linkages for the 1980s (pp. 171–192). Cambridge, MA: Ballinger.
- Schwartz, M., & Moskowitz, J. (1988). *Fiscal equity in the United States*. Washington, DC: Decision Resources.
- Shedd, J. B., & Bacharach, S. B. (1991). Tangled hierarchies. San Francisco: Jossey Bass.
- Sizer, T. (1992). Horace's school: Redesigning the American high school. Boston: Houghton Mifflin.
- Slavin, R. E., Dolan, L. J., & Madden, N. A. (1994). Scaling up: Lessons learned in the dissemination of Success for All. Paper prepared for the Center for Research on the Education of Students Placed at Risk, Johns Hopkins University, Baltimore, MD.
- Slavin, R. E., Karweit, N., & Madden, N. (Eds.). (1989). Effective programs for students at risk. Needham Heights, MA: Allyn and Bacon.
- Slavin, R. E., Karweit, N., & Wasik, B. (1994). Preventing early school failure. Boston: Allyn and Bacon.
- Slavin, R., Madden, N. A., Dolan, L. J., Wasik, B. A., Ross, S., & Smith, L. (1994). Whenever and wherever we choose: The replication of Success for All. *Phi Delta Kappan*, 75(8), 639–647.
- Slavin, R. E., Madden, N. A., Dolan, L. J., Wasik, B., Ross, S., Smith, L., & Dianda, M. (1995, April). Success for All: A summary of research. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- Underwood, J. (1995). School finance litigation: Legal theories, judicial activism, and social neglect. *Journal of Education Finance*, 20, 143–162.
- Verstegen, D. (Ed.). (1994). Further evidence on why and how money matters in education. *Journal of Education Finance*, 20(1). Entire issue.
- White, P. A., Gamoran, A., & Smithson, J. (1995). Math innovations and student achievement in seven high schools in California and New York. Madison, WI: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education.
- Wohlstetter, P., & Anderson, L. (1993). Charter schools. Phi Delta Kappan, 75(6), 486–491.
- Wohlstetter, P., Smyer, R., & Mohrman, S. A. (1994). New boundaries for school-based management: The high involvement model. *Educational Evaluation and Policy Analysis*, 16, 268–286.
- Wykoff, J. (1992). The interstate equality of public primary and secondary education resources in the U.S., 1980–1987. *Economics of Education Review*, 11(1), 19–30.

Received October 5, 1995 Revision received October 19, 1995 Accepted October 20, 1995

22 EDUCATIONAL RESEARCHER -