The Rand Change Agent Study Revisited: Macro Perspectives and Micro Realities

MILBREY W. MCLAUGHLIN

The Rand Change Agent study, undertaken from 1973–1978, indicated a significant shift in the ways people thought about affecting planned change in education. Rand found that effective projects were characterized by a process of mutual adaptation rather than uniform implementation, and that local factors (rather than federal program guidelines or project methods) dominated project outcomes. Revisiting these findings in light of today's changed practices and understandings reinforces some of Rand's findings and suggests modifications in others. This reconsideration also underscores the essential contribution of teachers' perspectives as informant and as a guide to policy and suggests that the challenge lies in understanding how policy can enable and facilitate effective practice.

Educational Researcher, Vol. 19, No. 9, pp. 11-16

From 1973 through 1978, the Rand Corporation carried out, under the sponsorship of the U.S. Office of Education, a national study of four federally funded programs intended to introduce and support innovative practices in the public schools.[1] The four programs identified for study had substantively different objectives: Title III of the 1965 Elementary and Secondary Education Act (ESEA) provided support for local innovative projects; Title VII of ESEA supported district bilingual education efforts; programs financed by the 1968 Vocational Education Act encouraged practitioners to develop new approaches to career education; and the Right-to-Read program funded local efforts to eliminate illiteracy. Despite programmatic differences, these programs shared a general, common purpose—the stimulation and spread of educational innovations—and a common policy instrument—the provision of temporary funds or seed money to support new practices.

Rand's 4-year, two-phase study examined a sample of 293 local projects funded by these four federal programs in 18 states. Reported under the general title *Federal Programs Supporting Educational Change*, the findings of the so-called "Change Agent" study marked a significant shift in the ways policymakers, practitioners, and researchers thought about affecting and understanding planned change in education.[2]

The projects included in the Change Agent study were the products of federal policies conceived in the late 1960s and local plans developed in the early to mid 1970s. These projects represented the first significant federal-level attempts to stimulate change in local educational practices. They were based on relatively unexamined assumptions about change in public schools and the role of government (or policy) in affecting it. Policymakers formulating these early federal education initiatives assumed a relatively direct relationship between federal policy "inputs," local responses, and program "outputs." Policy of that period generally ignored the contents of what economists called the "black box" of local practices, beliefs, and traditions. The common idea behind these substantively distinct federal programs was that more money or better ideas—enhanced inputs—would enable local educators to improve school practice. A cynical, retrospective description of that era of federal education policy might dub it the "missing input model of education policy."

In the approximately 15 years since the programs examined by Rand were initiated in districts around the country, and in the 10 years since the final volume of the Change Agent study was published, practice has changed, policy has matured, the social and political context of schools has changed, and more research on planned change and educational reform has accumulated. This paper reviews the major findings of the Rand Change Agent study and then asks:

1. Which of the findings have endured? Which conclusions, 10 years later, continue to be accurate descriptions of the local change process and the role of policy?
2. Which of the findings have not held up? Which findings, 10 years later, should be rethought or revised?
3. What are the implications of this revisionist analysis for policies aimed at improving educational practice and for research aimed at understanding the relationship between policy and practice? Where are we now?

Rand Findings in Review[3]

Rand found that federal change agent policies had a major role in prompting local school districts to undertake projects

MILBREY W. MCLAUGHLIN *is at Stanford University, Stanford, California 94305.*

that generally were congruous with federal categorical guidelines. Local initiatives were generally consistent with what policymakers had in mind in framing broad program objectives. However, Rand analysis found that "adoption" was only the beginning of the story: Adoption of a project consistent with federal goals did not ensure successful implementation. Further, Rand found that even successful implementation did not predict long-run continuation of projects initiated with federal funds. The Change Agent study concluded that the net return to the general investment was the adoption of many innovations, the successful implementation of few, and the long-run continuation of still fewer.

Although federal seed money was essential to local efforts, Rand found that money did not always buy the things that mattered most to successful implementation and continuation of local change agent projects. The consequences of the various federal policies examined by Rand primarily depended on local factors, not federal guidelines or funding levels.

Rand examined how characteristics of projects and school districts affected the outcomes of innovations and concluded the following.

The *educational methods* used by a project determined its implementation and continuation only to a limited extent. This was so because projects with essentially the same strategies could be, and were, implemented differently at different sites. In other words, what a project *was* mattered less than *how* it was carried out.

Project resources did not predict outcome. Expensive projects were no more likely than less costly efforts to be successful. Money mattered in terms of enabling practitioners to get a project underway, but resources alone did not secure successful implementation or project acceptance.

Project scope was an important consideration. Ambitious efforts were more likely to stimulate teacher change and involvement than were modest, narrow projects. However, projects aiming at significant, system-wide change proved difficult to implement all at once. Planned-change efforts, it seemed, needed to be sufficient in scope to challenge teachers and kindle interest, but not so ambitious that they required too much too soon from the implementing system.

The *active commitment of district leadership* was essential to project success and long-run stability. Without the active support of district central-office staff, including the superintendent and principals in project schools, individuals responsible for implementation typically did not put forth the effort necessary for successful implementation, and once federal support was withdrawn, resources necessary for continuation were unavailable. Further, this commitment, Rand found, needed to be present at the outset to undergird implementation efforts.

Locally selected *implementation strategies* about how to put a project into practice dominated the outcome of federally supported change agent projects. Because they were incompatible with aspects of district realities or with the dominant motivations, needs, or interests of teachers responsible for implementation, the following strategies generally were seen to be ineffective:

- reliance on outside consultants
- packaged management approaches
- one-shot, pre-implementation training
- pay for training
- formal, summative evaluation
- comprehensive, system-wide projects

In general, these strategies were not effective because they failed to provide the on-going and sometimes unpredictable support teachers needed, excluded teachers from project development, and (intentionally or not) signaled a mechanistic role for teachers.

In contrast, Rand found that effective strategies promoted mutual adaptation, or the adaptation of a project and institutional setting to each other. Effective implementation strategies supported that process of adaptation by provision of timely feedback, identification and correction of "errors," and building broad-based commitment to the project. The following strategies generally were effective, especially when applied in concert:

- concrete, teacher-specific and extended training
- classroom assistance from local staff
- teacher observation of similar projects in other classrooms, schools, or districts
- regular project meetings that focused on practical issues
- teacher participation in project decisions
- local development of project materials
- principals' participation in training

Local implementation choices were determined by institutional context to a significant degree. They reflected local expertise, capacity, and sophistication in project implementation as well as local motivation and management style. Change agent policies, Rand concluded, operated through and within this local context.

Which Findings Hold True Today?

A general finding of the Change Agent study that has become almost a truism is that it is exceedingly difficult for policy to change practice, especially across levels of government. Contrary to the one-to-one relationship assumed to exist between policy and practice, the Change Agent study demonstrated that the nature, amount, and pace of change at the local level was a product of local factors that were largely beyond the control of higher-level policymakers. To further complicate matters, these local factors change over time and so create substantively and strategically different settings for policy. The specific findings that hold today are corollaries of this general observation about the relationship between macro-level policies and micro-level behavior. A few of these findings follow.

Implementation dominates outcome. The dominance of local responses (in contrast to policy inputs) has been underscored in subsequent research and has generated what has been called the "implementation perspective" in policy research. Although the policies under study differ from those that were the focus of the Change Agent study, Rand's conclusion that local choices about how (or whether) to put a policy into practice have more significance for policy outcomes than do such policy features as technology, program design, funding levels, or governance requirements. Change continues to be a problem of the smallest unit.

Policy cannot mandate what matters. What matters most to policy outcomes are local capacity and will. The local expertise, organizational routines, and resources available to support planned-change efforts generate fundamental dif-

ferences in the ability of practitioners to plan, execute, or sustain an innovative effort. The presence of the will or motivation to embrace policy objectives or strategies is essential in the generation of the effort and energy necessary for a successful project. Local capacity and will not only are generally beyond the reach of policy, they also change over time. Local events such as teachers' strikes, fiscal retrenchment, desegregation orders, or enrollment decline can negatively affect both capacity and will as they engender competing pressures and define constraints upon local action.[4] Further, teachers' will or motivation is contingent on the attitudes of school administrators or district officials. Thus, although teachers in a site may be eager to embrace a change effort, they may elect not to do so, or to participate on only a pro forma basis, because their institutional setting is not supportive. Consequently, the enthusiasm engendered in teachers may come to little because of insufficient will or support in the broader organizational environment, which is hard to orchestrate by means of federal (or even state) policy.[5]

Local variability is the rule; uniformity is the exception. Although classrooms, schools, and school districts share common features—curriculum structures, grade structures, and student placement policies—they also differ in fundamental and consequential ways. A high school English course in a wealthy suburban classroom differs substantially from a course offered under the same title in an inner-city school. The problems confronting California school administrators differ markedly from those faced by colleagues in Kansas. Dade County's site-based decision-making project will bear only scant resemblance to a restructuring activity in Santa Fe.

Traditionally, variability has been an anathema to policymakers and cast as the plague of efforts to reform schools because it signaled uneven local responses to policy objectives. Also, variability has been interpreted as a warning sign of trouble in the system. Today, however, there is recognition that variability may be a good thing—that it signals a healthy system, one that is shaping and integrating policy in ways best suited to local resources, traditions, and clientele. However, good or bad, it is as true now as it was when Rand first studied change agent projects that local practices do and will vary in significant ways among sites and over time.

Findings Requiring Revision

The Change Agent study examined the local responses to the various federal programs supporting educational change within a particular moment of educational policy making. The programs we studied were based in programmatic assumptions and realities that have themselves changed in response to experiences such as those described by the Change Agent study. As a consequence, a number of the conclusions or interpretations drawn from the study require revision in light of that changed reality and understanding. Three interpretations are especially central to policies and practices developed in support of planned change in education:

- the significance of teachers' initial motivation to participate in a change agent project to predict outcomes
- the role of external consultants or externally specified projects
- the structures available to provide resources and support for teachers' professional growth

The study overemphasized the importance of initial motivation. One interpretation of the Change Aent study was that policy could achieve its goals only when local instigators supported it and were inspired to carry it out. This analysis was primarily based on the distinction we saw in the field between projects undertaken for opportunistic reasons—available dollars—and those initiated out of perceived programmatic need or promise. In part, this conclusion has continued veracity. It is true that initiation and implementation of a planned-change effort receive important energy from the motivation of advocates—individuals who believe in the effort and are willing to commit energy and effort to its success.

Yet experience has also shown that we did not see or did not recognize instances in which belief follows practice. Individuals required to change routines or take up new practices can become believers. This omission may have been a function of the programs we were studying, that is, innovative efforts that were, for the most part, voluntary from the perspective of the implementing system. The local Right to Read, Title III, Career Education, and Bilingual Education programs supported by federal funds were elective and the consequence of local competition for limited federal funds. Thus, the Rand program sample did not provide instances of programs or strategies imposed upon the local system, such as desegregation efforts, or system-wide entitlement programs such as Title I (compensatory education). Nor did we look to see what happened to skeptical or unwilling individual participants over time.

If we had done either, we would have seen that belief or commitment can follow mandated or coerced involvement at both the individual and the system level. Findings from an investigation of local responses to the policy changes associated with the transition of federally funded compensatory education programs from Title I of ESEA to Chapter 1 of Education Consideration and Improvement Act (ECIA) highlight both the importance of local will and the fact that individuals or institutions originally opposed to an idea can change their minds (McLaughlin, Shields, & Rezabek, 1985).

Title I mandated local evaluation of compensatory projects supported through the program; additionally, it required parental involvement in the planning and governance of the local Title I program. Both mandates initially were greeted with objection by local educators and defined significant characteristics of the Title I program. Chapter 1, in an effort to redefine the federal role and reduce federal regulation of local practices, dropped these requirements. Once the regulatory thumb of federal mandate and oversight was released, parental involvement essentially came to an end in all but a few districts that had reason to value it.

Local evaluation of federally supported compensatory education programs, in contrast, continued even after locals no longer had to evaluate their efforts. In some districts, evaluations continued only because local managers were fearful that federal auditors would return and demand them. However, most districts that continued a strong evaluation effort did so because they found it useful. Originally resisted as an intrusion on local autonomy and a waste of time and money, evaluation required by Title I gradually became viewed as important once districts gained competence in carrying out and using evaluation.[6]

The observation that belief can follow practice is important from the perspective of policies aimed at social change. The

Change Agent study's conclusions reinforced the conservative tendencies of the system and implied that policy attempting to change people or practices in ways they were not motivated to change were apt to be futile. Subsequent and different experience has shown that conclusion to be overstated and directs attention to the fit between policy strategies and the incentives or motivation of the implementing agent.

Our conclusions were too skeptical about the role of external agents and their ability to promote positive change in local practices. The Change Agent study concluded that outside consultants, external developers, or technical assistants were too removed and insufficiently responsive to particular local conditions to provide effective support for planned-change efforts.

Here, too, we were a captive of our sample. By and large, the packaged programs and the outside consultants we observed as part of the Change Agent study were ineffective because they did not acknowledge features of the local setting that demanded modification or special attention. However, the study's negative conclusions about the role of external agents failed to consider what might be. As Crandall et al.'s DESSI study (1982) and other subsequent research has shown, externally developed programs and external consultants can be extraordinarily effective in stimulating and supporting local efforts to improve practice. In these instances, the external agents enabled local efforts to respond to or modify external practices or advice to suit the local setting.

In this sense the Change Agent study's finding about the importance of mutual adaptation and the DESSI study's conclusion about the positive outcomes associated with fidelity of replication and outside technical assistance are not as incompatible as they might first appear. Rather, these two studies were based on programs and experiences that were different in at least one critical respect. Rand looked at programs and advisors that generally ignored local factors in an effort to encourage standardized practices. DESSI looked at programs that had incorporated the lessons about the counterproductive aspects of such uniformity. Further, in contrast to the significant developmental nature of the local efforts Rand examined, the projects DESSI studied profited from the experience and direction of well-developed change efforts whose major components could be described. The term *replication* no longer meant mechanistic reproduction, but rather adaptive implementation that remained true to the project's core philosophy and central strategies. DESSI found that reproduction of externally developed projects in a variety of local settings could be achieved, given adequate external support (see Crandall et al., 1982).

This modification of the Change Agent study's conclusion about the role of external agents also rewrites a discouragingly conservative position regarding the possibilities of change. One implication of the original Rand conclusion is a "tribal" or "village" model of change that relies on local resources and capacity. Social learning of the type assumed by many change agent strategies of dissemination and development consequently would be unlikely to occur. However, we have seen that the broader policy system can learn from its investments and that experience can be telescoped and effectively shared. We understand now that it is not so much the external quality of outside practices and experts that inhibits their effectiveness, but how they interact with the local setting. Reflection on the Rand findings also raises concerns about many of the local activities initiated under the general flag of restructuring. Like the early change-effort projects Rand examined, these local efforts are largely developmental inventions and do not build on well-articulated practice. It seems likely, then, that the first generation, local restructuring efforts will proceed with much the same unevenness that characterized the first generation of change agent projects, especially where the centrality of teachers' skill development and professional growth are given insufficient attention.[7]

In addition, although the Change Agent study correctly stressed the significance of the actions and choices of teachers, or what Weatherley and Lipsky (1977) called "street level bureaucrats," and although the study's conclusions underscored the embeddedness of local implementors in a larger system, our conception of the structures most relevant to teachers was too narrow. Our research and analysis took the policy system for granted. That is, we assumed that the structure most relevant to teachers was the policy structure—the federal, state, and local policies—that eventuated in classroom practice. Had we made those assumptions problematic, rather than taken them as givens, we would have seen that although we as policy analysts were chiefly concerned with the policy system, it was not always relevant to many teachers on a day-to-day basis.

This misunderstanding is important because many of the study's conclusions about local responses to change agent programs were based on the assumption that teachers responded to specific policy objectives or strategies. In fact, for many teachers, these policy goals and activities were simply part of a broader environment that pressed in upon their classrooms. Thus, to ask about the role or consequences of a particular program or strategy for practice risked misrepresentation of reality because it gave policy a focus or significance it did not have in the daily matter of classroom life. We did not look beyond the policy structure to consider that the embedded structure of greatest import to teachers might have nothing or little to do with policy—it might have to do with professional networks, school departments, or other school-level associations, or colleagues however organized.

Ironically, although the Rand study was among the first to map backward from the perspective of local implementors and to analyze planned-change efforts associated with macro-level policies, it still was a top-down study because the driving questions reflected macro-level concerns, not micro-level realities. Because we did not understand that fully, I believe our analysis fell short as a description of planned change at the local level and as advice to policymakers and practitioners about how to enhance local practice.

Implications for Policy

This reanalysis of the Change Agent study raises a number of implications for policy aimed at improving educational practices.

One implication is that special projects, or reforms aimed at discrete elements of the education policy system, are likely to be disappointing. The dominance of local implementation, the local factors that make variability the rule, and the fluid and often unpredictable character of the local institutional environment all underscore the *systemic* nature of the problems

that change agent policies address. Special projects focused on single issues or single inputs typically (by necessity) ignore the systemic and interconnected conditions that influence classroom practice.

Special projects also are incompatible with the realities confronting teachers and administrators on a day-to-day basis. Educators must respond to multiple, simultaneous pressures and demands. The single-focus assumptions implicit in special projects are inconsistent with schools and classrooms. Further, the demands of special projects can actually diminish overall operations because "the innovation becomes the focus rather than the more holistic, organic, classroom and school life....Innovations become ends in themselves, and paradoxically, turn out to be diversions from the more basic goals of improvement" (Fullan, Bennett, & Rolheiser-Bennett, 1989).

Finally, special projects are often unproductive because they promote a view of the problems before the education policy system and practitioners as bounded and short term. The episodic intervention embodied in programs such as the federal change agent programs Rand studied ignores the fact that reform is steady work. (Elmore & McLaughlin, 1988). Many special projects implicitly or explicitly set out to fix the problem they address—such as poor reading outcomes, high drop-out rates, or limited English proficiency. Yet the problems addressed by current state-driven reforms or change agent programs are not acute; they are chronic. Reform needs to be systemic and on-going; special projects frame the problems of reform artificially and superficially and so are limited in their ability to significantly change educational practices.

A second implication for policy and practice relates to the enterprise policy hopes to affect. The problems addressed by educational change agent policies or strategies for reform lie at the intersection of teacher, students, and subject matter. Content matters as much as process. Many of the so-called innovations or reforms undertaken during the 1970s were correctly derided as simply rearranging the deck chairs—pursuing the appearance of constructive change without meaningful substance, that is, "content-free process." If pre-1970 reforms such as the "new math" or Sputnik-motivated science curricula fell short because specialists ignored process and the importance of local implementation, many of the post-1970 reforms failed because they passed over the "stuff" of schooling—they attempted to install new strategies of decision-making, classroom management, or staff development but neglected content. Policy intending to promote more effective educational practice must address both and acknowledge the need for the quite different kind of expertise associated with the management of organizational change and improved content.

A third implication for policy has to do with frame of reference and the need to look beyond the formal policy structure as a channel for promoting improvement and stimulating change. For example, if teachers lie at the heart of successful efforts to enhance classroom practices, then the professional networks that engage teachers comprise promising vehicles for change. The apparent success of teacher groups such as the Bay Area Writing Project, the Puget Sound Consortium, or the Urban Math Collaborative suggest that change strategies rooted in the natural networks of teachers—in their professional associations—may be more effective than strategies that adhere solely to a delivery structure outlined by the policy system. Reforms or policies that engage the natural networks of teachers can support change efforts in a more sustained fashion. Further, because teachers rather than policy are responsible for integrating new practices with traditional routines, it is possible to acknowledge the systemic nature of change. Reforms acknowledging the naturally occurring relationships of practitioners also open policy to the involvement of new institutional actors and promising organizational connections overlooked in policy tied to the formal delivery system.

A fourth implication also concerns the frame assumed by policy (and by policy research). Many reform policies focus on removing or buffering constraints to effective practice, that is, inadequate materials, lack of appropriate teacher preparation, or insufficient teacher voice in curriculum decisions. However, an important lesson of the past decade is that removing constraints or obstacles does not by itself ensure more effective practice. A teacher with reduced class size or new materials, for example, does not necessarily do a better job in the classroom.

Other and often different factors are required to enable practice.[8] In addition, the factors that enable practice—productive collegial relations, organizational structures that promote open communication and feedback, and leadership that "manages" opportunities for professional growth and nurtures norms of individual development, for example—are not amenable to direct policy fixes because they do not operate singly or consistently across settings.

A focus on enabling practice within the presence of existing constraints highlights the conditional, mutually reinforcing, and contextual nature of factors that support effective teaching. For example, shared mission and school-wide goals that encourage teachers to do their best require leadership at the school site to manage the necessary resources and processes. However, in order for shared mission and supportive leadership to enhance classroom practices, institutional structures need to be in place that provide regular feedback about teachers' performance, permit teachers to be heard in the area of curriculum decision making, and promote collegial interaction (Fullan et al., 1989). All of these enablers, in turn, are enhanced by the presence of multiple opportunities for teachers' professional growth. By itself, any one of these factors can promote better practice, but only in the short term. Sustained support for effective classroom practice assumes the co-occurrence of these and other enabling factors at the school site.

Finally, this perspective, which moves from understanding policy implementation to enabling effective practice, underscores the essential contribution of teachers' perspectives as informants and guides to policy. We have learned that we cannot mandate what matters to effective practice; the challenge lies in understanding how policy can enable and facilitate it. These are the questions that, 10 years later, a Change Agent study should be asking.

Notes

An earlier version of this paper was presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 1989. Preparation of this article was supported by the OERI Center for Research on the Context of Secondary School Teaching, Grant No. G0087C0235.

The author would like to thank Gary Griffin and Ann Lieberman for

their encouragement and Larry Cuban, Kim Ford, Joan Talbert, and David Tyack for their comments.

[1]Paul Berman was the project director for this study; I was the deputy project director. Berman and I were assisted by an extraordinary interdisciplinary team of researchers: Gail Bass, Richard Elmore, Todd Endo, Peter Greenwood, Dale Mann, Jerome Murphy, Anthony Pascal, Edward Pauley, John Pincus, Marta Samulon, Gerald Sumner, John Wirt, and Gail Zellman all played central roles in the project.

[2]The study was conducted in two phases. A series of five reports described the results of the first phase of the research that focused on introducing and implementing innovation (Volumes I–V of the RAND study). The results of the final phase are contained in Volumes VI–VIII.

[3]This section draws directly from Volume VIII of the RAND study.

[4]Mary Metz of the University of Wisconsin adds the important caveat that although is difficult to mandate what matters, *what* you mandate matters.

[5]There is an "embedded" complexity of teachers' motivation and the difficulty of influencing district or school level motivation by means of macro-level policies.

[6]As a reviewer elaborated, more specific evaluation requirements have been added to Chapter 1 over time. The Hawkins amendment to Chapter 1 (HR5) included detailed evaluation direction: annual reporting of pre-post norm referenced test results; annual review of individual student progress toward program exit goals; a school-by-school review of the Chapter 1 program activities and consequences.

[7]This point about the current wave of restructuring reforms was suggested by an anonymous reviewer, who offered the assessment that one of the most important lessons learned from the experience of federal change agent policies is the recognition that skill development is necessary for most innovations to be implemented and can be provided through a combination of insiders and outsiders offering training, help, assistance, and support. This point elaborates my concerns about the village model of educational change.

[8]One way to view the effective implementation strategies identified by the Change Agent study is that they all functioned to enable teachers' efforts to change classroom practices and learn new, more effective ways of operating.

References

Crandall, D. P., et al. (1982). *People, policies and practices: Examining the chain of school improvement* (Vols. 1–10). Andover, MA: The NETWORK Inc.

Elmore, R. F., & McLaughlin, M. W. (1988). *Steady work: Policy, practice and the reform of American education.* Santa Monica, CA: RAND.

Fullan, M. G., Bennett, B., & Rolheiser-Bennett, C. (1989, April). *Linking classroom and school improvement.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

McLaughlin, M. W., Shields, P. M., & Rezabek, D. J. (1985). *State and local response to chapter 1 of the education consolidation and improvement act, 1981* (Tech. Rep. No. 85-A6). Stanford: Institute for Research on Educational Finance and Governance.

Rand Corporation. (1974). *Volume I: A model of educational change* (Research Rep. No. R-1589/1-HEW). Santa Monica, CA: Author.

Rand Corporation. (1975). *Volume II: Factors affecting change agent projects* (Research Rep. No. R-1589/2-HEW). Santa Monica, CA: Author.

Rand Corporation. (1975). *Volume III: The process of change* (Research Rep. No. R-1589/3-HEW). Santa Monica, CA: Author.

Rand Corporation. (1975). *Volume IV: The findings in review* (Research Rep. No. R-1589/4-HEW). Santa Monica, CA: Author.

Rand Corporation. (1975). *Volume V: Executive summary* (Research Rep. No. R-1589/5-HEW). Santa Monica, CA: Author.

Rand Corporation. (1977). *Volume VI: Implementing and sustaining Title VIII bilingual projects* (Research Rep. No. R-1589/6-HEW). Santa Monica, CA: Author.

Rand Corporation. (1977). *Volume VII: Factors affecting implementation and continuation* (Research Rep. No. R-1589/7-HEW). Santa Monica, CA: Author.

Rand Corporation. (1978). *Volume VIII: Implementing and sustaining innovations* (Research Rep. No. R-1589/8-HEW). Santa Monica, CA: Author.

Weatherley, R., & Lipsky, M. (1977). Street-level bureaucrats and institutional innovation: Implementing special education reform. *Harvard Educational Review, 47*(2), 171–197.