The Federal Role in Educational Research and Development

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THE FEDERAL GOVERNMENT has been collecting, analyzing, and disseminating educational statistics for more than 130 years. Over time the focus has shifted from data gathering to research and development (R&D) to find more effective ways of educating children. Educational research and development, however, has not been held in high esteem by most academics and policymakers in the twentieth century.[1]

Policymakers have usually downplayed the value of supporting long-term research and development compared with providing immediate and direct assistance to local schools. When the sciences and social sciences were called upon to increase their contributions during World War II, the U.S. Office of Education (USOE) scaled back its support of educational research and development.[2] However, as it became increasingly evident in the mid-1960s that adequate knowledge was lacking about how to improve the schooling of poor children, the Johnson administration and Congress supported larger investments in long-term educational research and development.[3]

The need for federal involvement in educational research, development, and statistics has increased today. Analysts and policymakers are slowly and reluctantly acknowledging that many of the basic federal compensatory education programs established in the 1960s are not as effective as originally hoped. Large-scale, popular federal educational initiatives such as Title I and Head Start probably do offer assistance for some disadvantaged students. But these programs have not provided the same educational

opportunities for at-risk children as their more fortunate counterparts enjoy. Many of these federal initiatives are only general funding mechanisms rather than specific programs proven to be particularly effective for helping children who live in impoverished homes and neighborhoods. Nor is there enough detailed and reliable statistical information about schools to help educators formulate better policy alternatives. As a result, a growing need exists for better educational research, development, and statistics to improve education and schooling for everyone.[4]

Both the Bush and the Clinton administrations have emphasized standards-based reform. The Clinton administration and the 103rd Congress enacted the Improving America's School Act (IASA), which called for the close coordination of high academic standards, assessment measures, and the curriculum. While the concept of the new systemic reform approach in IASA was plausible, it was not an empirically tested approach and critics have raised some serious questions about its efficacy. Although definitive evaluations of the systemic reform approach are still to come, a standards-based or systemic reform approach by itself probably will not be enough to close the achievement gap between at-risk children and their more fortunate peers.[5]

Unfortunately, the federal government in the 1980s and 1990s has not devoted much attention and resources to supporting rigorous development and evaluation of alternative ways of providing better opportunities for disadvantaged children at the school or classroom level. As Robert E. Slavin has aptly stated:

> For decades, policymakers have complained that the federal education research and development enterprise has had too little impact on the practice of education. With a few notable exceptions, this perception is, I believe, largely correct. Federally funded educational R&D has done a good job of producing information to inform educational practice, but has created few well-validated programs or practices that have entered widespread use.[6]

Therefore, consideration should be given to how the current Office of Educational Research and Improvement (OERI) structure and practices could be altered to facilitate the support of more high-quality research and development.

A short essay such as this one cannot hope to explore all of the important matters related to the current, ongoing reauthorization of OERI.

Therefore this paper will briefly address seven issues: (1) the relative independence of OERI, (2) the quality and quantity of the research staff, (3) the funding and flexibility in the allocation of resources, (4) the fragmentation of the research and development efforts, (5) the quality of the research and development produced, (6) the intellectual leadership at OERI, and (7) the role of politics in the agency.

The Relative Independence of OERI

Although widespread agreement exists on the need for federal involvement in educational research and statistics, less consensus is found on where that effort should be located organizationally. Mid-nineteenth century educational reformers wanted a separate cabinet-level department of education to signal the importance of a federal role in schooling. Congress did establish a separate Department of Education in 1867 (almost immediately reorganized and renamed as the Bureau of Education) but deliberately confined its responsibilities in practice to gathering, analyzing, and distributing data on schooling—thereby emphasizing the importance and autonomy of the federal government's statistical and research activities.[7]

As the Bureau of Education acquired new responsibilities in the early twentieth century, its statistical and research activities gradually received less internal attention and support. Calls for enhancing federal involvement in education often justified themselves by emphasizing the importance of gathering educational data. But once the broader federal involvement was attained, the statistical activities in practice usually were downplayed.[8]

The Bureau of Education was reconstituted as the U.S. Office of Education in 1930. As the agency grew rapidly in the 1960s, fear arose that the statistical and research functions of USOE had been neglected and mismanaged.[9] As a result, a separate National Institute of Education (NIE) was created to provide more visibility and coherence for educational research in the 1970s. Unfortunately, strong congressional hostility to NIE initially prevented the agency from fully capitalizing on the benefits of its new independent status.[10]

When the Department of Education was created in the late 1970s, NIE was transferred into a new Office of Educational Research and Improve-

ment and eventually lost much of its autonomy and visibility. The incoming Reagan administration tended to be suspicious of social science research or program evaluations and tried to curb educational research and development.[11] The OERI reorganization in 1985 further diminished the role of researchers and scholars within the agency as the remnants of NIE became further submerged within the larger organization.[12]

Starting in fiscal 1989, the transfer of many new, but less research-oriented, programs to OERI meant that the overall budget and focus of the agency shifted still further away from the original NIE concentration on research and development. In fiscal 1989 funding for the National Center for Education Statistics (NCES), the regional laboratories and research centers, field-initiated research, and the Educational Resources Information Clearinghouses (ERIC) made up 98.7 percent of the OERI budget. But by fiscal 1993 these more traditional OERI activities were only 52.8 percent of the overall budget; by fiscal 1997 they had shrunk to 47.6 percent.[13]

Given OERI's current limited research and development capabilities and disappointing past achievements, perhaps the time has come to reconsider the organizational location of the agency. Should OERI and its rapidly increasing number of programs be maintained as they currently exist or should the research and development components within that unit be separated from its other growing responsibilities? Congress has strongly recommended that the Department of Education consolidate even more of its research and evaluation functions into OERI. This may be a useful step—depending on which programs and activities are designated as research-oriented and transferred to OERI.[14] At the same time, perhaps OERI should also focus more of its attention on research, development, and statistics by shedding some of its recently acquired, but less research-related, program activities. In a surprising, but refreshing, move by the head of any federal agency, Assistant Secretary Kent McGuire recently stated in testimony before the Senate that he believed that OERI's service-oriented programs should be transferred to elsewhere in the Department of Education.[15] The ultimate decision will be made by Congress, but McGuire's efforts should be applauded as a first step toward reorienting OERI in the direction of research and development.[16]

Another consideration might be restructuring some of the more important analytic functions in the Department of Education such as program

evaluation. Currently the Planning and Evaluation Service (PES) has the primary responsibility for conducting program evaluations. But given its limited funding and preoccupation with numerous short-term assignments, PES has not been able to produce many scientifically sound program evaluations.[17] Perhaps the department should work with both OERI and PES to develop a unit that plans and monitors more rigorous, large-scale evaluations of education programs. The program evaluation unit might be overseen by an independent, objective group of experts who would not only provide technical assistance, but also ensure that the design, implementation, and interpretation of the evaluations are statistically reliable as well as useful to educators and policymakers.[18]

Some analysts have suggested that the existing OERI program should be abolished. The more research-oriented components of the current OERI could then be merged with some other federal agency such as the National Science Foundation (NSF) while its more statistically oriented activities might be incorporated into another unit such as the Bureau of the Census. This is certainly a plausible alternative that should be explored. The suggestion is attractive because educational research and development would be attached to another more scientifically rigorous and accomplished federal agency. Yet a danger exists that overall the focus on educational research might be diminished in another federal agency. Moreover, the links between practitioners and researchers may be stretched too far if the direction and control of educational research are to be removed from the Department of Education.

Another recent and thoughtful suggestion has been to create a separate, but independent, educational research agency. Christopher T. Cross, a former OERI assistant secretary, called for taking the research and data collection out of the current OERI organization and creating a new Agency for Learning—somewhat similar to the National Science Foundation or the National Aeronautics and Space Administration. Similarly, Diane Ravitch, another former OERI assistant secretary, has also advocated a separate, independent educational research agency. While locating the educational research agency outside the Department of Education has some drawbacks, they are outweighed by the benefits of having the research unit be relatively free from political interference and able to institute more rigorous and scientifically sound research practices.

Naturally, no easy or ideal answer can be found to the difficult but fundamental question of where federal educational research and development

should be located. NIE and OERI have experienced repeated reorganizations in the past—many of which involved considerable time and effort but yielded few real improvements. Therefore, one should be wary of yet another call for reorganization. What is needed is less moving the existing organizational boxes around than creating a situation in which knowledgeable researchers can have more influence on how the goals of the agency are formulated and implemented. Thus, it is more a question of power and influence than just how the agency is structured, though the two issues are by no means unrelated. While any major reorganization by itself will not solve the many difficulties besetting OERI today, such organizational alternatives should at least be explored because research and development has not fared well within the current OERI structure and practices.[19]

The OERI Research Staff

One major problem within OERI has been the lack of adequate staff to implement and oversee the operations of the agency. This deficiency is not a problem unique to OERI as the recent efforts to "reinvent" the federal government have led to significant staff reductions at the same time that aggregate federal expenditures continue to increase. The reinvention program has been helpful in reorganizing federal agencies and improving their customer services. But while some of the staff reductions can be justified by improved efficiency, the cuts may have been too deep in some areas such as educational research and development. At the same time that OERI's budget mushroomed in the 1990s, the agency lost 25 percent of its staff, including some of its most experienced and capable individuals (who were eligible for the new early retirement buyouts).[20] As a result, recent expectations for higher quality work at OERI are making even greater and perhaps somewhat unrealistic demands on a significantly reduced and less-experienced staff.

The challenges of doing high-quality work in the Department of Education are particularly difficult because the general field of educational research and development is not as methodologically sophisticated or scientifically rigorous as in other social and behavioral sciences.[21] Therefore, the OERI staff initiating and implementing federal initiatives in educational research and development need to be particularly well trained and

knowledgeable to ensure that the work supported meets high-quality standards. At the end of the Bush administration, outgoing OERI assistant secretary Diane Ravitch correctly pointed out the lack of first-rate researchers in the agency—a situation that appears to have deteriorated even further after she left in early 1993.[22]

There are several explanations for the absence of a distinguished research staff at OERI. First, most of the OERI assistant secretaries have not been experienced or productive scholars themselves and therefore have not always appreciated the need for hiring well-established researchers. Most of the top-level OERI positions have been staffed not by distinguished or active researchers but by civil servants, making it nearly impossible to operate a first-rate federal research agency or to recruit well-trained academics.[23]

Second, the relative overall weakness of the field of educational research has created difficulties in identifying and hiring a well-trained and methodologically sophisticated OERI professional staff. The agency has not been particularly interested in recruiting the often better-trained scholars from the other social science and behavioral disciplines. And given the more activist and less research-oriented focus of the American Educational Research Association compared with many of the other social science professional associations, less peer pressure has been exerted on OERI to hire outstanding researchers.[24]

Third, the wholesale dismissal of many competent professionals during the early Reagan years significantly weakened the agency. And claims of subsequent periodic abuses of "excepted service" led to the more recent congressional and union opposition to this appointment process.[25] Instead of providing a way to attract distinguished scholars to serve in the federal government for a few years, excepted service has all but disappeared. This is unfortunate because the ability to recruit temporarily some of the more capable and knowledgeable researchers might be an important source for staffing OERI's changing educational research and development needs.

Finally, instead of trying to recruit and retain the best-trained and most-talented researchers, OERI often has promoted individuals within the agency who lack the necessary research skills or experience. The agency has not provided adequate incentives or opportunities for the professional staff to upgrade their research skills and knowledge; nor has OERI allowed them to continue doing much of their own professional

work. Questionable hiring practices also have sometimes denied opportunities for professional advancement for career employees and contributed to the relatively low staff morale during much of the 1980s and 1990s. One result of these and other problems is that OERI has not been viewed by distinguished researchers as an attractive place to work.[26]

Thus, while not everyone in a federal research and development agency needs to be an expert in those areas, a substantial proportion of the professional staff should have those skills. And for those who are not well versed in research and development, opportunities and encouragement should be available to receive additional training. Unfortunately, in recent years OERI has failed to attract and hire the high quality of research and development experts necessary for the agency to fulfill its internal goals as well as its congressional mandates.

Funding and Flexibility in Allocation of Resources

Educators and researchers have repeatedly pointed out the lack of adequate federal support for research, development, and statistics. Given the unusually broad and ambitious agenda expected of NIE and OERI, this is a legitimate complaint. Much more money has been available for research and development in medicine and science than in education. Even compared with other behavioral and social sciences, funding for educational research and development has trailed badly.[27]

The National Educational Research Policy and Priorities Board (NERPPB), which was created in 1994 to advise OERI, has recommended that:

> Funding for education research must be increased dramatically. An interim target should be to reach the level proposed by the President's Committee of Advisors on Science and Technology of 1/2% of our nation's expenditures for elementary and secondary education—about $1.5 billion annually. This would be a feasible target to reach over a five year period.[28]

Similarly, the Independent Review Panel on the Evaluation of Federal Education Legislation has criticized the lack of knowledge about which programs and practices are most effective in helping disadvantaged children:

> We find it unacceptable that as a nation we spend hundreds of billions on education, but do not fund the research and evaluation necessary to assess the effects of that investment. Title I illustrates this problem. The nation spends several billion dollars each year on the Title I program, but since reauthorization the budget for evaluation has averaged only $5 million a year.
>
> During the next reauthorization, we recommend a set-aside of 0.5 percent of program funds, half of which should be allotted for evaluation and the other half for research and development. In evaluation, we believe it will be imperative for the Department of Education to support studies that assess more definitively the achievement of students participating in Title I. . . .
>
> Paired with the set-aside for evaluation, an equal sum for research and development is needed to identify effective practices in the field, to build on theory, and to refine model programs for wider implementation. The demand for "best practices" is increasing, and the knowledge base needs to keep pace. A significant investment in research and development is the best foundation for the dramatic improvements in education that all the nation's children need and deserve.[29]

Part of the explanation for the lack of support is that most educators and policymakers do not have a high regard for educational research and development. Many of them think that what needs to be done to improve schooling is already known. If anything, they feel that the dissemination of the results from the "treasure chest" of earlier work should simply be expanded.[30] Others, who are more supportive of the need for additional research and development, have a low opinion of the quality and relevance of much of the previous work. This lack of enthusiasm for research and development is compounded by the fact that even many sympathetic educators and policymakers have considerable difficulty in citing examples of past successes despite three decades of sizable federal expenditures in this area.[31]

The problem of limited funding is compounded by a lack of focus and long-term commitment to supporting research and development.[32] Members of Congress and educators attacked NIE and OERI for the lack of relevance of educational research and development and forced the agency to devote a relatively large percentage of its scarce resources to dissemination compared with NIH or NSF so that little was left for research and development. As a result, research and development expenditures were particularly devastated in the mid-1980s.[33] Yet the increasing attention

and monies spent on dissemination in the late 1970s and early 1980s were not sufficient, compared with other federal research and statistical agencies, to protect NIE and OERI from the unusually severe reductions in overall funding during the Reagan years.[34]

While monies available for research, development, and statistics have been limited, the ability of NIE or OERI to spend those existing funds efficiently and effectively has been hampered by Congress. Rather than allowing the agency to decide how to distribute its own resources to achieve the general goals set forth by the legislators, a few members of Congress since the mid-1970s have allied themselves with some of the largest beneficiaries of those federal contracts and mandated how the federal educational research and development funds must be spent. While Congress certainly has the responsibility and power to set the general policy goals for federal research and development activities, its specific and detailed efforts to micromanage NIE and OERI have been counterproductive for the nation as a whole—especially given that Congress has not been able to devote the type or quality of oversight of these activities necessary to ascertain the full impact of its legislative interventions. Particularly problematic is the frequent practice of inserting in congressional report language at the last moment major policy directives that have not been adequately considered through the regular authorization and appropriations process.[35]

As Congress and OERI look to the future, perhaps it would be useful to review the distribution of monies allocated for research, development, statistics, dissemination, and other activities. How much money is needed to achieve the projected needs and priorities of the office for the next five or ten years? Does the optimal division of expenditures in OERI exist given those future objectives? And within each of these subcategories of expenditures, are the best mechanisms being used for achieving stated objectives? For instance, how much of the dissemination monies should be spent on ERIC compared with alternative ways of reaching educators and policymakers? What proportion of the expenditure of NIE and OERI monies has been congressionally mandated and what have been the advantages and disadvantages of that approach? For example, has congressional earmarking of funds for labs and centers during the past two decades been the best way of distributing those monies? Should such earmarking continue in the future or are there more flexible and less intrusive ways of achieving the same overall congressional goals more effectively?

Fragmentation of the Research and Development

One of the persistent complaints about educational research and development is that it has been fragmented and too oriented toward short-term projects. Educators and policymakers usually have wanted to address more topics than could be reasonably expected given the limited funding. Rapid changes in leadership at NIE and OERI have contributed to the episodic and impermanent nature of much of the work of the agency. While numerous long-term research and development plans have been drawn up, few have survived more than one or two years and even those have not provided adequate guidance and direction. During its first twenty-five years, NIE and OERI were not willing or able to create a short list of research and development priorities and then stick to them for any length of time. And the recent OERI research priorities do not provide the detailed and focused direction that is essential for guiding future work in this field.[36]

OERI's research priorities, issued in 1997, are already being supplemented by more detailed and more focused suggestions from other groups. The National Research Council has issued a fifteen-year strategy for improving the usefulness of education research.[37] The NERPPB commissioned the National Academy of Education (NAE) to provide research priority recommendations.[38] And NERPPB issued a set of new recommendations stating that "the priority for research in education must be *high achievement for all students* and, within that domain, the initial emphasis should be on *reading and mathematics* achievement."[39] As the new, often competing sets of research priorities are debated and resolved, it will be interesting to see how (and whether) OERI changes its funding of the existing labs and centers to reflect the new directions in research and development, and whether Congress permits the agency to have any discretion over research funds.[40]

The centers and the labs established in the mid-1960s were intended to focus on a small set of long-term educational research and development problems. Unfortunately, neither the labs nor centers fulfilled that initial vision. Educators and policymakers often gambled by creating a larger number of small centers and labs in the mistaken belief that additional monies soon would be provided so that these institutions could be properly enlarged. Efforts to fund long-term, large-scale curriculum development projects were discouraged in the mid-1970s first by Congress and

then by NIE. Responding to internal and external pressures, each of the labs and centers usually funded twenty to thirty small, short-term projects that did not necessarily fit together into a coherent and sustained research and development program.[41] A conference of leaders from more than a dozen of the better education research and development initiatives was convened by OERI and NERPPB in July 1998; they candidly acknowledged that "OERI's centers and labs are not preeminent in the field, partly because they have lacked the resources."[42]

Given the continued fragmentation and funding of numerous small projects, Congress and OERI should reexamine their strategies for encouraging long-term research and development. How much has the fragmentation of research and development in NIE and OERI hindered the ability of those agencies to make a more lasting impact on educational practice? What proportion of the lab and center activities should focus on larger and more long-term research and development projects? Why does there often seem to be a disconnect between calls for more integrated, long-term projects in the labs and centers during reauthorizations and the more fragmented, small-scale projects funded? Are there ways of improving the coordination and long-term planning in other areas such as field-initiated grants?

OERI is certainly a logical agency to sponsor and oversee high-quality, systematic development; and its recent assistant secretaries have expressed support for this type of work on many occasions. So why hasn't more been accomplished? After three decades of frustration and mutual recriminations, the time has come to acknowledge that many of the R&D centers and regional educational laboratories have not been producing much high-quality, systematic development.[43]

A separate program should be set up for soliciting and implementing large-scale, systematic development. Initially this program might focus its energies on three to five long-term projects in areas such as developing reading improvement programs or helping at-risk children make a successful transition from early childhood programs into the regular classroom. A distinguished board of experts might oversee the progress of these development projects and ensure the scientific soundness of the work as well as its usefulness for educators and policymakers. Anyone, including the existing centers or laboratories, could compete for these demonstration projects. The open competition would not only spur existing educational research and development providers to draw up better

proposals, but it might also attract interest from other major social science research organizations such as the Manpower Demonstration Research Corporation, RAND, or the Urban Institute.[44]

Because much of the existing work of the laboratories is providing research-based technical assistance to their regional clients, the labs and the department's Comprehensive Regional Assistance Centers should be merged. As five of the ten labs are already operating one of the fifteen comprehensive centers, this merger would eliminate wasteful duplication and provide more efficient and effective services. To provide more flexibility at the state and local levels, some of the monies saved by the merger could be redistributed directly to the states and local school districts so that they could acquire whatever particular technical assistance they need (including purchasing additional services from the newly merged labs and comprehensive centers). In the distribution of technical assistance monies to the states and local districts, those funds perhaps should be targeted to schools that lack the resources necessary to improve their operations and that also serve the most economically disadvantaged children.[45]

The five-year R&D centers should continue to play an important role in educational research, but they should be much larger and their work should be more focused. Instead of supporting some centers at an annual budget of only $1.5 million or $2 million, the minimum size of an R&D center should be at least $4 million or $5 million annually. Moreover, these centers should develop a coherent, focused five-year research program; centers should not have twenty to thirty different small-scale, uncoordinated projects scattered among a half-dozen different institutions throughout the nation.[46]

Congress in 1994 increased the amount of monies for field-initiated research in OERI. This was a good idea, and field-initiated research should be expanded in the next reauthorization. At the same time, however, OERI should target some of its field-initiated research competitions on particular educational problems by developing more focused, mission-oriented initiatives. Perhaps a useful model to consider would be the research and evaluation work that was done in the mid-1970s and 1980s on the issue of adolescent pregnancy and early childbearing by the National Institute for Child Health and Human Development. The targeted competitions for educational research sometimes might be most appropriately staffed by distinguished outside experts who join OERI temporarily as members of the excepted service staff.[47]

Quality of the Research and Development

A few questions also have been raised about the types of educational research and development funded by the federal government. A major shift has occurred from historical and philosophical studies in the late nineteenth century to behavioral and social science investigations in the twentieth century. While most educators and policymakers welcomed this change, some individuals in the early 1980s challenged the increasingly exclusive use of the behavioral and social sciences. The debate today focuses more on the relative use of quantitative or qualitative methods as well as on the benefits of doing case studies instead of large-scale and more systematic investigations.

Much of the quality of research and development produced by education researchers is regarded by academics in other behavioral and social science disciplines as second-rate methodologically and conceptually. The low opinion of the quality of much of educational research and development is frequently shared by policymakers who consider the work sponsored by NSF or the National Institutes of Health (NIH) generally to be more rigorous and scientifically sound than that produced by OERI.

Despite recurrent questions about the quality of educational research and development, NIE and OERI have done little to assess the work of their grantees and contractors. The groups and panels looking at the labs and centers in the 1970s, for example, did not investigate the quality of their contributions.[48] Nor did the recent National Academy of Sciences (NAS) study of OERI consider the quality of the products produced by the agency or its funding recipients.[49] A review of the statistical work done by NCES in the mid-1980s raised serious questions about its quality—though later evaluations of the subsequent work done by NCES have provided a much more reassuring picture of its products.[50] The one recent evaluation of the quality of the research and development produced by the centers and the labs painted a mixed, but overall disappointing, picture of the conceptual and technical soundness of much of their work.[51] More attention needs to be paid to the types and quality of studies being supported by OERI to ensure that federal research and development monies are being well spent. Has the focus been too much on contemporary problems using a behavioral and social science approach without adequate attention to historical and philosophical analyses? How should quantitative and qualitative methods be

used in educational research and development? Should educational evaluations employ more randomized-controlled experiments? What is the proper role of case studies and large-scale investigations? How good are the OERI-funded studies conceptually and technically? What can be done to enhance the quality of the work in educational research, development, and statistics?

Although concerns about the quality of research and development usually have not been prominent features at NIE and OERI, the 1994 legislation took an important step forward by calling for OERI, in consultation with NERPPB, to establish "standards for the conduct and evaluation of research."[52] OERI and NERPPB have risen to that challenge and issued strict quality assurance standards.[53] The agency and NERPPB also commissioned a thoughtful and useful analysis of the peer review system.[54] Moreover, the Department of Education and OERI have been involved in an ongoing third-year review of the centers and labs, which, one hopes, will consider the quality of their research and development products.[55] It is too early to know how effective OERI has been in improving the quality of its research and development work, but the agency now is addressing this important issue.

Intellectual Leadership at OERI

Federal involvement in educational research, development, and statistics has often suffered from unstable and weak intellectual leadership. Some outstanding and distinguished leaders served in NIE and OERI. But some appointees had credentials that were based more on their political experience than on their distinguished educational and research achievements. Moreover, the rapid turnover of NIE directors and OERI assistant secretaries has not provided the much-needed continuity or stability for the agency. During just the four years of the Bush administration, there were five assistant secretaries. And recently OERI has had four assistant secretaries in less than one year. Particularly lacking during much of the past three decades has been the type of intellectual leadership needed in a major federal research and development agency.[56]

OERI has also lacked strong intellectual leadership in its middle management research positions. While the Office of Research in OERI used to

have a director who oversaw the operation of all of the centers, today the five National Research Institutes created in the 1994 legislation are operating independently of each other and without adequate intellectual coordination. Moreover, three of the five institute directors recently have decided to leave OERI—raising some questions about the attractiveness of those key positions for the agency's research leaders as well as further diminishing the already depleted number of researchers in the institutes. Finally, while recent OERI assistant secretaries announced plans to appoint a distinguished research adviser for the agency, that post has remained vacant throughout the Clinton administration.

OERI and Congress should examine some of the questions raised about the leadership and staff of the agency. Why has such a rapid turnover occurred in leadership in NIE and OERI, and what can be done to provide more stability and continuity? How well have NIE and OERI handled the repeated interruptions in leadership, and what might be done in the future to make such transitions not only less frequent, but also less disruptive when they do occur? What should be some of the essential attributes of any assistant secretary at OERI, and how often has this been achieved in practice? What should be some of the most important characteristics of a professional staff at any distinguished federal research, development, and statistics operation, and how well has this been reflected in the ever-changing composition of employees at NIE and OERI? Given the labor-intensive nature of work expected at agencies such as NIE and OERI, what should be the size of the professional staff and how does this match what has been available over time? Why have NIE and OERI offered inadequate intellectual leadership in educational research, development, and statistics? And what must be done to improve the quality of intellectual leadership in the future?

Role of Politics in OERI

One of the more important and troubling issues that has not received much analysis is the charge that NIE and OERI have been too political. Compared with much of the work in medicine or science, school reforms and improvements to some extent are by their nature controversial and political. The education and socialization of children involve highly sensitive decisions not only about how students should be educated, but also

about what they should be taught. Given the historic charge to the Bureau of Education to help improve state and local schooling as well as NIE's commitment to promote excellence and equity in education, it was not entirely surprising that a conservative reaction occurred in the early 1980s against the seemingly liberal and activist federal research and development agenda—though many of the proposed revisions were just as political and ideological as the earlier policies that the new appointees were criticizing.

Many observers have condemned the more blatant and transparent political controversies of the early 1980s.[57] But an even more fundamental and subtle issue is how much and what kind of separation should exist between the immediate policy interests of any administration or Congress and the independence and integrity of NIE or OERI. While almost everyone agrees that OERI should critically investigate and evaluate the strengths and weaknesses of alternative educational policies and procedures, how much of its research and development agenda should be focused on short-term policy-related questions? Because NIE and OERI have always had a strong educational reform component in their mission statements, how should the leaders and staff of that agency interpret their responsibility to support any particular set of current reforms advocated by policymakers in the executive or legislative branches—especially when little bipartisan agreement is found on what educational reforms or improvements are needed?

A tendency in recent years exists to accuse OERI of engaging in politics. Diane Ravitch, an OERI assistant secretary in the Bush administration, rejected that accusation during her tenure and continues to reject it today, but she acknowledges that the perception remains and continues to hurt the agency:

> The overriding weakness of federal education research is a lack of trust, on the Hill, in the press corps, and among the public. When I was at OERI, I was told repeatedly by Congressional staff and members that the agency lacked any credibility, that it was thoroughly politicized. This reputation made it hard to recruit top-flight researchers. Based on my own experience, I did not believe this to be true, and I do not believe it is true today. But certainly this perception is commonplace. Today, there is still a widespread perception that the federal research agenda reflects the political needs of the party in power or the interests of professional educators and researchers.[58]

While all federal agencies engaged in research and development are involved in the political process, some members of Congress have been particularly intrusive in the area of education. For example, Chester E. Finn Jr., one of the original supporters of NIE, complained about the inappropriate and inordinate involvement of Congress in educational research and development:

> Congressional people have no business setting research agendas. They create research agencies. They fund research agencies. They don't tell it what to do. They can tell it how much money to spend, yes. They don't tell the director of the National Cancer Institute which drug to test on which forms of tumor. They have not told the director of the National Science Foundation, to my knowledge, how much money to spend on particle physics versus solid state metallurgy.... Congress is far more intrusive in the management of federal education programs than it is in the management of federal science research programs. But NIE, because it is overseen by the education committees and subcommittees, and so on, is stuck with the same mind set, the same political culture if you will, as Title I, where in fact it should be treated the same as NSF or NIH.[59]

An open and candid discussion also is needed of the proper role of interest groups in guiding the operations of a federal research agency. In other federal agencies such as NIH and NSF, academic and other outside interest groups have often tried to influence the general goals and lobbied to help secure the necessary federal funds.[60] Some institutions of higher education in the last two decades have sought congressional earmarking of funds for special projects.[61] But most outside involvement seems to have been focused on providing support for a particular NIH division or for trying to cure a specific disease (such as acquired immune deficiency syndrome [AIDS], cancer, or heart disease). Much less frequently have any of these outside groups and their congressional allies attempted to mandate the details of how research monies should be spent or which specific institutions should receive federal assistance once they have been allocated to an agency. And when outside attempts to interfere in the ongoing day-to-day operations of other federal research agencies have been made, strong protests usually have arisen from those agencies, the academic community, and members of Congress committed to protecting research objectivity and integrity.[62]

The troubled history of NIE and OERI with influential outside interest groups such as the former Council on Educational Development and Research (CEDaR), which lobbied on behalf of the regional laboratories, suggests the need to explore this topic openly and in more depth. While inevitably in any federal research and development operation there will be some politics, the extent and nature of that political involvement needs to be carefully monitored and contained lest it compromise the ability of the agency to do scientifically objective and efficient work. The periodic congressional micromanagement of NIE and OERI, often at the instigation of CEDaR, seems excessive and inappropriate in the setting and implementing of a scientifically sound and educationally effective research and development program.

Congress and outside interest groups have not been the only potential threat to the relative political independence of OERI. Efforts were made during the Reagan administration to replace many of the existing OERI staff who were viewed as too liberal ideologically.[63] More recently concerns have been raised about the Clinton administration's efforts to further its educational agenda by using OERI staff and discretionary funds to develop and oversee the proposed voluntary individual national tests in fourth-grade reading and eighth-grade math. Fortunately, that issue now appears to have been resolved as the administration and Congress have reached at least a temporary compromise on the national testing issue, which has removed OERI from the direct development and supervision of that highly controversial undertaking.[64]

Similarly, questions have been raised about the Clinton administration's decision not to renominate Pascal "Pat" Forgione Jr. to a six-year term as the commissioner of education statistics to oversee the operation of the National Center for Education Statistics in OERI. Forgione was widely regarded as a conscientious and effective leader of NCES, and the agency's Advisory Council on Education Statistics had urged Secretary Richard W. Riley to reappoint him.[65] The reason given for not reappointing Forgione was that he had been late in filing his income taxes.[66] But some Washington insiders suspect that it may have been Forgione's public protesting of Vice President Al Gore's inappropriate intrusion during the release of the National Assessment of Educational Progress reading scores that doomed his candidacy—something the administration strongly denies.[67] Whatever happened, the entire unfortunate episode has

raised additional questions about the relative political independence of NCES and OERI and reinforced those calling for additional protection of those agencies from political interference.[68]

Conclusion

Since the mid-nineteenth century, a general consensus has emerged that the federal government should play a key role in collecting, analyzing, and disseminating educational data as well as exert some responsibility for supporting educational research and development. Today awareness is growing among the public and policymakers of the need for better research and development to help improve schools.

For more than three decades the federal government has intermittently tried to create more rigorous and systematic educational research and development. The R&D centers were developed in 1964, and the following year Congress authorized the regional educational laboratories. Although these institutions periodically have experienced changes in their focus and operations, they have been among the major recipients of federal research and development expenditures during these years. While the monies allocated to research and development have never been adequate, substantial funds (in constant 1996 dollars) were spent on the centers and labs from fiscal 1964 through fiscal 1998: $1.16 billion for the centers and $1.59 billion for the labs. While the reasons for the shortcomings in these and other federal educational research and development programs are complex, the bottom line is that the public and policymakers still have not received the adequate and reliable information needed to ensure that all children have a real chance of succeeding in school.

As one follows the history of federal educational research and development during the past three decades, one is struck by the thoughtful but often repetitive suggestions for making improvements. Almost everyone involved in these discussions seems to call for more research funding; better trained researchers; more permanent and distinguished NIE or OERI leaders; more strategic planning to meet the needs of classroom teachers and students; more long-term, coherent research and development projects; scientifically sound research and development that is useful to practitioners; and preservation of the intellectual and political independence of the agency. Most of these recommendations have found

their way into the legislative language of the agency's periodic congressional reauthorizations.

Yet looking back to what has been accomplished at the end of each reauthorization, the results seldom match the earlier stated expectations and promises. Structural weaknesses in the design of the agency, inadequate funding, and excessive congressional micromanagement partly explain the deficiencies. But some of the responsibility for the agency's shortcomings must also rest with its own leadership over the past twenty-five years. NIE or OERI directors have not always tried to recruit distinguished researchers or been committed to insisting upon high-quality work from all of the agency's grantees and contractors. Nor have all members of the educational research community been sufficiently committed to making NIE or OERI a distinguished agency—especially if it has meant sacrificing their own short-term interests by subjecting their own federally sponsored work to more rigorous evaluations or facing more frequent competitions for their funding.

Thus, the issue during the current reauthorization of OERI is not just how to restructure the agency, but also how to ensure that the ideas put forth in the legislation will be carried out. In many ways the legislation that reauthorized OERI in 1994 was good and reasonable, and many of the shortcomings that have appeared subsequently might have been corrected administratively. Perhaps a large part of the problem rests with how the legislative suggestions and directives have been implemented in practice. As a result, some policymakers are becoming impatient with listening to the same, familiar promises of improving research and development in the near future when not enough has been done during the previous four or five years. Unless educational policymakers as well as researchers are prepared to make the necessary and often difficult decisions and sacrifices needed to make OERI into a first-rate, high-quality research and development operation, some policymakers might consider shifting some of the monies and responsibilities currently allocated to OERI to other research and statistical agencies outside the Department of Education.

The Senate Budget Committee Task Force on Education, for example, seems to have limited confidence in the ability of OERI to produce the high-quality research and development needed:

> Unfortunately, it is often difficult to discern good research from bad. The precursor to OERI was the National Institute of Education (NIE). Mod-

> eled after the National Institute of Health, which is widely respected, the NIE never realized the same success as its role model. The Task Force heard that OERI does not seem to be closing the gap either. Inadequate peer-review processes and a lack of good quality control measures stymies progress. Even the PCAST [President's Committee of Advisors on Science and Technology] group recommends that additional research on education and the use of technology in education be undertaken by "a distinguished independent board of outside experts." There seems to be little faith in our current education infrastructure to produce the needed research on policies and programs that work.[69]

Finally, while a review of past and present federal strategies for educational research, development, and statistics serves as a reminder of the difficulties of making significant and lasting improvement, it also provides occasional examples of outstanding success stories. The National Academy of Sciences in the mid-1980s was so disappointed with the statistical work of NCES that it recommended the dissolution of that entity if immediate corrective measures were not taken.[70] Faced with that harsh reality, a few dedicated and talented individuals emerged who accepted the challenge. Working closely with the appropriate OERI staff as well as with several influential members of Congress, they managed within the space of only a few years to create an organization that is now acknowledged as a distinguished and effective federal statistical agency.[71] Given the challenges and opportunities facing OERI today, much more has to be done to make OERI a first-class federal agency. While the task of reforming and improving OERI will be difficult, it can be done if both Congress and the executive branch are willing to work together in a bipartisan fashion to restructure the agency into one capable of providing the high-quality research, development, and statistics needed to help all American children thrive educationally in the twenty-first century.

Comment by Carl F. Kaestle

Maris A. Vinovskis and I were colleagues at the University of Wisconsin many years ago, and we collaborated on a book and some articles back in the 1970s. We have different political instincts but agree on many things about the history of American education and about educational research. We have also had some similar relationships to the Office of

Educational Research and Improvement (OERI), the subject of Vinovskis's paper. We both have written about the history of the agency, and we both have spent some time around it. But Vinovskis on both of these counts—knowing the history of the agency and hanging around its hallways—has gone far beyond anything I have done, so my remarks on his paper are given with some modesty and as a friend. Still, worrying about the fate of the National Institute of Education (NIE) and OERI has been a Division I sport since 1972, so I am not unusual in having opinions on the matter.

Vinovskis begins his paper with an argument that policymakers need better federally sponsored research to evaluate federal programs designed to help disadvantaged youth and to create alternative approaches to educating these kids. This policy emphasis is understandable, not only because Vinovskis has been steeped in the literature on these programs for the past few years, but also because the education of disadvantaged children is an important and legitimate focus of federally funded research.

However, pinnng the justification for better federally funded education research principally on its potential usefulness in assisting federal education policy may be unrealistic. This may overestimate its potential, on the one hand, and give too narrow a view of the functions and audiences of federally funded education research, on the other. I do not think that solid educational research evidence will ever be a litmus test for the establishment of new federal policies, and I think its application to ongoing programs will always be controversial, even with more and better evaluation research. Nonetheless, the aim should be for more and better evaluation. To do so will require policymakers and researchers to collaborate in building a new cohort of better trained researchers, making strong provisions for evaluation in policies and legislation, and perhaps experimenting with ideas such as that proposed by Chester E. Finn Jr. to run state trials followed by tough evaluations, in advance of launching national policies in a given area.

Nonetheless, policymakers are not likely to achieve consensus about the effectiveness of education programs in advance of their launch or in their first few years of operation. Politicians have to decide whether to establish programs on the basis of necessarily fragmentary, preliminary evidence, often from analogous programs that are not the same or from pilot programs, the results of which can be argued either way. Whether the program is about compensatory education to fight poverty, inclusion

in special education, block grants for more responsive decisionmaking, systemic reform for higher academic achievement, or vouchers for generally more effective schooling, the problems are the same. A tidy, attractive model sometimes invoked from research and development (R&D) in business or the military begins with laboratory-scale production followed by evaluation, then moves to pilot-scale production and evaluation, and finally to larger-scale production and evaluation. However, this model will probably not save educational research and development. It does not always work well in other sectors, and it rarely pertains to education (although I would not mind seeing it attempted more often and more rigorously). The variables in education are not as controllable and the process is more complicated. Because the activity is important, public, and political, education R&D is not allowed the insulation and time that careful, research-based development and evaluation enjoys in other more protected spheres.

Policymakers should be given the best, toughest evaluations possible, as promptly as possible, and their limitations and usefulness should be made clear. But education researchers should not be expected to make quick summary judgments about complex educational processes and outcomes. They are better, in the short run, at assessing the importance of context, the ambiguity of program labels, the appearance and impact of unintended consequences, and other complexities. Over the longer haul, they may reach some consensus about trends in educational outcomes. Even when the drift of judgment about effectiveness seems to be going in one direction, there will always be diverse studies and results, and policymakers can select the research that supports their own policy instincts and interests.

Major compensatory programs are always moving targets. Good policymakers are interested not only in short-term learning measures but also in long-term outcomes, the persistence of academic gains, and nonacademic goals in late youth or early adulthood. Thus, the research has to be long term. In the meantime, while multiyear longitudinal research is progressing, the program is changed, presumably for the better. So when results arrive from Ypsilanti, the *Prospects* study, or some other source, researchers are evaluating data from a program as it existed some years before. The results are relevant, but not conclusive.

Again I am not arguing that tough-minded evaluations of federally funded education programs are not needed but that the launching and the

early adjustment of programs will often have to continue without thorough, credible evaluation of outcomes—whether it is big federal programs, Chicago decentralization, Milwaukee choice, or Success for All. It is the nature of the beast. A program's effectiveness cannot be fully evaluated until a substantial investment has been made in it. Even then, if it is tinkered with along the way (as it should be), the evaluations will always be a little out-of-date.

If I seem to be more skeptical than Vinovskis about education research in the service of federal policy, I am also reminded of other, more diffuse purposes of education research. In educational federalism (a complicated American invention), the tilt in educational governance is toward the state and district levels. Only a small portion of policy and practice is determined at the federal level. But education research sponsored by the federal government can have an influence on policy and practice determined at the state level, by the district, in the school building, in the classroom, or for an individual student. Federally sponsored research can serve all of these actors, and agencies such as OERI must keep all of them in mind. The school finance research of the 1970s was largely relevant at the state level; the recent work on reading is relevant to states, school districts, and individual teachers, as is work on cognitively guided instruction in math or the work on domain-specific knowledge conducted at the Learning and Research Development Center in Pittsburgh. So, while I agree with Vinovskis that the main agency charged with conducting educational research should be doing a more impressive job evaluating large federal initiatives and exploring alternatives, I would keep in mind the many nonfederal uses of federally funded education research.

Vinovskis considers possible areas for improvement in the structure, personnel, and purposes of OERI. I will select only a few for discussion: changing the structure of OERI, restoring its capacity for high-quality research, and bringing focus to its fragmented research mission.

One recurring issue in the twenty-eight-year history of OERI has been the desire to insulate it from politics and give it stability through some structural design. The same thing was heard in 1999, from various quarters. Vinovskis seems properly skeptical about this, though he says that the performance of the agency is so problematic that thoughts about restructuring should be entertained. I believe that the quest for a haven from politics is quixotic. It did not work with NIE (witness the treatment on Capitol Hill of Tom Glennan, NIE's first director, or the Reagan

administration's summary dismissal of the independent NIE research board chaired by Harold "Doc" Howe). And after the National Center for Education Statistics (NCES) had developed a remarkable reputation for independence and impartiality, it was thrust overnight into the Clinton administration's education program as the main developer and advocate of the president's Voluntary National Test. Politics can scale any walls in Washington, especially if the walls were built with federal dollars.

The costs of restructuring are fearsome and should not be taken lightly. When people look back on the creation of the Department of Education, the creation of OERI, even the more modest restructuring of NIE under Patricia Graham, they uniformly tell tales of paralysis, deep decline of morale, and preoccupation with bureaucratic adjustments in jobs and functions that last months and months. The authors of such changes later expressed doubts that structural changes matter much. In the oral histories I did for the National Research Council's committee on the previous OERI reauthorization, the following remarks were made about reorganizations that had taken place from the mid-1970s to the mid-1980s: Virginia Richardson, head of research on teaching at NIE, said there was "more cost than benefit"; Sally Kilgore, director of the Office of Research, said it was an "incredible distraction"; Chester Finn, assistant secretary of OERI, said, "The more I've been here, the less I think that you cause change by moving boxes around"; and Ernest Boyer, commissioner of education, said, "Structure is almost totally inconsequential."[72] Isn't that some sort of bipartisan consensus? Before politicians undertake to save OERI by abolishing it and starting over, recall that one never "starts over" in Washington bureaucracies. New structures will not change ongoing obligations, existing staff, and—more important—existing attitudes. What is wrong is something deeper than structure and harder to change.

I agree with Vinovskis's central emphasis on the gradual, regrettable dilution of the research orientation and research capacity of OERI, a woeful, vicious circle. I join him in applauding Kent McGuire's emphasis on repairing this capacity. I agree with his well-phrased statement that there is no easy or ideal answer. I agree that the main problems are research capacity, stability, leadership, and focus. Repairing these does not preclude some structural changes within the framework of OERI. The notion that something like the success of NCES could be replicated on the research side of OERI lingers. Some have urged a fixed term for the head

of OERI. I do not know what kind of animal a fixed-term assistant secretary is. It sounds like a mythical animal, like Doctor Doolittle's Push-me-Pull-you, with two heads. But perhaps there could be a commissioner of education research parallel to the commissioner of education statistics, in charge of a Center for Education Research.

These changes might facilitate a renewed dedication to quality research, with the assistant secretary still in charge of the office as a whole, with a reduced portfolio of improvement activities, plus two centers with fixed-term commissioners. The twin demand would be to reduce the fragmentation of the research agenda itself. Vinovskis rightly points out that this will necessitate hard thinking about the role of the labs and centers, and, I would add, the five institutes within OERI, which are diverse in their coverage and have not fulfilled their potential following that structural change within OERI. They were not funded as amply as some had hoped. Their directorships were too long filled with acting appointments, and then permanently with agency staff, not the visible outsiders who would bring new energy and prominence to the agency's research mission. Apart from these considerations, if OERI adopts the proposal of the National Education Research Planning and Priorities Board for a more focused research agenda, it will mean that the structure and activities of the institutes need to be reevaluated.

These commitments—to revitalize the central research mission of OERI and to focus its research agenda on a shorter list of priorities—might mean internal structural changes of some magnitude. But they would remain within the structure of OERI. Abolishing the agency to keep it from politics is, I think, wishful thinking. Abolishing it to escape its reputation and its diminished capacity avoids the issues that have led to its low reputation and its diminished capacity, issues that will not go away with a new acronym and a new address. What is needed is a new consensus; a consensus spanning Congress, the secretary of education's office, the agency itself, the research community, and the leaders of policy and practice groups; a consensus that OERI must define, sponsor, evaluate, synthesize, and use high-quality research around a focused agenda of long-term, practical importance. It would follow from such a consensus that OERI must recruit a small cadre of research leaders. It needs to have in place shortly after the new administration takes office an energetic assistant secretary with first-rate credentials in research leadership and the uses of research. It will have to redirect the existing staff to

a new priority on quality—quality peer review, quality monitoring, and new opportunities for professional development directly related to research. To survive, the agency will have to dedicate itself to the proposition that better work on a smaller agenda is mandatory.

The agency desperately needs to reverse the downward spiral of low performance, low respect, low expectation, and low resources. The agency should not be cast aside, and in my opinion, its salvation does not depend mainly upon restructuring. Instead, OERI needs a change of will, a sense of urgency that the work must be done better, and a newfound confidence that it can be done better. Perhaps this will not happen until (in the words of the 1960s rock song) "the moon is in the Seventh House and Jupiter aligns with Mars," but it is, nonetheless, what the agency needs.

Comment by Thomas K. Glennan Jr.

Maris A. Vinovskis has provided a comprehensive analysis of the problems that the U.S. Department of Education (and previously, the Department of Health, Education, and Welfare) has faced in creating an effective research and development (R&D) program. Basing his analysis on his deep knowledge of the history of the Office of Educational Research and Improvement (OERI) and its predecessor, the National Institute of Education (NIE), he sets forth seven problems that have inhibited the conduct and sponsorship of educational R&D in the department:

1. The lack of sufficient autonomy, independence, and prominence of the organizational locations of the departmental R&D enterprise.

2. The limited numbers and low quality of staff, particularly in recent years.

3. Limited resources to support R&D.

4. The fragmented, episodic, and short-term nature of the individual R&D efforts.

5. Low quality in the research and development itself.

6. Turnover in top agency leadership and uneven quality in the middle-level management leaders.

7. Overly strong emphasis of politics (as opposed to science merit) in the development of the agency's agenda.

As the first director of NIE, I had intimate familiarity with many of the problems Vinovskis cites in the early years of federal support for education R&D. I know little of the activities of the 1980s and early 1990s. Recently I have been working on issues of research quality with the current OERI leadership. On the basis of this incomplete experience, I find little quarrel with the facts he presents and the picture that he paints. However, the fairly even-handed painting of his picture may provide a potpourri of suggested reforms when a narrower and more focused effort is required.

In my view, much of the situation that OERI faces today can be traced to the pattern of funding for educational research since the early 1970s when NIE was created. NIE was established in response to many of the same concerns that Vinovskis outlines; for example, poor-quality and fragmented research, inadequate funding, too many politically motivated projects, a lack of organizational independence, and inadequate staff talent. NIE was provided independence, the opportunity to hire new staff, and, by today's standards, fairly substantial funding. NIE's first-year budget was nearly $500 million in today's dollars, and the Nixon administration asked for a substantial increase for its second year.[73]

In fiscal 1973 NIE's proposed budget contained nearly the only request for increased funding in the entire federal educational budget, a fact that did not endear it to the legions of lobbyists for various education causes. NIE (and its intended mission) began life with the unenviable role of being the Nixon administration's excuse for not spending more on education. Moreover, the mere establishment of a new agency did not increase Congress's dim view of the quality of educational research. The leadership of NIE clearly failed to build the needed support in Congress and with important elements of the education community. The result was not only a failure to obtain the hoped-for increases in funding but also a 50 percent cut in the appropriations for research from nearly $500 million in fiscal 1973 to just over $200 million in fiscal 1974 (1999 dollars).

It is hard to overstate the negative consequences the cut had for the agency. It had been successful in attracting capable new staff, but many were quickly thrown into scaling back existing programs rather than building the new ones that NIE had been intended to create. While little doubt exists that, from a scientific perspective, many of the programs that NIE tried to eliminate had little value, the need to make the cuts further exacerbated the divisive political wrangling that has so frequently

characterized the NIE and OERI reauthorizations and appropriations over the years.

From fiscal 1974 through 1980, NIE continued with funding at a little less than $200 million a year (1999 dollars). Some important planning was done and research supported. However, beginning with the Reagan administration, funding steadily fell, reaching levels as low as $65 million (1999 dollars) around 1990.[74] Since that time, educational research funding in OERI has begun to rise and in fiscal 1999 stands at about $160 million, still only a small fraction of what was contemplated at NIE's founding.[75]

From my perspective then, the key problems of federal education research stem from its low funding and dysfunctional political battles over dividing up that limited funding. The key to future success of federal support for educational R&D is obtaining more funds and resisting the temptation to spread them among many potential claimants. The best hope for more funds is to clearly demonstrate the value of educational R&D and the capacity of OERI to manage that R&D. While I do not doubt that many or all of the changes that Vinovskis proposes are desirable, I think that the time they require and the political energy that is likely to be needed to achieve many of them will detract from this important task.

To demonstrate the usefulness of effective and focused education R&D, I would avoid devoting limited managerial resources to immediate restructuring of the existing research programs. Instead, I would focus on the effective use of the limited increases in funding now being provided by Congress in this time of high national concern about education and economic prosperity. I would emphasize a small number of problem areas of unquestioned national importance such as literacy and numeracy, and I would frame the research program in a way that sets that program on a (perhaps ten-year) course to making major contributions to solving those problems.

In the near term, OERI probably lacks the ability to recruit first-rate intellectual leadership to its regular staff. But this does not seem to be the most important near-term goal. What seems far more important is to engage some of the best minds in the field in the planning, conduct, and assessment of the performance of the programs. Perhaps leading members of the research and practice community can be brought together in study

groups, panels, or networks to perform these functions. In doing this, OERI should draw upon the managerial experience of more credible research agencies such as the National Institutes of Health and the National Science Foundation (NSF), which rely heavily on members of the research community to plan research and evaluate proposals and progress.

While the full value of such an effort will be known only some time in the future, let me propose some indicators by which Congress, the public, and the educational community can judge the conduct of the program:

—It attracts solid research performers and creates an active and exciting research community.

—It engages practitioners both as performers and users; the work is continually tested against the needs of users.

—It actively promotes the accumulation of understanding, providing regular reflection on what has been learned and what new work is needed.

—It discards unproductive lines of inquiry.

—The work of the program involves development—it produces programs, embodying the findings of research that can be demonstrated to be effective.

Most important, perhaps, such programs lead to a critical mass of individuals and institutions that are engaged in sustained inquiry and development.

Program elements needed to carry out such problem-centered program efforts are already in place. OERI, NSF, and the National Institute for Child and Human Development (NICHD) have joined to carry out an Interagency Educational Research Initiative in fiscal 1999 and the Clinton administration has asked for increased funding for fiscal 2000. Parts of the field-initiated studies program might be focused on these priorities, and several of the National Research Centers and Regional Laboratories have important and relevant work under way or planned. The problem is to bring direction, coherence, and cumulativeness to the effort.

However, one factor emphasized by Vinovskis cannot be ignored. Limiting OERI's focus to a few key problems, engaging the best of the nation's research community in dealing with those problems, and selling the effort to Congress is critical. Without leadership capable and willing to do this, I fear federal support for education R&D will continue to have the features Vinovskis has laid out.

Notes

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5. For discussions of the new reforms, see Michael G. Fullan, "Turning Systemic Thinking on Its Head," *Phi Delta Kappan*, vol. 77, no. 6 (February 1996), pp. 400–07; John F. Jennings, ed., *National Issues in Education: Elementary and Secondary Act* (Bloomington, Ind.: Phi Delta Kappa International, 1995); John F. Jennings, *Why National Standards and Tests?: Politics and the Quest for Better Schools* (Thousand Oaks, Calif.: Sage Publications, 1998); Stanley Pogrow, "Reforming the Wannabe Reformers: Why Education Reforms Almost Always End Up Making Things Worse," *Phi Delta Kappan*, vol. 77, no. 10 (June 1996), pp. 656–63; Diane Ravitch, ed., *Debating the Future of American Education: Do We Need National Standards and Assessments?* (Brookings, 1995); Diane Ravitch, *National Standards in American Education: A Citizen's Guide* (Brookings, 1995); Robert Rothman, *Measuring Up: Standards, Assessment, and School Reform* (San Francisco: Jossey-Bass, 1995); Mary Jean Le Tendre, "Supporting School Reform through Title I," *Journal of Education for Students Placed at Risk*, vol. 1, no. 3 (1996), pp. 207–08; and Maris A. Vinovskis, "An Analysis of the Concept and Uses of Systemic Educational Reform," *American Educational Research Journal*, vol. 33, no. 1 (Spring 1996), pp. 53–85.

6. Robert E. Slavin, "Design Competitions: A Proposal for a New Federal Role in Educational Research and Development," *Educational Researcher*, vol. 26, no. 1 (January/February 1997), p. 22.

7. Kursch, *The United States Office of Education*; Warren, *To Enforce Education*.

8. For example, see Victor W. Hennigsen III, "Reading, Writing, and Reindeer: The

Development of Federal Education in Alaska, 1877–1920," Ed.D. dissertation, Harvard University, 1987; Paul C. Pickett, "Contributions of John Ward Studebacker to American Education," Ph.D. dissertation, University of Iowa, 1967; Darrell H. Smith, *The Bureau of Education: Its History, Activities, and Organization* (Johns Hopkins University Press, 1923); and Stephen J. Sniegoski, "John Eaton, U.S. Commissioner of Education, 1870–1886," December 1994.

9. For discussions of the state of educational research in this period, see Benjamin S. Bloom, "Twenty-Five Years of Educational Research," *American Educational Research Journal*, vol. 3, no. 3 (May 1966), pp. 211–21; Orville Brim Jr., *Sociology and the Field of Education* (New York: Russell Sage Foundation, 1965); John B. Carroll, "Neglected Areas in Educational Research," *Phi Delta Kappa*, vol. 42, no. 8 (May 1961), pp. 339–46; Arthur P. Coladarci, "More Rigorous Educational Research," *Harvard Educational Review*, vol. 30, no. 1 (Winter 1960), pp. 3–11; Lee J. Cronbach and Patrick Suppes, eds., *Research for Tomorrow's Schools: Disciplinary Inquiry for Education* (New York: MacMillan, 1969); and Carter V. Good, "Educational Research after Fifty Years," *Phi Delta Kappan*, vol. 37, no. 4 (January 1956), pp. 145–52.

10. Richard A. Dershimer, *The Federal Government and Educational R&D* (Lexington, Mass.: Lexington Books, 1976); and Lee Sproull, Stephen Weiner, and David Wolf, *Organizing an Anarchy: Belief, Bureaucracy, and Politics in the National Institute of Education* (University of Chicago Press, 1978).

11. Robert Glaser, ed., *Improving Education: Perspectives on Educational Research* (Pittsburgh, Pa.: National Academy of Education, 1984); and Philip Zodhiates, "Bureaucrats and Politicians: The National Institute of Education and Educational Research under Reagan," Ed.D. dissertation, Harvard University, 1988.

12. Some policymakers such as former representative John Brademas and former secretary of education Terrel Bell would have preferred that the Office of Educational Research and Improvement (OERI) be abolished and all of the research and development (R&D) activities placed in the National Institute of Education (NIE). John Brademas, *The Politics of Education: Conflict and Consensus on Capitol Hill* (University of Oklahoma Press, 1987), p. 76.

13. Maris A. Vinovskis, *Changing Federal Strategies for Supporting Educational Research, Development, and Statistics* (Washington: National Educational Research Policy and Priorities Board, 1998), pp. 25–26, 34–35. The budgets for OERI have been reconstructed from OERI documents and the House and Senate appropriation committee reports. I am indebted to Thomas Brown of OERI in particular for his assistance in assembling the recent budgets. For analytic purposes, OERI budget funds for the library programs were excluded as the unit was run separately from the other operations.

14. While Congress has pushed for the transfer of other research-related programs in the Department of Education to OERI, so far little has been accomplished. While the Department of Education has said that OERI is now coordinating and overseeing much of the other research-related activities, in practice OERI has not increased its involvement significantly.

15. Remarks made at *Education Research*, hearings before the Senate Committee on Health, Education, Labor, and Pensions, April 14, 1999.

16. Some individuals in OERI expressed surprise and strong disappointment with Assistant Secretary Kent McGuire's proposal to transfer some of the nonresearch functions elsewhere. They felt that there is no reason that an agency such as OERI should not handle both research and more direct reform-oriented activities. While these critics may be correct in principle, in practice OERI has become so bereft of researchers that it may be necessary

to shed these more service-oriented activities to refocus the energies of the agency on research and development. If as the more service-oriented programs are transferred elsewhere the full-time equivalents (FTEs) of the individuals who administered them are also shifted out of OERI, the overall benefits to the agency would be considerably diminished.

17. On the difficulties of doing systematic program evaluations in the Department of Education, see Maris A. Vinovskis, "Missing in Practice?: Systematic Development and Rigorous Program Evaluation at the U.S. Department of Education," paper presented at the Conference on Evaluation of Educational Policies, American Academy of Arts and Sciences, Cambridge, Mass., May 13–14, 1999.

18. The nature of the program evaluations would vary according to the types of information needed. For the most rigorous and statistically reliable studies, the use of randomized-assignment control groups should be considered—though the much higher costs of these efforts will limit the number of studies that can be expected to employ this approach. Planned variation projects, building upon the work of the early 1970s in educational evaluation, can be profitably used in many other instances. And more limited and less costly information might be routinely gathered in most projects to provide guidance and feedback to local areas to help them make any necessary improvements. Testimony of Maris A. Vinovskis, "Improving Federal Educational Research, Development, and Evaluation," *Overview of Federal Education Research and Evaluation Efforts*, joint hearings before the House Committee on Education and the Workforce and Senate Committee on Health, Education, Labor, and Pensions, June 17, 1999.

19. On the problems of reorganization, see Carl F. Kaestle, "The Awful Reputation of Education Research," *Educational Researcher*, vol. 22, no. 7 (January/February 1993), pp. 23–31; and Grady McGonagill, "Reorganization—Faith and Skepticism: A Case Study of the 1977–78 Reorganization of the National Institute of Education," M.A. thesis, Harvard University, 1981.

20. The figures on changes in staff FTEs were provided by Sharon Taylor of the Department of Education, Budget Services, May 1997.

21. Robert Boruch, "The Importance of Randomized Field Trials in Education and Elsewhere," paper presented at the Conference on Evaluation of Educational Policies, American Academy of Arts and Sciences, Cambridge, Mass., May 13–14, 1999; and Thomas Cook, "Considering the Major Arguments against Random Assignment: An Analysis of the Intellectual Culture Surrounding Evaluation in American Schools of Education," paper presented at the Conference on Evaluation of Educational Policies, American Academy of Arts and Sciences, Cambridge, Mass., May 13–14, 1999.

22. Diane Ravitch, "The State of the Agency," *OERI Bulletin*, no. 1 (Winter 1992–93), p. 2.

23. One does not necessarily have to be a trained and experienced researcher to be a good OERI assistant secretary—and several of the better assistant secretaries were not distinguished researchers themselves. However, they do have to have an understanding and appreciation of the strengths and weaknesses of the fields of research and development. Moreover, they should have at least some capable researchers on their staff and in leadership positions to help them develop and implement appropriate research and development strategies.

24. On the general weakness of the field of education research and development as well as the poor reputation of its scholars, see Alexander W. Astin, "The Decline in Public Faith in Education Research," in Manuel J. Justiz and Lars B. Bjork, eds., *Higher Education Research and Public Policy* (New York: MacMillan, 1988), pp. 147–56; Kaestle, "The Awful Reputation of Education Research"; Lagemann, "Contested Terrain"; Gerald

E. Sroufe, "Improving the 'Awful Reputation' of Education Research," *Educational Researcher*, vol. 26, no. 7 (October 1997), pp. 26–28.

25. Zodhiates, "Bureaucrats and Politicians."

26. See Vinovskis, *Changing Federal Strategies for Supporting Educational Research, Development, and Statistics.*

27. For example, see Richard C. Atkinson and Gregg B. Jackson, *Research and Education Reform: Roles for the Office of Educational Research and Improvement* (Washington: National Academy Press, 1992).

28. National Educational Research Policy and Priorities Board, *Investing in Learning: A Policy Statement on Research in Education* (Department of Education, April 5, 1999), p. vii.

29. Independent Review Panel on the Evaluation of Federal Education Legislation, *Measured Progress: An Evaluation of the Impact of Federal Legislation Enacted in 1994* (Department of Education, April 1999), p. 20. I was one of twenty-three members on the panel.

30. For a summary of this position as well as a refutation of it, see the testimony of Diane Ravitch at *Education Research*, hearing before the Senate Committee on Health, Education, Labor, and Pensions, April 14, 1999.

31. Astin, "The Decline in Public Faith in Education Research"; and Kaestle, "The Awful Reputation of Education Research."

32. On the lack of interest in long-term educational research and development, see Brademas, *The Politics of Education,* pp. 14–48.

33. General Accounting Office, *Education Information: Changes in Funds and Priorities Have Affected Production and Quality*, GAO/PEMD–88–4 (Washington, 1987).

34. Justiz and Bjork, *Higher Education Research and Public Policy*.

35. See Vinovskis, *Changing Federal Strategies for Supporting Educational Research, Development, and Statistics*.

36. The recent OERI research priorities plan is not adequate and was not available to be used in the allocation of funds for most of the current R&D centers. For example, see Maris A. Vinovskis, *History and Educational Policymaking* (Yale University Press, 1999), chapter 8.

37. Lynn Olson, "NRC Seeks New Agenda for Research: Proposal Calls for Year-Long Dialogue," *Education Week*, vol. 18, no. 31 (April 14, 1999), pp. 1, 27.

38. National Academy of Education, *Recommendations Regarding Research Priorities* (New York, March 1999).

39. National Educational Research Policy and Priorities Board, *Investing in Learning*, p. iv, emphasis in original.

40. The Senate Budget Committee Task Force on Education has raised questions about the structure and effectiveness of the National Educational Research Policy and Priorities Board (NERPPB). It recommends that the model of the National Assessment Governing Board (NAGB) be used instead. Senate Budget Committee Task Force on Education, *Prospects for Reform: The State of American Education and the Federal Role,* interim report (Washington, 1998). For a discussion of the strengths and weaknesses of NAGB, see Maris A. Vinovskis, *Overseeing the Nation's Report Card: The Creation and Evolution of the National Assessment Governing Board* (Washington: National Assessment Governing Board, November 1998).

41. Maris A. Vinovskis, "Analysis of the Quality of Research and Development at the OERI Research and Development Centers and the OERI Regional Educational Laboratories," OERI, June 1993.

42. Michael Timpane, *National Directions in Education Research Planning* (National Educational Research Policy and Priorities Board, December 1998), p. 8.

43. Vinovskis, "Missing in Practice?"

44. Vinovskis, "Improving Federal Educational Research, Development, and Evaluation."

45. For discussion of the Comprehensive Regional Assistance Centers, see Katrina G. Laguarda and others, *A Conceptual Framework for an Evaluation of the Comprehensive Regional Assistance Centers* (Washington: Policy Studies Associates, December 1997).

46. Vinovskis, "Improving Federal Educational Research, Development, and Evaluation."

47. On the uses of research in the area of adolescent pregnancy, see Maris A. Vinovskis, "The Use and Misuse of Social Science Analysis in Federal Adolescent Pregnancy Policy," Distinguished Lectures in the Social Sciences, Northern Illinois University, DeKalb, Ill., November 1989.

48. Roald F. Campbell and others, *R&D Funding Policies of the National Institute of Education: Review and Recommendations, National Institute of Education* (Department of Health, Education, and Welfare, 1975).

49. Atkinson and Jackson, *Research and Education Reform*.

50. Daniel B. Levine, ed., *Creating a Center for Education Statistics: A Time for Action* (Washington: National Academy Press, 1986).

51. Vinovskis, "Analysis of the Quality of Research and Development at the OERI Research and Development Centers and the OERI Regional Educational Laboratories."

52. P.L. 103–227, Title IX, Section 941 (h) (7).

53. National Educational Research Policy and Priorities Board, *Attaining Excellence: A Handbook on the Standards for the Conduct and Evaluation of Research Carried Out by the Office of Educational Research and Improvement* (Department of Education, April 1999).

54. Diane August and Lana D. Muraskin, "Strengthening the Standards: Recommendations for OERI Peer Review," Summary Report Draft, National Educational Research Policy and Priorities Board, January 30, 1999.

55. For a discussion of the difficult issues involved in ascertaining the quality of the work in these areas, see Maris A. Vinovskis, "An Analysis of the Proposed Phase Three Standards for the Conduct and Evaluation of OERI Activities," background paper prepared for OERI, March 26, 1997; and Maris A. Vinovskis, "Measuring the Interim Performance of the Regional Educational Laboratory's Educational Research and Development Activities," background paper prepared for the U.S. Department of Education, October 4, 1998.

56. See Vinovskis, *Changing Federal Strategies for Supporting Educational Research, Development, and Statistics*.

57. For example, see Paul E. Resta, "The Depoliticization of Educational Research," in Manuel J. Justiz and Lars G. Bjork, eds., *Higher Education Research and Public Policy* (New York: MacMillan, 1988), pp. 157–73.

58. Testimony of Diane Ravitch at *Education Research*, hearing before the Senate Committee on Health, Education, Labor, and Pension, April 14, 1999.

59. Personal communication of Chester E. Finn Jr. to Carolyn Breedlove, July 23, 1981. Quoted in Carolyn Jean Breedlove, "Origins of a Conflict: The National Institute of Education, the Laboratories and Centers, and the Congress, 1972–1976," Ed.D. dissertation, University of Illinois, 1996, p. 163.

60. For a useful summary of the developments in the sciences, see Joseph P. Martino, *Science Funding: Politics and Porkbarrel* (New Brunswick, N.J.: Transaction Publishers, 1992).

61. Constance Ewing Cook, *Lobbying for Higher Education: How Colleges and Universities Influence Federal Policy* (University of Michigan Press, 1998).

62. On the abuses in the use of federal funds to support political activities of the nonprofit groups in science-related activities, see James T. Bennett and Thomas J. DiLorenzo, *Cancer Scam: Diversion of Federal Cancer Funds to Politics* (New Brunswick, N.J.: Transaction Publishers, 1998).

63. Zodhiates, "Bureaucrats and Politicians."

64. Carol Innerst, "Goodling Plans Effort to Stop National Tests: Critics Fear Rise of National Curriculum," *Washington Times*, July 31, 1997, p. A7; Millicent Lawson, "House Blocks, While Panel Settles On, New Tests," *Education Week*, vol. 17, no. 13 (November 19, 1997), pp. 1, 20; and Millicent Lawson, "Test Proposal to be Tested by Experts," *Education Week*, vol. 17, no. 13 (November 19, 1997), pp. 1, 20.

65. "Pat Forgione is a strong and energetic leader of the National Center for Education Statistics [NCES]. In his brief time in that post, he has accomplished a great deal. He has ensured the quality and timeliness of publications, vigorously pursued the use of the World Wide Web to make NCES statistics more widely and readily available, and reorganized his staff in ways that connect their talents and interests more effectively with the work to which NCES is committed. All the while he has managed to have the agency respond successfully to an ever-increasing scope of work without increases in staff available to perform that work," wrote Andrew C. Porter, chair of Advisory Council of Education Statistics, to Richard W. Riley, secretary of education, November 3, 1998.

66. "For the past eight years, Mr. Forgione said, he has applied for an extension before the April 15 filing deadline for federal income-tax returns. But each of the years until this one, he missed the Aug. 15 deadline granted under those extensions. He has not paid penalties or been subjected to criminal charges, he said, because each year he has been due a refund. But the pattern has created an ethical cloud that administration officials did not want, he said. Mr. Forgione decided to withdraw his name from consideration last week so he can pursue others jobs." David J. Hoff, "Renomination Blocked, Forgione to Depart," *Education Week*, vol. 18, no. 37 (May 26, 1999), p. 3.

67. Considerable controversy arose over the appropriateness of Vice President Al Gore, instead of the commissioner of education statistics, releasing the 1998 National Assessment of Educational Progress report card. Mark Musick, chair of the National Assessment Governing Board, was among those protesting that Gore's actions violated established guidelines and procedures. Mark D. Musick, chair of NAGB, letter to Pascal D. Forgione Jr., commissioner of education statistics, February 18, 1999.

68. For discussions of this episode, see Jonathan Fox, "Forgione Resigns Post as Top ED Statistician," *Education Daily (*May 20, 1999), pp. 1–2; Jonathan Fox, "Politics Blamed for Ouster of NCES Commissioner," *Education Daily* (May 27, 1999), pp. 1–2; Hoff, "Renomination Blocked"; and David J. Hoff, "Republicans Vow to Free NCES from Political Meddling," *Education Week*, vol. 18, no. 38 (June 2, 1999), p. 18.

69. Senate Budget Committee Task Force on Education, *Prospects for Reform*, p. 25.

70. Levine, *Creating a Center for Education Statistics.*

71. Atkinson and Jackson, *Research and Education Reform*.

72. Carl F. Kaestle, *Everybody's Been to Fourth Grade: An Oral History of Federal R&D in Education*, report prepared for the National Research Council, Committee on the Federal Role in Education Research (Madison, Wis.: Wisconsin Center for Education Research, April 1992), p. 31.

73. While counted as research in the historical data, important parts of the programming that the National Institute of Education (NIE) inherited from the Office of Education and

the Office of Economic Opportunity were demonstration programs of limited research merit, which NIE's leaders expected to complete and replace with more research-oriented activities.

74. In interpreting these figures as research, it is important to understand that NIE and the Office of Educational Research and Improvement (OERI) have always carried dissemination activities such as the Educational Resources Information Clearinghouses in their research category. In fiscal 1990, 13 percent of the research budget was devoted to these efforts, and significant proportions of the activities of the Regional Educational Laboratories and Educational Research Centers were devoted to dissemination and technical assistance.

75. As Maris A. Vinovskis points out, Congress in the mid-1980s began to increase the funding for educational statistics and the National Assessment of Educational Progress as well as to add significant demonstration and limited service programs to OERI's portfolio. OERI today is responsible for nearly $800 million in programs.