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ABSTRACT

A 1-day workshop preceded a meeting of the National Educational Research Policies and Priorities Board of the Office of Educational Research and Improvement (OERI) to help the Board consider the most appropriate structure for research and dissemination in education. The workshop opened with a presentation by William Raub, who provided a view on research and dissemination from the standpoint of biomedical research. Following a question-and-answer session, the next workshop session discussed the evolution, current state of affairs, and future plans of three aspects of the current OERI agenda: a national educational research center, a regional educational laboratory, and an additional ERIC clearinghouse. A session on historical context examined the development of the OERI and existing problems in the present OERI infrastructure. Another session discusses various perspectives on the institutions and resources needed to support an effective research and development system in education. The following papers are included as appendices: (1) "Toward a New Federal Role in Dissemination and Knowledge Utilization" (Karen Seashore Louis); (2) "Teacher Education Accreditation: The Unheralded Engine for the Dissemination of Educational Research" (Arthur Wise); (3) "The Development and Effectiveness of Federal Compensatory Education Programs: A Brief Historical Analysis of Title I and Head Start" (Maris Vinovskis); (4) "The Experience of a National Research Center: Contributions to a Vision for a National Educational Research, Development, and Dissemination System" (John Hollifield); and (5) "Outline of a Theory of Knowledge Utilization To Guide Strategic Planning by the Office of Educational Research and Improvement" (Willis Hawley). A list of participants and biographies of presenters are included. (SLD)

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Envisioning an Educational Research, Development, and Dissemination System

FINAL REPORT

U.S. Department of Education
National Research and Priorities Board Room
Washington, DC

March 20, 1997

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WORKSHOP SUMMARY
ENVISIONING AN EDUCATIONAL RESEARCH, DEVELOPMENT AND DISSEMINATION SYSTEM

OERI NATIONAL EDUCATIONAL RESEARCH POLICY AND PRIORITIES BOARD
MARCH 20, 1997

Introduction

This one-day workshop preceded a scheduled meeting of OERI's National Educational Research Policies and Priorities Board (the Board) for the purpose of helping the Board grapple with the question of what is the most appropriate structure for research and dissemination in education. The workshop presented the opportunity to start a process of reflection and investigation and to uncover some of the persistent barriers in infrastructure to research and innovation in education.

The workshop was structured as a series of discussions between Board members and invited presenters who represented various constituencies of the U.S. research community outside of OERI, as well as those funded through OERI. (See list of participants and biosketches.)

The workshop was facilitated by Carl Kaestle of the University of Chicago, who was also a presenter.

The workshop was transcribed by a shorthand reporter and recorded on audio tape.

The View From Another Discipline

William Raub, Deputy Assistant Secretary for Science Policy in DHHS and former Acting Director, the National Institutes of Health (NIH), opened the workshop with his presentation on "Strategic Approaches to Funding Biomedical Research."

Using the example of the NIH, Dr. Raub identified what he considered to be the primary reasons behind the success of the NIH and of biomedical research for the last five decades. These are: 1) access to sufficient resources and strong public and Congressional support; 2) the luxury of being able to simultaneously pursue basic, targeted and integrated research; 3) availability of research grants and other subsidies aimed at supporting the research community in general and training a generation of future scientists; 4) availability of research funds which are earmarked to promote social change; and 5) methods of assisting the integration of their research into industry. He stressed that without the NIH's access to adequate resources this level of success would have been less likely. (See Appendix A for a summary of Dr. Raub's presentation.)

The Question and Answer session highlighted the following issues:

How to Target Research
First, NIH operates on the assumption that a sufficient base of knowledge exists in specific areas and that it is investments targeted to these areas that will yield definite results. NIH also assumes, that it is those who are applying the knowledge who can best shine the light on where the real needs and opportunities exist, and considers the interaction between the clinician and the practitioner to be critical in the decisionmaking process. Often the decision about what to target is the result of a consensus between the clinician, practitioner and public advocates.

How to Gain a Similar Level of Respect for Education
While noting that education does not have the life and death appeal of biomedical research and thus, has a harder time getting its message across, Dr. Raub stressed that the message must still be made using grassroots involvement. In discussions with the Legislature it's important to go beyond, "I need more money," and to add "let me tell you the good thing that happened last week," supported by concrete examples of a key initiative by specific universities in specific Congressional districts. NIH does not have a separate department which makes these types of appeal and instead, relies on the interactions with the outside community. Everyone is involved in some way with this process.

How to Prevent Entropy in Research
It was noted that the peer review process in all disciplines tends to institutionalize scientific orthodoxy while disfavoring the cutting edge. Dr. Raub felt that within NIH this tendency is undercut by the commitment to basic science, and so the vast majority of innovative ideas are accepted. Problems are managed on a case-by-case basis. An appeals process has, in the past, overridden the decision of the peer review process, particularly where the researcher has a track record and the primary reason for the initial decision appears to have been the unwillingness to take risks. The Request for Application (RFA) process also allows the Institute to initiate cutting edge work.

How to Ensure that Research is being Processed
Those present noted that OERI has no way of ensuring that the results of previous research are being learned, processed and applied, and that, therefore, no one has a good sense of what is being learned. Dr. Raub stated that the NIH uses several mechanisms to address this issue, with the most useful being the publication of refereed literature. Funding units expect that any research worth funding has reviewed the literature and the peer review process will not fund anyone who has not published their findings. Additionally, the health care industry is very aggressive in using and assimilating research findings.

Intra-Agency Staff Development
NIH trains two main cadres: 1) Health scientist administrators, many trained as physicians but who don't want to practice and who manage grant programs; and 2) Grants managers who oversee fund management and grantmaking procedures.

In conclusion, Dr. Raub stressed the need to find the features that have been successful in the health areas that can work for education.

Overview of Current RD&D System

This session discussed the evolution, current state of affairs and future plans for three separate components of the current OERI Research Development and Dissemination (RD&D) system: a national educational research center, a regional educational laboratory, and an ERIC (Educational Resources Information Center) clearinghouse.

John Hollifield, Director for Dissemination, Center for Research on the Education of Students Placed at Risk (CRESPAR), provided one example of what a research center funded by OERI looks like. CRESPAR conducts research on student outcomes and everything that affects what, how and why students learn, with students-at-risk the primary population under study. The center's current focus includes the development and evaluation of actual programs that can be used to apply some of the research findings. Mr. Hollifield described the center's struggle to get schools to incorporate their research findings in their work and concluded with a description of the center's goal for the next ten years. (See Appendix B for a summary of Mr. Hollifield's presentation.)

Tim Waters, Executive Director of the Mid-continent Regional Educational Laboratory (McREL), provided the view from the practitioner's side (based on his years in the field) and from that of a regional lab. His view of the role of labs in the OERI RD&D system is based on his experiences as a practitioner, whose primary needs are: a) help with integrating into their work the research being done in the labs and institutes; and b) partners who will develop products and practices which have been tested, are effective, and can be used in the field. Dr. Waters described how McREL is meeting this need for its constituents and concluded with his view of the future issues with which the lab will need to grapple. These include contributing to the search for solutions to some of the nation's biggest problems--closing the gaps between the haves and have nots in the school systems, financing mechanisms for public education, and finding answers to the questions of what should be the common educational experience for all children in a democracy. (See Appendix B for a summary of Dr. Waters' presentation.)

Lawrence Rudner, Director of the ERIC Clearinghouse on Assessment and Evaluation, discussed ERIC's current status and future goals. Dr. Rudner described the services provided by ERIC. These include an online service used by millions of teachers and parents to access such products as lesson plans, instructional materials and teaching guides, as well as information on such issues as performance-based assessment, models and evaluations for year round schools and block scheduling. Future plans include getting a better idea of the extent to which their services are used and for what purposes, improved acquisition and increased dissemination. (See Appendix B for a summary of Dr. Rudner's presentation.)

Teacher Involvement and Ownership

One Board member wondered whether the lack of teacher interest in research may be the result of the lack of involvement of teachers in the planning and development phases. Both CRESPAR and McREL stressed that they work with teachers, but also questioned the feasibility of getting all teachers and schools involved in developing everything they need to use. The Board member urged the research centers and labs to give teachers accurate information and for the ERIC clearinghouses to verify the accuracy of information before putting it online.

Historical Context

This session examined the evolution of OERI and identified existing problems within the current OERI infrastructure.

Carl Kaestle, Professor of Education, the University of Chicago, began this session with a discussion of his previous involvement in the study of OERI's infrastructure, and with a short list of the "well known litany" of problems within the Agency. Noting that the problems tend to reinforce each other, he pointed to the need for an attitudinal change to accompany the infrastructural changes in order to stop the vicious cycle of low morale and low results. Dr. Kaestle identified two inter-related and equally important priorities for the Agency: a) reviewing of proposals; and b) accumulation of results. Dr. Kaestle ended with a plea for stability in the Agency structure and top personnel. (See Appendix C for a summary of Dr. Kaestle's presentation.)

Maris Vinovskis, Professor of History, University of Michigan, discussed the current vision of Federal research and policy, its record, recent developments in OERI, and the current transition. As a former Research Advisor to the Assistant Secretary of Education at OERI he presented from the perspective of an outsider with some inside knowledge based on his previous term in the Agency. His major criticism was that the focus on poverty and the disadvantaged and the original goal of closing the gaps in opportunities has been lost, and with devastating results. Dr. Vinovskis identified several factors which he felt have contributed to this state of affairs, including: a) insufficient attention to different models and programs and whether or not they work; b) fragmentation of OERI labs and the absence of a coordinating structure; c) depletion in Agency staff and the absence of researchers; and d) lack of stability in the Agency's top personnel. One bright spot, Dr. Vinovskis felt, has been the development of high standards for applications and review which he urged the Board to continue. (See Appendix C for a summary of Dr. Vinovskis' presentation.)

Emerson Elliott, former Director, National Center for Education Statistics (NCES), served as Commentator to this session. He also presented a critical view of the current state of affairs in OERI. Mr. Elliott stated that OERI's current agenda held a narrow view of education RD&D when compared to the original vision from the 1960s. The contributing factors, he felt, are the

decreased emphasis on curriculum development and on testing materials to be used in classes to reform education, and the absence of the large centers and labs to contribute to teacher training. He also noted the negative effect of staff cuts on the Agency's internal capacity to deal with complex issues and problems. He urged the Board to figure out what facilities are required for them to get their work done by relating their work back to their program agenda and then deciding on the mechanisms needed to get the work done. Using the NCES as a model, Mr. Elliott suggested several starting places for this work, including: a) initiating a discussion with Institute directors about their work, the topics they think are important and what needs to be done with the results; b) setting an agenda and boundaries for the Agency; c) knowing and creating a role for the Agency; d) identifying allies and getting their comments on how to improve; and e) engaging the organization as a whole and working with the Agency staff to strengthen them. (See Appendix C for a summary of Mr. Elliott's presentation.)

The ensuing discussion focused on one issue:

OERI's Role in the Current Political Context
Several Board members and presenters provided examples of how OERI, its agencies and their research can be used by policymakers and other constituencies to support political initiatives and issues. Several suggestions were made to avoid getting drawn into this fray, including: a) handing over controversial topics to a commercial entity; b) avoiding support of specific initiatives; c) acting as a truthsayer rather than as an advocate; d) ensuring that an atmosphere in which people can disagree and express and pursue their opinions exists within the Agency; and e) being aware of the subtle attempts to get a specific position endorsed. Kenji Hakuta stressed that OERI is an advocate for the role that research can play in addressing the issues.

Looking to the Future

This session presented and discussed various perspectives on the institutions and resources needed to support an effective RD&D system in education.

Arthur Wise, President, National Council for Accreditation of Teacher Education (NCATE), began this session by promoting what he called the "alien or novel idea" of the connection between education research and teachers colleges. He said that the major role that colleges already play in dissemination of R&D is neither understood nor exploited as effectively as it might be. He argued that the Federal government, in general, and OERI, in particular, ignore the colleges as instruments of change. Dr. Wise urged that OERI have, as a key goal, enhancing the intellectual base of the colleges, and concluded that with attention from the Board, teachers colleges could become an effective part of the dissemination system. (See Appendix D for a summary of Dr. Wise's presentation.)

Dena Stoner, Executive Director, Council for Educational Development and Research (CEDaR), shared her view that education RD&D has been overly managed and underled and described her first exposures to this sector, which were predominantly negative ones. In her current role with CEDaR, however, Dr. Stoner has had an opportunity to address infrastructural issues, to focus on research and policy and to witness the successful development of a coalition of RD&D institutions called "IGAR" that worked closely together during the last reauthorization. Dr. Stoner referred to this process as the "beginning of a culture change." She went on to identify several key issues for the Board to address, including: 1) fitting OERI into a decentralized system called education; 2) protecting the critical mass by identifying a few key things on which to work; and 3) figuring out OERI's role in ensuring that access to innovations does not depend on one's ability to afford them. (See Appendix D for a summary of Dr. Stoner's presentation.)

Karen Seashore Louis, Associate Dean of the College of Education and Human Development, University of Minnesota, focused on the dissemination side of OERI's mission. Dr. Louis began by describing an incredibly fragmented and incoherent infrastructure which is driven by the existing knowledge base, insensitive to current policy dilemmas, and impossible for practitioners to access. Despite criticisms of the 1970s and some innovations by parts of the system as a whole, she argued, the system has kept intact the same basic and problematic pieces. Dr. Louis described several recent failures in order to support her point. Dr. Louis also stated that the advances in technology and the widespread ease of accessing information--on the Web for instance--have changed the focus of the dissemination problem to how to sort the existing information and how to decide what is of decent quality. She urged that the Board, in its reorganization of OERI, begin to rethink what dissemination means and what the existing infrastructure needs to be doing in light of these technological changes. Dr. Louis identified several areas for OERI to consider, including: 1) conducting research on the intersection between knowledge and school improvement, 2) developing Federal policies to stimulate research, dissemination and knowledge utilization; 3) relinking the professional and public interest in changing and improving education with a well developed research field on dissemination and knowledge utilization; 4) examining the role of new technologies and the new environment of information overload, not underload; 5) rethinking who the Agency is disseminating to; and 6) thinking of better ways to stimulate partnerships with industry.

Citing the "Roots and Wings" program as an example, Dr. Louis concluded that the field now knows enough to make a big dent in improving education, given the will to do so. (See Appendix D for a summary of Dr. Louis' presentation.)

Willis Hawley, Dean of the College of Education, University of Maryland, began his comments on this session by reiterating that the fundamental mission of OERI is to foster the quality of education through R&D. Noting that the issues confronting the enterprise are long standing, he said that the task now is how to think about them differently. Using the funding problem as an example, Dr. Hawley identified a supply and a demand side of this issue. On the one hand, the lack of funding is tied to the lack of support from the educational community. This

lack is, in turn, related to the fact that teachers and other potential users do not see a connection between the research-based knowledge they have and the research itself. On the other hand, the research to which people have access lacks credibility as people can find support for whatever position they wish to advocate. Dr. Hawley urged OERI to take the risky and difficult step of beginning to identify which practices and ideas are better. Finally, he noted that OERI cannot do everything and provided seven suggestions for priorities: 1) work with professional organizations to promote effective dissemination; 2) focus on critical issues in education so that these issues become part of other program areas in the department; 3) provide quality control, peer reviews, and the types of incentives NIH gives to promising scholars; 4) support practice or policy-ready research; 5) know more about dissemination and focus on users; 6) provide leadership in keeping with the mandate; and 7) work on the structure and on the professional development of staff. (See Appendix D for a summary of Dr. Hawley's presentation.)

The Question and Answer session which followed highlighted the following issues:

The Future of the Industry and Technological Innovation
It was noted that the commercialization of innovation requires that appropriate rules of profitmaking be developed so that these innovations don't widen the equity gaps, as evidence suggests has been the case with the way NIH operates in this area.

A second concern was that of quality. It was noted that much of the software being sold have not been vetted for quality, which emphasizes a Federal role because of the real opportunity cost of introducing products of low quality into schools. Inversely, it's harder for the low income areas, where the need for the best is highest, to actually access the best products. Consequently, the Federal government bears some responsibility to coordinate assessment of materials and products. It was noted that this role is not incompatible with a private system because the emphasis is on quality.

Scaling Up Reforms
Most presenters wondered whether the reform process was at the appropriate stage for scaling up. Dr. Louis, for example, felt that most of the existing models were the equivalent of "Model-Ts" and that scaling up those models is unrealistic and undesirable at this stage. Citing the example of industry, she said the tendency is to see lots and lots of efforts that look interesting, but that it's typically later in the development stage that two or three products emerge that are worthy of production. She felt that education research is still in the early stages and that what is needed are more activities that involve research development and utilization based on existing research knowledge. Dr. Vinovskis also wondered where are the "treasure chests" worthy of scaling up and cited the need to focus on student outcomes in order to truly assess the benefits of existing reforms. Other presenters talked about the need to find the right models to scale up and to enable and empower people to make their own decisions, noting that any model works best when teachers adapt them to their environment. The need to know better why things fail was also mentioned.

A related question was the extent to which a body of knowledge had already been collected, sufficient to provide the needed answers through a process of sustained and repeated learning and of practice over a period of time. It was noted that the infrastructure already exists in OERI to help in this process. However, the missing, yet key, issue was that of providing sufficient funding and assistance in a focused enough manner to achieve real goals through the introduction of program grants, like the NIH's, which permit long term issues to be addressed without expectations of immediate payoff. Consequently, there was also the political problem of how to argue for the resources needed to implement the agenda being discussed.

This last comment moved the discussion toward the question of whether or not this cumulative body of knowledge does exist, and if so, of the need for new research to synthesize what was learned previously. It was felt that the Board could help to create a discussion that engages people in the field around this issue.

The Real World

One Board member expressed his frustrations with the funds spent on such reforms when there are schools, such as the one at which his wife teaches, where there are 800 pupils but only two bathrooms, a "library" which contains no books and which has to be used for classes, no Internet, and security concerns. At the same time, this same school district has the Epson Project, which "siphons" off money to run 15 and 20-sized classrooms. The Board member felt that the needs of the blue collar middle-class children are not being addressed.

Prioritization

One recurring and underlying theme was the need for the Board to make hard choices. It was noted that the education sector has not, in the past, been able to resist the temptation to pursue several issues because it couldn't choose. The Board was urged to identify the two or three issues on which it would focus its attentions over the next ten years, building staff expertise, and developing cross-agency interactions. Presenters provided the following advice and suggestions (not listed in order of priority) to assist in this process:

1. Address the big problems in education, e.g., urban education;
2. Address the issue of inclusiveness;
3. Provide increased funding and decreased politicization;
4. Avoid getting embroiled in the political agenda;
5. Consider how to put into practice the model which exists of an effective school;
6. Consider how to improve the ways in which students learn in schools;
7. Provide improved access to the things that are known to work;
8. Develop a carefully articulated vision to build the beginnings of the kind of political movement which exists at NIH;
9. Use the opportunity presented by the President's identification of Education as a top agenda item and the bipartisan feeling in Congress to help OERI effectively make the point that "children at risk" is a life and death issue;
10. Raise the awareness and change attitudes of the public to get their support in lobbying

for adequate resources for staff development of principals and teachers;

11. Instead of trying to do it all, set the agenda and commission papers, like the ones of the 1980s, to help provide the answers;
12. Start revisions on the research priority plan by identifying the impact and the critical points at which the Board wants to intervene and identify institutional ways to accomplish this;
13. Reshift the focus in the research priority plan to K-3 and summer learning;
14. Find things that work and advocate them so that the broader establishment can provide their support;
15. Get, as soon as possible, an articulate Assistant Secretary like the last one who will advocate for the Agency to make sure no ground is lost and who will turn things around;
16. Communicate the downside of the appointment of an interim, instead of a permanent, Assistant Secretary;
17. Hire additional staff at OERI with different types of qualifications;
18. Find a way to access the good ideas that typically never make it to the Board;
19. Talk to the OERI staff and try to address their problems and demoralization;
20. Establish intermediate agencies to carry out reform;
21. Continue on the current path, tweaking where it's needed, but without demolishing a system that's just getting where it needs to be;
22. Place emphasis on the Institutes to help them to do more;
23. Remove the distance between the Board and the Institutes by involving them in Board projects and meetings, and vice versa;
24. Make the Institutes, labs and centers focus on the issues of concern to the practitioners, which is how to address the needs of low income schools;
25. Have labs develop the type of data that enables the Board to make such decisions as, "What kind of money would it take to put *Success for All* in the school described above"; and
26. Place some trust in the field, i.e., researchers and practitioners, so that funders are more responsive to the issues coming up from the field and the classrooms.

The Board, on the other hand, indicated its desire to get future advice and input on:

- How to engage and invigorate staff and to let them know how to communicate to the Board;
- How to find out what the staff is doing and what their issues are;
- How to get staff opinions on the issues discussed today; and
- Suggested candidates for an Assistant Secretary.

They also expressed some distress at how quickly the research priority plan, which attempted to define areas, needs and the grounds on which constituencies can show up and talk to each other, and which involved a lot of work and had some positive features, has been discarded.

In response, several presenters argued that the Institutes were too numerous to be truly

effective. It was also argued that the Institute structure was not the result of a careful analysis of how to facilitate a discussion of the nation's problems. Instead, it was essentially politically motivated and outside of the range of most of OERI's resources and activities, and therefore, not the best construct around which to organize real study and research. It was also felt that many of the Institutes are not organized around identifiable problems or constituencies, as is the case with the NIH. It was noted that there are some successful components, which are also doing the entire range of research and dissemination activities. Others argued, that while problems exist with the Institute structure, the concept of institutes is key and should be the focus of any growth in the budget to address field research.

Improvements

The presenters noted some major improvements in the current OERI structure. They felt that labs are functioning at a much higher level than they have in the past and that OERI staff is functioning and working far better with the field now than has ever been the case before. Research with minority kids is making progress and a solid basis for moving forward exists, even if it needs more work.

Kenji Hakuta closed the meeting noting that the discussion will continue.

APPENDIX A
SUMMARY OF PRESENTATION: THE VIEW FROM ANOTHER DISCIPLINE

Dr. William Raub, Deputy Assistant Secretary for Science Policy, DHHS

Dr. Raub described those factors which have contributed to the success of the National Institutes of Health (NIH) system.

1. The NIH has access to sufficient resources because of the strong public advocacy for separate and distinct investments in biomedical research after World War II. Because they deal with life and death issues, the Institutes have a strong constituency, including strong Congressional bipartisan support, the research community, philanthropic organizations, and the lay community. Dr. Raub noted, for example, the enviable situation that each Institute is responsible for making its own case to the Appropriations Committee in Congress and has its own discrete appropriation from Congress. Philanthropic organizations are also effective in leveraging the public process to increase appropriations. Consequently NIH enjoys a position which few other public agencies have.

2. This access to resources has allowed NIH the luxury of being able to simultaneously pursue five principles of operation: *Commitment to Basic Research* which funds the pursuit of knowledge for knowledge's sake in the general belief that if the question is truly interesting, the answer is guaranteed to be useful somewhere, often with the potential for impact well beyond the areas of original interest; *Pursuit of Targeted Research* aimed at finding the answers to specific gaps in knowledge, with each success providing justification for that specific venture as well as for all the basic research which went before and made it possible; *Investigator Initiative*, which leaves the decision of what is to be studied up to individual researchers, as opposed to what a committee decides; *Peer Review* which provides heavy reliance on expert appraisal of the merits of proposals and acts as the primary screen that decides what is ultimately funded, allowing NIH to select from among the best proposals the most relevant ones for funding; and *Investigator Direction* which gives the researcher almost complete discretion in the pace and direction of their research, based on the belief that one ought to follow the data and where it leads.

3. Four administrative devices which serve the purpose of making things happen faster: *Research grants and fellowships,* to help train the next generation of scientists; *Subsidy of technology and instrumentation,* to provide shared access by NIH projects to expensive equipment; *Program project grants*, which make interrelated projects part of the same award; and *Center grants*, to provoke interdisciplinary research and to foster interplay between labs and clinic worlds.

4. NIH earmarks funds for the purposes of tweaking the research agenda in attempts to steer researchers toward socially worthwhile goals they might not have otherwise pursued, for example the study of addiction or the search for a cure to AIDS. Program Announcements and Requests for Applications inform the general public of NIH's interests and have been successful in steering research in the desired directions.

5. In order to assist the transfer of its research findings into industry, NIH has initiated the practice of unpatented agreements, giving the public access to ideas originating out of a Federal agency on a first-come basis.

Dr. Raub concluded his presentation with the prediction of a rosy future for the biomedical sciences based on the continued and strong bipartisan support which exists, as evidenced by recent statements, in Congress and the Appropriations Committee. He stressed, however, that the existing coalition and their strategy will be sustained successfully only for as long as resources hold, but will fragment if resources don't hold, because at that point they would have to make some hard choices about the direction to pursue. Access to resources is the primary basis for their success.

APPENDIX B
SUMMARY OF PRESENTATIONS: OVERVIEW OF THE CURRENT RD&D SYSTEM

John Hollifield, Director of Dissemination, CRESPAR

The Center for Research on the Education of Students Placed at Risk (CRESPAR) was created in 1967 as one of the first research centers but has existed in various forms and under various names. CRESPAR's mission, however, has always been student outcomes and everything that affects what, how and why students learn, with students at risk the primary population under study. The center began with an original focus on research, but over time shifted its focus to include the development and evaluation of actual programs that could be used to apply some of the research findings.

One of the major challenges has been getting people to use their research. CRESPAR tried informing schools, developing manuals, sending out prototype materials, lesson plans, etc., with no results. Progress began only when they developed workshops to train teachers. CRESPAR now interacts and works with schools on an ongoing basis through a program of technical assistance in order to ensure that products and procedures given to schools are being used regularly. This has created a process of mutual and constant learning which is used to build effectively on the programs in use. At the same time, CRESPAR continues elements of basic research. The program on reading achievement provides an example of where they have developed constructive principles and are now applying them to mathematics and science.

Elements which have contributed to some level of success for CRESPAR have been: a) continuity of the Mission; b) staff stability through the work of program directors who have identified their areas of expertise and worked on them for the past 15-25 years; and c) a full-time R&D emphasis with very little faculty involvement and few teaching roles. Problems include the need to work more with the regional labs, though this is increasing, and access to adequate funding.

Goals for the next five to ten years include improved measurable achievements in student achievement through school use of effective programs and practices, based on Talent Development principles, i.e. how schools should actually work with children. CRESPAR also debates the pros and cons of being able to delegate the actual work of distributing the results of their research to the labs and other technical assistance agencies, but feels that it will probably require at least one outfit like CRESPAR to stay with the program in order to reach the goals of effective programming nationally.

Tim Waters, Executive Director, Mid-continent Regional Educational Laboratory (McREL)

Dr. Waters began by describing his struggles as a practitioner with how to integrate the work being done in the labs and institutes and his search for partners to develop products and

practices which were tested, effective and could be used in the field. His concerns were about the ability to access affordable and high quality products and services, and stability in the people providing them who could also help to implement and tailor them. He noted that while there are lots of people available to offer solutions, not all of these solutions are research-based.

Consequently, Dr. Waters sees the provision of such products and of stability in personnel as one of the primary functions of the lab system. Labs work in applied areas and bring to the field knowledge and products that can provide sustained and organizational changes. Consequently, his lab deals with real life problems with which people in the field have asked for help. Such examples are: (1) building a database of all standards as a useful tool for people trying to make sense out of the standards published by various groups; (2) developing a set of central standards that people can use to identify which of the numerous standards and benchmarks are implementable and relevant for their district or school; (3) providing assessment strategies or instrumentation to see if students are meeting the standards; and (4) developing a snapshot assessment to quickly determine the proficiency of students who are linguistically different, in math, science and reading as soon as they enter the classroom. Dr. Waters stressed that such investments at the Federal level result in the products that minimize the struggle at the school level.

The lab works to make its results available through a Website, conferences and meetings with policymakers, and dissemination of professional development materials and teaching guides, etc., and has plans to develop training programs.

In the opinion of Dr. Waters, labs, such as McREL, play a significant role in the RD&D system when it comes to production and transformation of knowledge for use in the field. McREL responds to a regional constituency, but at the same time is answerable to its regional governing Board which guides its work, keeps it answerable, and supports its work so that the lab can stay responsive to the bigger issues without having to respond to smaller, 911-types of issues and to political winds.

Future challenges include: creating a market for knowledge-based products and services; creating standards which are accepted across the industry; learning more about the infrastructure and systems needed to be able to roll information out to the field effectively and cost-effectively; creating relationships with centers and business partners to move innovation to the field so it is accessible not just to the most affluent but to all; and integrating policy and products and practical work with other institutions that serve their constituents, e.g. housing, welfare, and urban childhood services.

On a larger scale, the challenge is to be involved in finding solutions to the problems facing the nation, such as closing the gaps in wealth disparity, financing mechanisms for public education, and identifying what should be the common educational experience for all children in a democracy.

Lawrence Rudner, Director, ERIC Clearinghouse on Assessment and Evaluation

ERIC was described by Dr. Rudner as OERI's best known product, with its success due to a combination of Federal leadership, creative leadership, and luck from being in the right place at the right time.

ERIC provides the following services: a) ACCESS ERIC which provides information and products about everything on education; b) AskERIC which responds to teachers' research needs; c) Digest Series which is a two-page briefing paper which identifies and makes available the best studies and publications available on specific topics; and d) publishing. Many services are accessed through its Website where they have added such features as an on-line thesaurus, prepackaged search strategies and listservs. Beginning Summer 1997, they will make available online the full text of all materials available since January 1996.

ERIC does not collect sufficient information on who uses its services, but they know that its Website is used widely by teachers and parents. Consequently, the contents of the clearinghouse has changed to meet their needs. This means a shift from journal articles and conference papers to instructional materials and teaching guides, as well as to providing information on such issues as performance-based assessment, models and evaluations for year round schools and block scheduling.

ERIC does have some success in leveraging its public support to retain its funding. In response to a request which went out online, they received sufficient letters of support to be able to demonstrate to Congress that the service has significant support in their various constituencies.

Future plans include getting a better idea of the extent to which their services are used and for what purposes, improved acquisition and increased dissemination.

APPENDIX C
SUMMARY OF PRESENTATIONS: HISTORICAL CONTEXT

Carl Kaestle, Professor of Education, University of Chicago

Dr. Kaestle's previous involvement in the study of OERI's infrastructure has made him familiar with the "well known litany" of problems which have been discussed both publicly and privately for some time. These problem areas include:

- Agenda setting and development of Requests for Proposals (RFPs)
- Proposals and peer review
- Consensus development and research results
- Dissemination
- Basic versus applied research
- Funding of centers and labs versus field initiated studies
- Lack of expertise in agency
- Collaboration and coordination
- Inadequate funding
- Mistrust and low respect
- Instability of personnel and of institutional infrastructure
- Politicization
- Federal support for recruiting and training the next generation of researchers

Dr. Kaestle noted that the problems tend to reinforce each other, since so many parts of the infrastructure are affected by a vicious cycle. While there are shining examples by the Agency and some of its grantees, the overall history is depressing. He noted that the problems are sufficiently intertwined, tricky and stubborn, that it will take more than good will at the executive level to turn it around. What is required to bring about infrastructural change is luck, brains, a huge amount of energy, and whole lot of goodwill where that has not previously existed. Everything will have to be done at once. He noted also that for structural changes to work well, they will need to be accompanied by changing attitudes in order to reverse the vicious cycle. Low morale produces low results, and vice versa. The importance of this recommendation is underscored by its inclusion in a forthcoming report by the National Research Council which cites the need to develop trust and collaboration in the field.

Dr. Kaestle identified two inter-related and equally important priorities for OERI.

1. Reviewing of proposals: In his opinion, this area needs better research staff and improved relations with the field. OERI also needs to be able to answer the question of what it does with the research it sponsors.
2. Accumulation of results: Unlike the health sciences where there is a strong sense that the work is about science and of an accumulating body of knowledge, nothing similar exists in education. As a result, it's not clear that researchers and practitioners have a sense that some of their questions are getting answered and that new questions are

emerging as a result of the research. Ideally there would be some parts of the results of this research that would by now be established.

Dr. Kaestle ended with a plea for stability in OERI's structure and top personnel as the frequent turnover in Assistant Secretaries and periodic reorganizations demoralize people in the field.

Maris Vinovskis, Professor of History, University of Michigan

Dr. Vinovskis spoke passionately and critically about the current vision of Federal research and policy, its record, recent developments in OERI, and the current transition between Assistant Secretaries from the perspective of an outsider with some inside knowledge based on his previous term at OERI. His major criticism was that the focus on poverty and the disadvantaged and the original goal of closing the gaps in opportunities has been lost. Much of the recent reforms have had a middle class focus and did not get to the problems in which OERI should be interested. In his opinion, OERI is trying to help everybody and the results have been devastating for some of the following reasons:

1. OERI's research has not done enough of the right things to find out how to help children be successful and has not resulted in the right kind of changes for children. Rather than trying to do everything, it needs to help others who are working in this area. He expressed concern for the lost opportunities over the last years.

2. Dr. Vinovskis felt that insufficient attention has been paid to different models and programs and whether or not they work. He cited the Success for All Program as a success story. The program has been tested and developed, partly with OERI funds. OERI now needs to see what works in different contexts and to scale up the program. He noted that while OERI approved a plan in May 1994 to look at this issue, nothing has happened since.

3. OERI labs have not lived up to the vision of the mid 1960s as a model for long term use and development because their funding has been fragmented and short-term. He cited the example of McREL, which is doing interesting work on development, but not with OERI funding as none was available for that activity. He urged the Board to move away from these fragmented centers, projects and labs. He felt that the move toward creation of institutes was a good one, and approved of the idea of National Research Institutes. At the same time, he felt that an Office of Research and a Research Advisor were needed to provide coordination. In his opinion, OERI is badly wounded without coordinating capacities.

4. OERI staff has been cut at an even greater rate than was done under President Reagan in the 1980s, and without any major outcry. At the same time, the majority of the new

staff hired over the last ten years have not been researchers. As a result, there are no people on the cutting edge in OERI and the existing staff is not given a chance to do any good work. Dr. Vinovskis stressed that a research agency needs researchers. He also appealed for a return to the concept of Excepted Service, which brought people and new ideas into the system. He noted also that OERI is not currently an intellectually exciting place in which to work and that during his tenure people spent more time going to meetings on team building than on intellectual topics. He felt strongly that something needs to be done about this culture.

5. Referring to OERI as the "intellectual brains of the Department of Education," Dr. Vinovskis added his pleas for stability, and expressed concern about the three-month interim which has passed since the departure of the last Assistant Secretary and about the rumors of the imminent appointment of an interim Assistant Secretary. He felt a new and permanent Assistant Secretary needed to be appointed as soon as possible and that it should be someone with research credentials and vision.

Dr. Vinovskis did note one bright spot in the development of high standards for application review, and urged the Board to continue its focus on quality, noting that if done well, this could be considered one of the great successes of their term. He was particularly complimentary of Phases I and II, but felt Phase III needed work.

Emerson Elliott, former Director, National Center for Education Statistics (NCES)

Mr. Elliott served as Commentator to this session. He also presented a critical view of the current state of affairs in OERI. He stated that their current agenda held a narrow view of education RD&D when compared to the original vision from the 1960s. At that time, the emphasis was on curriculum development and on testing materials to be used in classes to reform education, and the goal was the creation of large centers and labs to contribute to teacher training. He noted, however, that the current system is totally different and that, in fact, a large component of the RD&D system is supported by other Federal and by private agencies and institutions.

At the same time, Mr. Elliott noted, the issues of creating and supporting systems, institutions and individual needs with which OERI needs to deal are uniquely Federal concerns. Any agency with a field of responsibility has to figure out what facilities are required for them to get their work done. In OERI's case, he argued that the system needs to relate back to the program agenda. He noted that this link is no longer being made. Instead, OERI focuses on the people that are important, rather than on the nature of the work to be done and on what has already been accomplished. Using the NCES as a model, Mr. Elliott suggested several starting points for this work, including:

- Initiating a discussion with Institute Directors about their work, the topics they think are important, and what needs to be done with the results. This thought process will help to identify the mechanisms needed to get the work done and will also most likely lead to a larger variety of institutions and structures which, while they will include the attributes of labs and centers, will also include others which don't currently exist as models.

- Setting or gaining familiarity with OERI's agenda and its boundaries.

- Knowing and creating a role for OERI. It's good leverage to let Congress know one's role and then to perform it. He also noted that the changes in leadership and reformulations of its role has had a negative impact on OERI's current state of affairs.

- Identifying allies. In the case of NCES, its allies were data users who wanted the product.

- Seizing and creating the opportunity to get comments on how to improve the work, even if the comments are negative.

- Engaging the organization as a whole and working on staff development. He also noted the negative effect of staff cuts on OERI's internal capacity to deal with complex issues and problems.

APPENDIX D
SUMMARY OF PRESENTATIONS: LOOKING TO THE FUTURE

Arthur Wise, Executive Director, National Council for Accreditation of Teacher Education

Dr. Wise promoted what he called the "alien or novel idea" of the connection between education research and teachers colleges. He said that the major role that colleges already play in dissemination of R&D is not understood nor is it exploited as effectively as it might be, and that the Federal government, in general, and OERI, in particular, ignore the colleges as instruments of change. He argued that teacher knowledge is related to teacher behavior, and that while there are other contributors to proactive change, it occurs, at least in part, because of what teachers know and how they translate this knowledge into operation.

To support his position, Dr. Wise described the current accreditation process used by his organization. Colleges are expected to articulate a conceptual framework for their programs that is knowledge-based, shared or articulated with the college mission and is continually evaluated. This framework shapes the college curriculum, as a result of which colleges are prepared to give teacher candidates a sophisticated understanding as a guide to practice. One college, for example, advances the idea that the teacher is a mediator of learning and breaks it down into twelve sets of expectations of knowledge that the teacher candidate will acquire, including the ability to base practice on high but realistic expectations for students.

Dr. Wise urged that OERI have as a key goal, enhancing the intellectual base of the colleges. OERI ought to consider them an integral part of dissemination activity, and needs to create consensus panels to review controversial findings and the connection between teaching knowledge and practice. He concluded that with attention from the Board, teachers colleges could become an effective part of the dissemination system.

Dena Stoner, Executive Director, Council for Educational Development and Research (CEDaR)

Dr. Stoner shared her view that education R&D has been overly managed and underled. She shared her first exposures to this sector, which were predominantly negative ones, and included experiencing the isolation of the research centers and labs from teacher training and practitioners; witnessing a bitter, mean and distasteful controversy around a key issue; witnessing the suppression of a critical site visit report by the Department of Education; and undergoing an introduction to the negative impact politics can have on education and its agenda.

In her current role with CEDaR, however, Dr. Stoner has had an opportunity to address infrastructural issues, to focus on research and policy and to witness the successful development of a coalition of RD&D institutions called "IGAR" that worked closely together

during the last reauthorization. Dr. Stoner referred to this process as the "beginning of a culture change." Dr. Stoner shared some insights from the last reauthorization process, including several prevailing and negative impressions of OERI among Congress and the Administration. At the same time, she urged the Board to remember that it has enormous power and responsibility and that it learn the history of what happened to the last Board and not repeat it. The Board should be supportive of the critical role played by the Assistant Secretary. Recent positive changes include improved coordination among groups and growing faith in the system. She felt that the Agency is now poised for take off if it can remain credible.

Dr. Stoner identified the following key issues for the Board to address:

- Fitting OERI into a decentralized education system;
- Protecting the critical mass by identifying a few key things on which to work rather than going after lots of good things. She did not believe another tiny little center somewhere to be a good idea;
- Developing discipline;
- Bringing research into innovation to better benefit the "have nots." She cited her concerns about an emerging for-profit industry which is building innovations for profit, and the need for OERI to figure out their role to ensure that access to these innovations did not depend on one's ability to afford them; and
- Addressing the tension between stability and accountability. She noted that stability cannot exist with a constant round of competitions but that some competition is needed to ensure accountability. She suggested that competition take place where an institution is performing inadequately.

Karen Seashore Louis, Associate Dean for Academic Affairs, College of Education and Human Development, University of Minnesota

Dr. Louis' contribution focused on the dissemination side of OERI's mission. Dr. Louis began by describing an incredibly fragmented and incoherent infrastructure which is driven by the existing knowledge base, insensitive to current policy dilemmas, and impossible for practitioners to access (except for regional labs). Despite criticisms of the 1970s and some innovations by parts of the system, as a whole, the system has kept intact the same basic pieces. In just the last couple of years, there has been a failed effort to fund a university-based research center to promote dissemination and knowledge utilization. This failure was due to the lack of an acceptable proposal because no consensus existed on what they wanted. As another example, the R&D labs, the most significant and permanent part of the culture, have been mandated to collaborate but have been given no incentives to do so. Consequently, for example, there are no buttons to get from one lab to the other on the Internet. She also noted what she termed the abandonment of a role by the Federal government with a resultant gap in this area. In short, there is no system, but rather, a set of good individual institutions. Consequently, she noted, there is a pile of applicable research without the means of putting it

into practice.

Dr. Louis stated that because of existing technology and the constant presence of practitioners on the Web, the nature of the dissemination problem has changed. The reality is there is now too much information, so the problem is how to sort it and how to decide what is of decent quality. So, in its reorganization, OERI needs to begin to rethink what dissemination means and what the infrastructure needs to be doing in light of these technological changes. A different set of policies are needed, not for changing the current infrastructure, but rather for rethinking its use.

Dr. Louis identified the following areas to be considered by OERI:

- Conduct research on the intersection between knowledge and school improvement;
- Develop Federal policies to stimulate research, dissemination and knowledge utilization;
- Relink the professional and pubic interest in changing and improving education with a well developed research field whose dissemination function has atrophied;
- Consider the role of new technologies and the new environment of information overload, not underload;
- Rethink who OERI is disseminating to and build real partnerships with the business community, parents, and youth development and community service workers;
- Strengthen existing infrastructure and develop new ways of creating partnerships between existing R&D institutions;
- Stimulate more experiments in order to generate proposals that are on the cutting edge of development;
- Increase models for research and practice; and
- Think of better ways to stimulate partnerships with industry to avoid having Microsoft-managed schools in 20 years.

Citing the *Roots and Wings Program* as an example, Dr. Louis concluded that the field now knows enough to make a big dent in improving education, given the will to do so.

Willis Hawley, Dean, College of Education, University of Maryland

Dr. Hawley began his comments on this session by reiterating that the fundamental mission of OERI is to foster the quality of education through RD&D. Noting that the issues confronting the enterprise are long standing, he said that the task now is how to think about them differently.

The funding problem, which is the overall issue, is tied to the lack of support from the educational community, which is, in turn, related to the absence of a market for this knowledge, and the lack of use of educational research. Teachers are in the business of enhancing children's lives, but they don't use the research because they don't see a connection

between the research-based knowledge they have and the research itself. No intellectual bibliography exists in this field.

Dr. Hawley noted that the supply and demand sides of this problem are dynamic. The issue is how to get this research knowledge into practice so it makes a difference for children. However, the research to which people have access lacks credibility as there is no practice in education that is not research-based, so people can find support for whatever position they advocate. To address this problem, OERI needs to take the risky and difficult step of beginning to identify which practices and ideas are better. He noted that this is done in other fields, even where there is not 100% agreement among experts.

Finally, Dr. Hawley recognized that OERI cannot do everything and suggested the following seven priorities:

1. Take different steps in practice and in strategic planning, as there is no point in providing information that people are not ready to use. One idea is to build contacts with other groups, e.g., NCATE, as professional development is the most effective dissemination strategy;
2. Focus on critical issues in education so that the utilization of research becomes part of other program areas in the department;
3. Conduct quality control and rigorous peer reviews, and provide the types of incentives NIH gives to promising scholars;
4. Support practice or policy-ready research. There are several research-based ideas already underway but without the base to carry them further;
5. Know more about dissemination and focus on users;
6. Provide leadership in keeping with the mandate, for which the support of an Assistant Secretary is essential; and
7. Work on the structure and on the professional development of staff.

BIOGRAPHIES

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Areas of Expertise

Students at risk, research and dissemination, student team learning

Experience/Affiliations

John Hollifield has served as the Director of Dissemination at CRESPAR since 1985 where he directs the dissemination of the Center's knowledge and education practice products. He is also Associate Director for the Center for the Social Organization of Schools at Johns Hopkins University. He has worked on a variety of educational issues, including science curriculum development, and has published extensively on the issue of school and community cooperative learning. Mr. Hollifield earned his M.S. in General Education from Johns Hopkins University.

Most Recent Publications

U.S. Department of Education, Office of Educational Research and Improvement. Evaluations and Standards for Schoolwide Programs and Programs Conducted in Multiple Sites. Washington, D.C.: 1996. (With Samuel C. Stringfield and Rebecca Herman.)

"Title I and School-Family-Community Partnerships: Using Research to Realize the Potential." Journal of Education for Students Placed at Risk 3 (January 1996): 263-79. (With Joyce L. Epstein.)

"High Schools Gear Up to Create Effective School and Family Partnerships." New Schools, New Communities Vol. VI, No. 2, (Winter 1995): 26-31.

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Areas of Expertise

Education policy, Federal statistics and management, teacher education and accreditation

Experience/Affiliations

Mr. Elliott headed the National Center for Education Statistics for eleven years until 1995 and became the nation's first Commissioner of Education Statistics in 1988. Prior to assuming this position, he directed the Planning and Evaluation Office and the Issues Analysis Staff for the Under Secretary of Education, was Deputy Director at the National Institute of Education, and the first head of the OMB's education branch when it was created in 1967. He currently consults on education policy, and is working with the National Council for Accreditation of Teacher Education to develop performance standards for teacher education and accreditation. Mr. Elliott holds an M.A. in Public Administration from the University of Michigan.

Mr. Elliott serves on the National Academy of Sciences' panels for the Bureau of Transportation Statistics and is a member of the Advisory Committee on Research and Development for the College Board. He holds memberships in the American Educational Research Association and the American Statistical Association (ASA) and was elected an ASA Fellow in 1996. Mr. Elliott has received Presidential Rank Awards for Meritorious and Distinguished Performance in the Senior Executive Service of the Federal Government.

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Areas of Expertise

Legislative and government relations, research and development centers and infrastructure

Experience/Affiliations

Dr. Stoner has served as the Chief Executive Officer of CEDAR since 1989, representing the key entities of the nation's Federal research and development infrastructure, including the regional educational laboratories and research and development centers. Previous positions held by Dr. Stoner include Legislative Representative for the National Rural Electric Cooperative Association, Economist on the Joint Economic Committee of the U.S. Congress, and Director for Legislative Liaison of the National School Boards Association. Dr. Stoner has served on a U.S. Office of Education evaluation team, several advisory boards and committees related to educational issues, and is currently Vice President for Programs for the U.S. Coalition for Education for All. Dr. Stoner earned her Ph.D. in Communications Theory and Education from the University of Wisconsin-Madison.

Selected Publications

"Vocational Education for 'A Nation at Risk.' School Leader (July/August 1983).

Local Control of Education and State Finance Reform. NSBA Task Force Report. April 1981.

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"Creating a Family-Focused Curriculum." Illinois Teacher (December 1978).

"A Rationale for a Multi-Disciplinary Approach to Nutrition." Wisconsin Journal of Public Instruction (Fall 1975).

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Areas of Expertise

History of education, educational reform, statistical analysis

Experience/Affiliations

Dr. Vinovskis has been a Professor of History at the University of Michigan since 1981, serving as Department Chair from 1993 to 1996. He has taken several leaves of absence to serve as a consultant to various government agencies, including a stint as Research Advisor to the Assistant Secretary of Education, Office of Educational Research and Improvement (OERI), 1992-1993; Consultant to OERI 1992, 1993-1995; and Consultant to the Office of Family Planning Programs, Department of Health and Human Services, 1983-1985. He has presented over 138 papers, lectures and seminars, commented on 27 professional papers and chaired 11 scholarly sessions, many of them on educational history and policy. Dr. Vinovskis has served on several advisory committees related to issues of aging, education and other social concerns. Dr. Vinovskis earned his Ph.D. in History from Harvard University.

Most Recent Publications

"Parenting in Historical Perspective," in Parenting: Contemporary Issues and Challenges. Ed. Terry Arendell. Beverley, CA: Sage Publications, Forthcoming. (With Frank Stephen).

"Education and Literacy in Eighteenth-Century North America," in Essays on Eighteenth Century America. Ed. Gerald F. Moran (Forthcoming).

"The Changing Role of the Federal Government in Educational Research and Statistics." History of Education Quarterly 36 (2) (Summer 1996): 111-128.

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Areas of Expertise

Educational history and policy; reading, assessment and adult literacy; role of the Federal government in elementary and secondary education

Experience/Affiliations

Dr. Kaestle is Professor of Education and an affiliate member of the History Department at the University of Chicago. Dr. Kaestle has also been a high school teacher and principal and has chaired the Department of Educational Policy at the University of Wisconsin and directed the Wisconsin Center for Education Research. He is currently President of the National Academy of Education and serves on the advisory committee of the National Adult Literacy Survey and on the Board on Testing and Assessment of the National Research Council. Dr. Kaestle earned his doctorate from Harvard University.

Selected Publications

"Literate America: High-Level Adult Literacy as a National Goal," in Historical Perspectives on the Current Education Reforms. Ed. Diane Ravitch and Maris Vinovskis. Baltimore, MD: The John Hopkins University Press, forthcoming.

Literacy in the United States: Readers and Reading since 1880. New Haven, CT: Yale University Press, 1991.

Everybody's Been to Fourth Grade: An Oral History of Federal R&D in Education. Report to the Committee on the Federal Role in Education Research, National Research Council, National Academy of Sciences, September 1991.

"Public Schools and the Public Mood." American Heritage (February 1990): 66-81.

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Areas of Expertise

Theory and application of systemic change processes in education, standards based school reform

Experience/Affiliations

Dr. Waters has over 25 years experience in education--as a history teacher, Dean of Students, Assistant Principal and Principal, Assistant Superintendent and Superintendent in Arizona's and Colorado's school systems. He was Special Advisor on Education to Governor Bruce Babbitt. He has served on several commissions and task forces, most recently on Colorado's K-12 Linkages Task Force, the Colorado Commission on Higher Education; has served as Chair of the Colorado Association of School Executives Legislative Council and as President of the Institute for the Support of Educational Excellence and of the Secondary Schools Principals Division of Arizona School Administrators, Inc.; and co-founded the National Center for Peak Performing Schools in 1990. Dr. Waters earned his Doctorate in Education from Arizona State University.

Selected Publications

"Moving Up Before Moving In." Educational Leadership (March 1995).

Improving Student Performance: New Strategies for Implementing Higher Standards. Aurora, CO: National Center for Peak Performing Schools, 1993.

"Tenure Colorado Style: What to do With Dinosaurs and Other Relics?" The Agenda Colorado Association of School Boards (Spring 1990).

"The Road to #1." Administrator's Viewpoint 9 (3) (1990).

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Areas of Expertise

Teacher professionalism, school finance reform, education research

Experience/Affiliations

Dr. Wise has been on the cutting edge of several innovations in education reform including, financing school reform through the judicial system; school-based management; teacher licensing, evaluation and compensation; and creation of the National Institutes of Education (NIE). In the late 1970s he helped to create the U.S. Department of Education and designed the original Office of Educational Research and Improvement. Prior to joining NCATE, Dr. Wise was Associate Dean and Associate Professor of Education at the University of Chicago. He has also held positions as Director of the RAND Corporation's Center for the Study of the Teaching Profession and first Associate Director of Research at the original NIE. He currently serves as Chair of the Board of Directors of the National Foundation for the Improvement of Education and is a member of the National Board for Professional Teaching Standards, the National Commission on Teaching and America's Future, and the Council for Excellence in Government. Dr. Wise received his Doctorate in Education from the University of Chicago.

Selected Publications

Dr. Wise's publications include Rich Schools, Poor Schools: The Promise of Equal Educational Opportunity (1989); Legislated Learning (1979) which anticipated the wave of educational reform by calling for teacher professionalism and school-based management; and A License to Teach (forthcoming) which offers a blueprint for the professionalization of teaching.

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Areas of Expertise

Organizational behavior, knowledge utilization, sociology of education, research methods and evaluation research

Experience/Affiliations

Dr. Louis has held the position of Associate Dean with the College of Education and Human Development since 1994. Prior to assuming this position she was a Lecturer in Organizational Behavior with Harvard University's, Graduate School of Education; Senior Research Fellow and Associate Director with the University of Massachusetts' Center for Survey Research; Associate Director for Education with Abt Associates; Assistant Professor in the Department of Sociology, Tufts University; and Research Associate with the Bureau of Applied Social Research at Columbia University. Dr. Louis is a member of the Graduate Faculties of Educational Policy and Administration and Sociology, of the American Sociological Association, the Association for the Study of Higher Education, the American Educational Research Association, and the International Congress for School Effectiveness and School Improvement.

Selected Major Publications

Professionalism and Community: Perspectives on Reforming Urban Schools. Thousand Oaks, CA: Corwin, 1995. (With S. Kruse and Associates).

Reshaping the Principalship: Insights from Transformational Reform Efforts. Thousand Oaks, CA: Corwin, 1994. (ed. with J. Murphy).

World Class Schools. Alexandria, VA: National Association of Secondary School Principals, 1994. (ed. with J. Jenkins and H. Walhberg).

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Areas of Expertise

Management, test design and validation, research design, survey and statistical methods

Experience/Affiliations

As Center Director at The Catholic University of America since 1993, Dr. Rudner directs the activities of the ERIC Clearinghouse, manages the campus course evaluation system, and teaches graduate level courses on evaluation, statistics, research, and measurement. His career has included stints as a Senior Research Scientist and Associate Professor at Gallaudet Research Institute, Senior Associate with OERI and Team Leader of the agency's program of Research on Testing and Evaluation. He is also the President and Founder of LMP Associates which provides contract research in teaching, evaluation, survey design, and statistical work. Dr. Rudner earned his doctorate in Psychology and Evaluation from Catholic University, and an M.B.A. from the University of Maryland.

Publications

Manuscripts authored or co-authored by Dr. Rudner have appeared in Journal of Educational Statistics, Educational and Psychological Measurement, School Administrator, Educational Measurement, Education Week, Journal of Teacher Education, Journal of Educational Measurement, Government Computer News, Capital Ideas, Journal of Personnel Evaluation, PC Monitor, Connecticut Mathematics Journal, The Volta Review, Encyclopedia of Computer Programs, Interpreter's Journal, Salon Management News, and Instructor Magazine.

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Areas of Expertise

Teacher education, school reform, urban politics, political learning, organizational change, educational policy, school desegregation, race relations

Experience/Affiliations

Dr. Hawley has served as Dean and Professor of Education and of Public Affairs at the University of Maryland, College Park since 1993. Prior to that he was Professor of Education and Political Science at Vanderbilt University, where he also served as Dean of Peabody College and as Director of the Center for Education and Human Development Policy at the Vanderbilt Institute for Public Policy Studies. He taught at Yale and Duke Universities before going to Vanderbilt. Dr. Hawley has served as consultant to several public agencies, including the U.S. Office of Management and Budget, U.S. Department of Health, Education and Welfare, the U.S. Department of Education, the World Bank, as well as many state and local governments, associations, and foundations. In 1977-78 he served as Director of Education Studies, President's Reorganization Project, Executive Office of the President of the United States. Dr. Hawley directs The Common Destiny Alliance, a coalition of national organizations and scholars interested in improving inter-group relations. Dr. Hawley earned his doctorate in Political Science from the University of California, Berkeley.

Selected Publications

Dr. Hawley has published numerous articles and books on his areas of expertise and has edited several volumes, including Realizing our Common Destiny: Improving Race and Ethnic Relations in America (1994); Japanese Teacher Education 1993); The Consequences of School Desegregation (1983); Improving the Quality of Urban Management (1974); and The Search for Community Power (1974).

Karen Seashore Louis

TOWARD A NEW FEDERAL ROLE IN DISSEMINATION AND KNOWLEDGE UTILIZATION[1]

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INTRODUCTION: Another Opportunity to be a Kvetch

As anyone who has been in OERI for more than a few years may know, I have been a critic of federal dissemination and knowledge utilization policies for several decades. In the 1970s I joined other critics in pointed out that the derivation of research from studies of the transfer of new technologies to farmers, village women, or other individual "knowledge users" has only partial relevance for today's schools. The focus on the organization as the unit of change has dominated research on educational innovation since the early 70s, but has only minimally penetrated thinking about dissemination and utilization of knowledge, even thought the old OERI sponsored a research synthesis effort that lead directly to that conclusion (Lehming and Kane, 1981).[1] In the past decade and a half, this focus on schools rather than individuals as the main unit of knowledge use has generated lines of research that attempt to integrate theories of dissemination and knowledge utilization with theories of organizational change (Louis, Rosenblum and Molitor, 1981; Louis and Dentler, 1984; Weiss, 1993).[2] However, as Ron Corwin and I pointed out in 1984, the balkanization of the federal government around issues of school improvement and technical assistance have impeded the development of a solid set of policies in this arena.

A few years ago, as a result of my involvement in an international study of school improvement, I prepared an article (stimulated by Sue Klein) that critiqued U.S. dissemination policies in comparison to other countries (specifically, Denmark and the Netherlands) (Louis, 1992). My comparative research has continued, including a paper that will be presented at AERA (Voogt, Louis and van Wieringen, 1997). Among the issues that I have raised are that the U.S. system (federally sponsored) is relative : (1) fragmented and incoherent; (2) driven by the existing knowledge base rather than balancing what is "known" and what is needed; (3) insensitive to current policy dilemmas; (4) balkanized between agencies and agendas (Title I, Special Education, etc.); and (5) hard to access by practitioners. In other words, there is no dissemination infrastructure that "makes sense" in terms of affecting classroom practice and students.

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[1] This discussion paper was developed at the request of the Office of Educational Research and Improvement to further planning for Congressional reauthorization for the agency. The views expressed are those of the author, and do not represent the opinions of OERI or any other sponsoring agency.

More recently, I have argued that D&U strategies need to acknowledge and incorporate some of the postmodern perspectives on knowledge (Louis, forthcoming). For example:

- *All knowledge is local.* "Local knowledge" developed and held by individual practitioners and schools is a key feature of the landscape of change, even though most would agree that there is important knowledge that is not local. Knowledge created elsewhere must be compatible with existing belief structures, diffuse rapidly throughout the organization field so that it becomes legitimized, have utility in local sites, and be "processed" in ways that make it fit with local preferences. Although a great deal of important knowledge may come from outside the organization, the above theories also suggest that this information is always combined with local knowledge.

- *All knowledge is contested and partial.* This feature of postmodernism is supported by most new theoretical advances in D&U thinking. At the cognitive learning level, for example, the contesting of knowledge is central to the learning process. The contested nature of knowledge is a primary element that lead many authors to conclude that there are a variety of ways of using knowledge, depending on the degree to which it is "solid" -- e.g., meets Weiss's truth and utility tests.

- *All knowledge is political.* Insofar as the newer theories address power, there is a tendency to follow Macauley's assumption that "knowledge is power" and that the creation of knowledge creates powerful settings (including constraints). Political contexts are critical to understanding knowledge use among not only politiciams and federal and state civil servants, but also "the man on the street."

Postmodernist theory has taken us two steps forward, demanding that we examine a wide variety of assumptions that we make about the nature of knowledge and its effects on ourselves and our settings. However, we must also take one step back and realize that the most profound of these insights are compatible with revised versions of existing theories, particularly if we broaden where we look for research to inform dissemination practice. In addition, as I have argued throughout this paper, the modifications to theories about knowledge and knowledge utilization are compatible with what we know about educational improvement and the directions of educational reform policies in a variety of settings.

Finally, I have argued that the characteristics of schools, and the nature of the strategies that seem to be working to promote knowledge utilization, suggest a more radical theoretical departure from the knowledge/product driven models. In particular, educational dissemination and utilization models need to take into account the extensive need for integrating "organizational learning" frameworks into the dissemination and utilization strategies (Senge, 1991; Louis, 1994; Louis, forthcoming). What differentiates an organizational learning approach from more traditional theories about dissemination and utilization is the emphasis on

the socially constructed nature of "useable knowledge" -- and the low likelihood of any meaningful change in an institutionalized school setting in the absence of efforts to reach an internalized consensus in the school about how any new information contributes to a more powerful vision of how urban children should be educated. At its best, organizational learning is defined by the ability of the organization to challenge its own assumptions (at least on a regular basis) in order to improve performance (Daft and Huber, 1987).

Each of the above concerns presents an opportunity to reconsider what can/should be done in the next decade.

WHERE ARE WE TODAY?

In recent years, there have been a number of events that must be put into the context of discussions about the federal role in D&U.

- There has been a failed effort to fund a university-based research center to investigate and promote dissemination and knowledge utilization (1992), officially aborted due to the lack of an acceptable proposal, but eliminated at least in part because of lack of consensus about the role of such activities in the Office of Education portfolio.

- The R&D Laboratory system which has a mandate to promote D&U, have not developed no coherent or collaborative policies in this regard (although individual labs and projects have exemplary activities).

- The OERI funded Research Centers have made individual efforts to disseminate their own research, but have relied largely on entrepreneurial efforts to "get the word out." While some of these have been extremely successful (for example, "Roots and Wings" that was supported at Johns Hopkins), overall there has been no coordinated effort to translate research results from multi-million dollar investments into "useable knowledge."

- The only national infra-structure that had direct access to large numbers of practitioners, that was not dedicated to a specialized population or knowledge base (Title I, bilingual, special ed., etc.) was defunded. Although many would agree that the National Diffusion Network had lost vitality, scant consideration was given to how it could be resuscitated.

THE TECHNOLOGY SHIFT: Its Implications for Dissemination

Our current theories about dissemination and utilization are still based in a pre-1990s assumption that gaining access to new ideas is the key problem for educational practitioners. In the 1960s, when the ERIC system, and the first federal dissemination effort, the Pilot State Dissemination Project, were initiated, this was, indeed a serious problem. As recently as 1993

and 1994 I argued that access to knowledge was a problem for schools.

D&U policy considerations have not, however, taken into account the paradigm shift that is necessary when we recognize the power of technological access to information. Within a few years, most schools have at least one computer that can access the Web; most have several (or even many). People with something to say to educators are one the Web: Labs have their home pages devoted to dissemination (some better than others); the Department of Education has a home page that links to many others; there are "independent" practitioner oriented sites, such as the University of Minnesota's Web 66, which serves as a kind of loose, virtual alternative to the old NDN structures. It is even easy to search ERIC through the University of Syracuse: a small miracle that has been thirty years in the making. It doesn't matter whether school practitioners seek disciplinary knowledge, practical advice on classrooms, or new curricula: there is a surfeit on the Web.

In summary: Access to information is no longer a problem for the vast majority of schools in the U.S. We have substituted, with the rapid spread of technology, the opposite problem: Information overload and its attendant problem of filtering. If one agrees with this premise, the issues facing any federal effort in D&U that is oriented toward the next decade become painfully clear.

SYSTEMIC CONSIDERATIONS UNDER CONDITIONS OF INFORMATION OVERLOAD

The implications of the above paradigm shift can be divided into four broad categories that should affect federal policy: (1) support for research on the intersection between knowledge and school improvement; (2) federal support for a D&U infrastructure; (3) Dissemination activities that require federal support; (4) federal policies to stimulate research/knowledge-based knowledge utilization.

Research and Policy Analysis

The federal government has a clear role in sponsoring research, but in the past 15 years it has had not research programs that focus on the intersection between knowledge and school improvement/effectiveness. The failure of the government to articulate a framework for, and fund, a university-based center on dissemination and knowledge utilization several years ago bears testimony to the divided federal interest on this issue. However, the advent of the "new technologies" for knowledge concerns have lead NSF to focus on the intersection between technology and classroom and teacher learning in the areas that they cover -- why should the Department of Education be far behind? The diminished funding for research in this area is reflected in the diminished vitality of the AERA Special Interest Group on Research Utilization, and the limited number of articles about education that appear in the major journals related to

dissemination and knowledge utilization. In addition, as I have noted elsewhere, research frameworks on school improvement have marched ahead over the past 15 years without acknowledging the important role of knowledge in the improvement process (Louis, forthcoming).

Some of the topics that are obvious include the following (each of which should incorporate, as an additional question "How does this affect what students, teachers, administrators and other members of the school community are doing?":

- Are there effective ways of "targeting" new technological means of dissemination, or does the new technology mean that dissemination is/can/should only be regulated by "the market?"
- what kinds of filtering processes are used to "screen" information under conditions of overload at the (a) individual teacher and administrator level; (b) the school level; © the school district level; and (d) among policy makers at all levels. (When operating under overload conditions, does Weiss's dichotomy of "truth" and "utility" tests still apply?
- What other criteria are used in screening? In particular, how do state and local policies affect school's efforts to access, screen and use knowledge?
- What changes can be observed in the relationship between individual teachers/teacher groups and "provides of information" such as principals, district offices, regional laboratories, etc. when the issue of accessing good, new information becomes pressing?
- How is the equity of access to information and knowledge utilization, which has been traditionally stratified by district size and wealth, affected by the new technology?
- How useful/relevant/utilized are the "screened" access points such as ERIC, R&D laboratories, University-based sites as compared with unscreened resources (teacher chat lines, etc.)
- How important is the easy access to new information via new technologies and/or competing non-technologically based responses as contrasted to previous vehicles.
- How does the type of access to information (Web, Lab, University, etc.) affect the quality of information obtained? The quality of "used" information?
- What kind of "politics" are apparent in the formal and less formal dissemination systems; e.g., what kind of information is preselected out of different modes of transmission?
- Who is left out of the new technological revolution in dissemination? With what effects?
- What new technological developments that would affect access to and use of information should be considered?

The Office of Education should also consider co-funding with NSF a major technology initiative that would focus not on the instructional, but the professional development uses of technology.

In addition, because the technological shift is so dramatic, we have many questions to ask about educational research knowledge among populations that have previously been excluded from

focused, formal federal dissemination efforts, such as the business community, youth development and other social services personnel, and others. The scope of potential dissemination, at no cost, suggests that it may be time to make a marked shift in the focus of policies related to potential target groups.

Infrastructure

The federal government has been a major supporter of infrastructures to support knowledge dissemination and utilization over the past three decades. They have worked through organizations that they have sponsored, and in tandem with other institutions, such as universities, school districts, state agencies, etc. The infrastructural support, aside from ERIC, NDN and the Regional Laboratories, has been episodic and programmatic in nature. During the 1970s and early 1980s, there was a period of major experimentation with infrastructures. This ended rather abruptly, largely due to the decline in federal funding for education that began under the Carter Administration. Within promising an expansion of the federal role, the cutbacks on NDN, and the potential for real savings in the ERIC infrastructure with the advent of new technologies suggests that infrastructure experiments may again be warranted. These should be focused on how to maximize the benefits of virtually unlimited access to information, while promoting strategies to screen information for relevance and quality.

The real dilemma facing the federal government, as all provider agencies, is the tradeoff between focusing on the technology/information/hardware side of dissemination (technology and knowledge driven) versus the need-driven, knowledge utilization side. In general, without government intervention, most local institutions will tend to focus on their own capacities to provide "stuff" and not on the potential user. The federal government's role in maintaining an emphasis on the infrastructure's capacity to apply new knowledge to problems of practice must be in the forefront. An additional infrastructure issue is that, in the current technological situation, all infrastructures must be capable of being "virtual" rather than physical. This means that new organizational forms, other than those currently supported, may become more effective in managing knowledge dissemination needs.

Another issue is to increase policies that may stimulate coordination among institutions that are currently funded by OE/OERI to provide dissemination (R&D Laboratories, Research Centers, TACs of various kinds, etc.) with other organizations that provide dissemination substantial dissemination support, but are not funded (colleges of education, extension services, intermediate units, district offices, unions, etc.). The rule of thumb should be: wherever there is a high level of involvement in professional development for educators, dissemination is already occurring. While the incorporation of a fully systemic is not possible in our situation, experiments might include:

- a new "R&D Utilization program" (see Louis, Rosenblum and Molitor, 1981) that targets information screening, rather than access, and encourages the collaboration between units that dissemination, but are not currently funded to do so.
- Experiments with effective ways of dissemination information about and designing web sites to make access to "good information" easier.
- Experimenting with the funding of new roles in schools, districts, intermediate education units, etc, that can help schools negotiate the alternative information sites.
- Funding experimental sites that use the Web to provide "do it yourself" technical assistance/training in areas of national and local priority.
- Funding development of better navigation systems that combine the spontaneity of current Web site activity with the codification of search terms, etc.
- Rethinking a technical infrastructure -- for example, collaborating with the extension service to expand access to technology based knowledge to rural sites; funding libraries and other social service centers as sites for information access.
- Experimenting with alternative ways of providing technology and personal based screens for reducing information overload, while taking advantage of new technology.

Strengthening the Existing Infrastructure

Although the new technologies have eliminated "dissemination as a problem" to a great extent, there is still a role for the federal government in coordinating dissemination efforts -- if only to reduce the cacophony of voices to a bearable level. The primary function should be to maintain an infrastructure that can assist with screening and reduction of information overload:

- Funding ERIC centers, Labs, states and other agencies to perform as a NDN State Facilitator-like function in relation to emerging information on the Web (focused on screening and providing assistance on navigation).
- Making R&D laboratories and/or Centers more responsible for developing and maintaining effective Web sites that include relevant linkages to related knowledge in other centers/labs.
- Developing common standards for Web sites for practitioners to facilitate access.
- Reinforcing effective screening and classification standards in current data bases.
- Reconsidering a University-based Center for D&U that would be combined with a focus on new technologies, school improvement and professional development for all members of the educational community.

Knowledge Utilization in a New Technological Context

If you ask most knowledgeable researchers, they will claim that we *know* a great deal about how to make schools more effective places for the intellectual and personal development

of students and adults, but we don't know how to put this knowledge into action. We know a great deal about how to foster "organizational learning" that was not in place two decades ago. We are still far from either a virtual or concrete science of how to make schools more effective. The new technologies may be revolutionizing schools' and practitioners' access to information. They do not, however, address the issue of how to translate information into useable knowledge, and further into changes in practice. This, then, remains the greatest challenge for the role of government, as a major stimulator of new ideas about school practice and school improvement. Among the efforts that the federal government might wish to consider are:

- Using the BAA process to generate proposals to increase organizational learning and knowledge utilization that is focused on making schools more effective;
- Using a focused field initiated grant priority to stimulate research-based interventions on new technologies and school improvement/creating more effective schools;
- Investing in on-line training packages that take research results on school improvement/school effectiveness into self-guiding professional development for schools

INVENTING THE FUTURE?

Most of the above suggestions are based on my relatively limited understanding of the current technical status of the system We are living in a time when the very definition of what "information" and "knowledge" is under question, both theoretically and practically. Old dissemination models in education tended to focus on "technology push" and "implementation." Both existing research and theories, conjointly with the increased emphasis on large scale reform (as contrasted to program innovations) suggest that we need to abandon the Scylla of "marketing models" for research knowledge, while avoiding the Charybdis of an entirely chaotic system that is focused only on random access to information in situations where there are no common standards for deciding on what constitutes "good information" or even a "good reform." This uncertainty will not diminish in the next few years, and the policies of OERI should remain sufficiently flexible to take advantage of what will, undoubtedly, be a rapidly accumulating knowledge base in this area.

ENDNOTES

1. This observations is not intended to diminish the contributions of scholars who have worked on understanding barriers to organizational innovation that may occur at the individual level.

2. I apologize to the readers for a high rate of self-citation. The articles referred to contain the references to the work of others that I would have included in a more scholarly paper.

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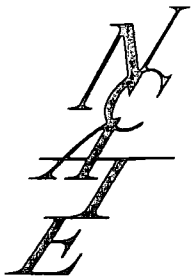

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TEACHER EDUCATION ACCREDITATION: THE UNHERALDED ENGINE FOR THE DISSEMINATION OF EDUCATIONAL RESEARCH

by
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TEACHER EDUCATION ACCREDITATION: THE UNHERALDED ENGINE FOR THE DISSEMINATION OF EDUCATIONAL RESEARCH

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February 1997

In this paper we reveal the impact that accreditation is having on the dissemination of research. In so doing, we hope to reveal the even greater potential for research to affect teaching practice.

Whether educational research impacts on educational practice has been the subject of scholarly attention for decades. One would have thought the question settled by the collection of brilliant essays sponsored by the National Institute of Education, edited by Patrick Suppes, and published by the National Academy of Education in 1978[1] In nine case studies, distinguished scholars convincingly describe the impact of research on education.

How educational research impacts educational practice is less well understood. Consider these observations by J. W. Getzels in 1978[2]:

> Almost within sight of my office are four school buildings. In one, dating from the turn of the century, the spaces called classrooms are rectangular, the pupils' chairs are bolted to the floor, and the teacher's desk is front and center. In the second building, dating from the 1930s, the classrooms are also square, the pupils' chairs are movable, and the teacher's desk is out of the way in a corner. In the third building, dating from the 1950s, the classrooms are also square but the pupils' desks are trapezoidal in shape so that

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[1] Suppes, P. (Ed.), *Impact of Research on Education: Some Case Studies*. Washington, DC: National Academy of Education, 1978.

[2]Getzels, J.W. Paradigm and Practice: On the Impact of Basic Research in Education. In Suppes, P. (Ed.), *Impact of Research on Education: Some Case Studies*. Washington, DC: National Academy of Education, 1978.

when placed next to each other they form a circle, and the teacher's desk has vanished. In the fourth building there is a classroom constructed in the 1970s that is four times the size of the ordinary classroom and has no teacher's or pupils' desks but is filled instead with all manner of odds and ends from finger paints to Cuisinaire rods. If one were not told it was a classroom, this space might be mistaken for an overgrown playroom or a warehouse full of children's paraphernalia. I shall refer to the spaces in the first building as the "rectangular" classroom, in the second as the "square" classroom, in the third as the "circular" classroom, and in the fourth as the "open" classroom.

Why did educators decide periodically to rearrange classroom furniture? Getzels responds:

o *Empty Organism: Rectangular Classroom*

At the turn of the century, a dominant, although by no means only, conception of the child as learner was that he was ideationally an "empty" organism responding to stimulation and learning primarily by trial-and-error when specific responses were connected to specific stimuli through the mediation of pleasure or pain.

o *Active Organism: Square Classroom*

The conception of the learner as an empty organism was transformed into the conception of the learner as an active organism.

o *Social Organism*

If the conception of the learner in the initial period was predominantly as an empty organism, and in the next as an active organism, in the period that followed it was as a social organism. The beliefs regarding the nature of the learner in the first period drew largely from the Associationist view of the human being, in the second from the personalistic and Gestalt views, now they drew also from the emerging social-psychological and field-theory views.

o *Stimulus-Seeking Organisms*

> ...Human beings need not be driven to explore to think, to learn, to dream, to seek out problems for solution; they are intrinsically constituted to do just this. The learner is not only a problem-solving and stimulus-reducing organism but also a *problem-finding* and *stimulus-seeking* organism.

Finally, Getzels concludes:

> It is admittedly dangerous to encapsulate complex phenomena in catch-phrases, but if the ideal classroom that emerged from the conception of the learner as an empty organism was teacher-centered, the classroom that emerged from the conception of the learner as an active organism was pupil-centered, and the classroom that emerged from the conception of the learner as a social organism was group-centered, the altered classroom that seems to be emerging from the conception of the learner as a stimulus-seeking organism may be characterized as "inquiry-centered."

Of course, Getzels was reporting in 1978. Since then, research and teaching practice have moved beyond the open classroom, though the importance of the stimulus-seeking conception remains in the emerging era of technology-aided teaching and learning.

No central authority directed these physical changes in the classroom. Indeed, educators may have been barely aware of why they were changing classroom arrangements. Yet, the research that they learned about in their preparation programs (or through their own studies) caused them to think quite differently about the teaching-learning process, and, as a result, to modify classroom architecture accordingly.

Teaching practice changes, in part, because of what teachers know. For this reason the National Council for Accreditation of Teacher Education (NCATE), the professional accrediting agency for schools of education, began in 1987 to expect schools of education to become explicit about their conception of the knowledge base for effective teaching.

Among NCATE's 20 major standards which deal with curriculum, students, faculty and resources is one which deals with research-derived knowledge. The 1987 version of the standard stated:

> I.A The unit ensures that its professional education programs are based on essential knowledge, established and current research findings, and sound professional practice. Each program in the unit reflects a systematic design with an explicitly stated philosophy and objectives. Coherence exists between (2) courses and experiences and (2) purposes and outcomes.

The 1995 version has been slightly modified:

> I.A The unit has high quality professional education programs that are derived from a conceptual framework(s) that is knowledge-based, articulated, shared, coherent, consistent with unit and/or institutional mission, and continuously evaluated.

NCATE defines the knowledge base as:

> The base of knowledge for effective teaching derived from empirical research, disciplined inquiry, informed theory, and the wisdom of practice.

NCATE's approach is not dogmatic. Every college of education, as a candidate for accreditation, must articulate *its* conception of the knowledge as the basis for its design of its programs. The first phase of the accreditation process requires the college to prepare an institutional report or self-study describing how it believes it meets NCATE's standards, including the knowledge-base standard.

Doren Christensen reviewed all 42 institutional reports prepared for visits carried out in spring 1993[3]. Summarizing his general findings, he observed:

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[3] Christensen, D. The Professional Knowledge-Research Base for Teacher Education. In Sikula, J. (Ed.), *Handbook of Research on Teacher Education* (A Project of the Association of Teacher Educators). New York: Simon & Schuster Macmillan, 1996.

Many reports credited a certain scholar(s) as responsible for the knowledge base structure influencing the design of the programs. By a large margin, the most commonly cited work was that of Shulman (1987) who was credited in at least nine reports. Others who were identified by more than one institution included Brody and Good (1986), Howey and Zimpher (1989), and Zeichner and Liston (1987). Other scholars influencing program designs included Barnes (1991); Boyer (1987); Bruner (1960); Dewey (1983); Gage (1984); Gagne (1985); Goodlad (1990); Grossman, Wilson, and Shulman (1989); The Holmes Group (1990); Katz and Raths (1988); and Schon (1983).

Scholars cited in all of the reports numbered more than 1,000; in the general program design alone, Indiana State University (1993) listed more than 750 scholars representing 856 citations. Except for six reports in which no scholarly works were referenced, all reports had developed a substantial knowledge-research base of scholarly work on which to build programs. Furthermore, it was apparent that the references were related appropriately to the specific components detailed in each case. That is, there was no evidence of institutions assembling a long list of references simply because they existed; the congruency of the knowledge base and the program design was apparent in each instance.

From Christensen's analysis, we see a direct path from educational scholarship to the design of teacher preparation programs.

He selected three institutional reports for a more detailed review.

In the first of these, the college advances the review of "the teacher as mediator of learning." Among the skills the teacher candidate is expected to develop is the ability "to base practice on high but realistic expectations for students." The description of curricular expectations is based on a thorough review of the literature on expectations beginning with the classic Rosenthal and Jacobsen's *Pygmalion in the Classroom* and continuing with the dozens of studies that support, contradict, and contextualize *Pygmalion*:

One area of research and theory supporting this programmatic outcome focuses on the effect of teacher behaviors on student achievement. Some of the reports of scholarly work in this area suggest that teachers tend, often inadvertently, to create more favorable learning environments for the students for whom they have high expectations (Hamachek, 19711; Rosenthal, 1989; Smey-Richman, 1989), thus contributing to greater achievement by these students. On the other hand, at least one study found a tendency for teachers to give less attention to students for whom they expect high achievement and, instead, for the teacher to concentrate their instructional efforts on the students they consider less capable; resulting in unexpectedly low achievement for the more able ones (Goldenberg, 1992). Despite these seemingly conflicting findings, the broader conclusion is that teacher expectations for students can influence instruction and, in turn, student performance. The encouraging findings from other investigations are that teachers can be made sensitive to unintended differential treatment of students based on expectations and that improved student achievement can result when the teachers make appropriate adjustments in their instruction (Lindley & Keithley, 91991; Murphy, 1988; Smey-Richman, 1989).

This college is thus prepared to offer its students a subtle and sophisticated understanding of this literature as a guide to practice. The review of the literature in support of basing practice on " high but realistic expectations" is but one of 12 such literature reviews that form the basis for teacher preparation programs at this college.

Another college conceptualized its program using a different approach:

The works of theorists and researchers (Anderson, 1989); Bandura, 1986; Gagne, 1985; Peterson & Comeaux, 1989; Shulman, 1987; Zimpher, 1988) were synthesized to develop the knowledge base areas around which the professional curricula were constructed. The four areas of knowledge determined as forming the base for the model include: (1) knowledge of learners (theoretical base); (2) knowledge of learning (theoretical knowledge, research-based knowledge, wisdom of practice base); (3) effective teaching (research base); and (4) conditional or contextual knowledge

(theoretical base, wisdom of practice, philosophical base).

A third college based its program on a variety of theorists and researchers:

Knowledge Base on Learning: Teaching Programs

Key Theories/Concepts	Key Theorists/Researchers
Learning domains	Bloom, Gagne
Cognitive development	Piaget, Wadsworth
Creativity	Didge, Tgorrance, Parnes
Learning styles	Gregore, Dunn & Dunn; Carbo; Moston
Cooperative learning	Slavin, Johnson, & Johnson
Behaviorism	Thoresen, Skinner, Bandura, Watson, Thorndike
Maturation	Gesell
Humanism	Maslow, Charles & French; McMurry
Motivation	Maslow, Berlyne, Brothy, Huntger
Discovery learning	Bruner, Moston
Empiricism	Locke
Conditions of learning	Gagne
Learning by exceptional students	Skinner, Lindlsey, Dunn, Phillips, Kirk, Hewitt
Prior knowledge	Ausubel, Holmes, & Roser
Whole language	Goodman, Kiefer
Scaffolding theory	Vygotsky, Palinscar, & Brown
Student-centered learning	Rogers

Clearly, the design of the curriculum is the entry point for educational research into the preparation of future teachers. Other NCATE standards ensure the effective teaching and learning of the curriculum, once it has been designed. For example:

I.G. Teaching in the unit is consistent with the conceptual framework(s), reflects knowledge derived from research and sound professional practice, and is of high quality.

I.D. The unit ensures that teacher candidates acquire and learn to apply the professional and pedagogical knowledge and skills to become competent to work with all students.

Thus, a primary means of disseminating education research is through the intellectual and practical development of future teachers. Teaching practice changes, in part, as the result of what teachers know. A recent study commissioned by the Kentucky Institute for Educational Research surveyed new teachers in that state and found that over 90% of new teachers said they were *extremely* well-prepared, *very* well prepared, or *moderately* well prepared to establish the following: a positive learning environment, communicate high expectations, design instruction that is developmentally appropriate, use different teaching strategies for different instructional purposes, and communicate the core concepts of their discipline. Over six in ten, or two-thirds. said they were extremely well prepared or very well prepared for these tasks[4]. The study did not look at how knowledge shapes practice. It does, however, suggest that what colleges of education now teach is seen by recent graduates as preparing them to teach. At least in this state, where 85% of new teachers graduate from NCATE-accredited colleges.

It is possible to argue (as I have done on numerous occasions) that the federal government has largely ignored the college of education as an instrument of educational change. Since the 1960s, its strategies for R, D & D have failed to contemplate the key role which schools of education and educator preparation play in changing (or conserving) teaching practice.

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[4] *The Preparation of Teachers for Kentucky Schools: A Survey of New Teachers*, conducted by Wilkerson and Associates for The Kentucky Institute for Education Research. 1997

Teaching is inherently an intellectual activity, based on ideas derived from a variety of disciplines. Enhancing that intellectual base should be a key goal of OERI.

Developing the intellectual capital of the nation's teachers is a change strategy only now beginning to be taken seriously. Accreditation is a lever for the reform of teacher preparation and teaching practice. It is time for the federal government to recognize the role played by colleges of education and to develop explicit dissemination strategies to facilitate the flow of research-derived knowledge to teacher preparation programs. The result would be improved preparation for beginning teachers. Equally important, the strategy would affect all teachers who return to universities and colleges for advanced degrees, which most teachers do. NCATE's knowledge-base standard has so far had its greatest impact on the design of initial teacher preparation programs, though clearly continued improvement remains essential. As it now turns its attention to the design of advanced programs for teachers and other specialists, universities and colleges would benefit from OERI initiatives to help infuse teaching knowledge into preparation programs to improve teaching practices.

Among activities which OERI might pursue to advance the appropriate use of research in teacher preparation programs are these:

- Consider teacher preparation institutions an integral part of the dissemination system.
- Conduct synthesis activities that are specifically aimed at the use of research in teacher preparation programs.
- Create consensus panels to review findings in controversial areas.
- Conduct research on the relationship between teaching knowledge and teaching practice.

Maris Vinovskis

THE DEVELOPMENT AND EFFECTIVENESS OF FEDERAL COMPENSATORY EDUCATION PROGRAMS: A BRIEF HISTORICAL ANALYSIS OF TITLE I AND HEAD START

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Educating at-risk children has always been a major concern in American society. Although initially parents, private charities, and local communities were expected to provide for the education for poor children, in recent decades the federal government has assumed a larger role. While many have welcomed the addition of federal education dollars and expertise, others have questioned the intrusion of federal regulations and guidelines into an area historically thought to be reserved for parents and local school boards.

Despite the large number of studies of federal education policy, few of them have approached the subject from a broader historical perspective while at the same time taking into consideration recent evaluations of program effectiveness. Therefore, this essay will survey earlier parental and local community efforts to educate poor children and then analyze the expanding federal role in K-12 education after the mid-1960s. Focusing on two particularly large and popular federal initiatives, Head Start and Title I of the Elementary and Secondary Education Act (ESEA) of 1965, the paper will investigate these programs during the past three decades and discuss some of the more recent evaluations of them. Finally, a few suggestions for addressing some of the weaknesses and limitations of the current compensatory education programs will be made.

A. Educating Poor Children in Colonial and Nineteenth-Century America

The Puritan settlers of the New World believed that everyone should be able to read the Bible and therefore stressed the importance of education. The assumption was that the head of the household would teach family members and any domestic servants how to read as part of their religious training in the home. As education was intimately tied to catechizing members of the household, it was expected that the father would be the primary educator--with the wife providing only limited instructional assistance. This arrangement seemed sensible as colonial males were more literate than females, but became problematic when many of the second-generation males stopped joining the church. Slowly and reluctantly, the Puritans turned to mothers to catechize and teach the young as females continued to join the church and as the literacy of women rose dramatically in the eighteenth century. Thus, while parents were still responsible for educating their children and servants, there was a gradual shift from the father to the mother as the primary instructor in the home.[1]

Americans today often have an image of the colonial family as one of the most important and autonomous institutions in that society. In many ways this was true--but only as long as the family lived up to the expectations of the local community. When the family failed in its societal responsibilities, however,

local authorities did not hesitate to intervene to correct the situation. In extreme circumstances, if the family failed properly to educate its members, the town selectmen might remove their children and place them into another, more suitable household.[2]

From the very beginning some primary schools were created in New England towns to provide alternative educational opportunities; but the creation of grammar schools and Harvard College in order to educate the next generation of clergy received even more attention from the early settlers. Where primary schools did exist, parents were expected to pay for the costs of their children's education. Poor children, however, had their primary school tuitions paid by the community. Private charities often helped impoverished scholars who aspired to be ministers to attend a suitable grammar school and then to enroll in college.[3]

Although colonial Americans accepted in principle the importance and necessity of education, demographic and economic circumstances made it more difficult to provide adequate schooling in the Middle Atlantic states and the South. In addition, education was usually restricted to whites; and males received more formal schooling than females as the latter initially were only expected to be able to read and not to write.[4] As a result, New England led the way in colonial schooling and had high rates of white adult male literacy while the South, women and non-Whites trailed considerably behind.

There were shifts in the justification for education in nineteenth-century America accompanying the great expansion in the provision of elementary schooling. Whereas colonial Americans focused on the value of education for religious purposes, their early nineteenth-century descendants stressed the importance of schooling for educating the next generation of citizens. As white adult male suffrage became nearly universal and the unanticipated divisiveness of political parties developed, education was seen as essential for the preservation and safety of the Republic.[5] Since mothers were now seen as the primary educators of their young children, women received additional formal schooling.[6] Moreover, in the mid-nineteenth century educational leaders such as Horace Mann developed and publicized the idea of the economic productivity of education--thereby providing yet another powerful rationale for supporting universal schooling.[7]

Common schools expanded rapidly in the early nineteenth century. New England states such as Massachusetts provided nearly universal access to primary schools by 1800--though the quality of those institutions as well as the length of the school-year varied considerably in the Commonwealth.[8] The rapid rise of public and private high schools in mid-nineteenth-century Massachusetts meant that nearly one out of every five children attended one of those new institutions.[9] The Middle Atlantic and the Midwest states also made significant strides in education so that by 1860 most of their residents had an opportunity to attend

a primary school. Only the South continued to trail the rest of the nation in educational opportunities--though even in some areas of that region primary schools became more readily available.[10]

Early nineteenth-century local schools were supported by an eclectic and erratic pattern of financing. The current relatively sharp distinction between public and private support for schooling did not exist as colonial and nineteenth-century governments provided financial subsidies to a wide variety of private and Protestant religious schools even while they were underwriting public schools as well. In the decades before the Civil War, however, common school reformers increasingly attacked private schools as an unnecessary and wasteful duplication of the new public school systems and persuaded the authorities and most parents to withdraw support from private elementary and secondary educational institutions.[11] The rapid increase in parochial schools and the growing local political demands that these new Catholic schools should receive public support now also persuaded many Protestants to oppose public funding of religious schools altogether.[12]

Nineteenth-century Americans were quite concerned about the poor--in part because they feared what an uneducated and uncontrolled subgroup of the population might do and in part because they believed that it was their Christian duty to help those in need. Public authorities and private philanthropies created special charity institutions such as the Lancasterian

monitorial schools or provided financial support for poor children to attend the regular primary schools.[13] Sunday schools were established and initially provided training in reading as well as religious instruction for disadvantaged children.[14] Over time, however, the stigma attached to attending any special educational institution only meant for the poor encouraged greater public school attendance.[15]

There is considerable debate among historians today about just how much schooling was available to poor children and whether it actually helped them. Some recent critics contend that nineteenth-century educational institutions were designed only to control working-class children and therefore did not provide any opportunities for social mobility.[16] The scattered evidence suggests that while poor children were shortchanged educationally compared to their middle- and upper-class counterparts, many did receive at least an elementary education and that some even attended one of the new high schools. While contemporaries may have exaggerated the extent and nature of nineteenth-century mobility, there is also growing evidence that schooling provided real social and economic advantages for some lower-class children.[17]

One particularly interesting effort to help poor children in early nineteenth-century America was the sudden creation and then the rapid demise of infant schools. Adapting models used in Europe in the 1820s and 1830s, infant schools were intended to provide early childhood training for two- and three-year-olds

from poor families. Fostered mainly by private charitable organizations, the infant school movement spread rapidly throughout the United States and by 1840 nearly 40 percent of all three-year-olds in Massachusetts were enrolled in a public or private school. One reason for its rapid acceptance and dispersion was that once the success of infant schools seemed proven, middle-class families demanded comparable institutions for their own offspring so that poor children would not gain an initial advantage in school.[18]

Many of the early infant schools assumed the precocious cognitive ability of children and taught them first the elements of the alphabet, and then how to read. When medical experts such as Amariah Brigham in the mid-1830s denounced early intellectual activities because they would permanently damage the still developing brain, teachers and middle-class reformers abandoned their support for the special infant schools and tried to bar young children from the regular public schools. By 1860 there were almost no three- or four-year-olds in Massachusetts schools and the infant school movement quickly faded from memory.[19] When the German kindergartens were imported into the United States to help poor children following the Civil War, their supporters carefully downplayed the notion that early childhood education could be equated with intellectual or academic stimulation.[20]

B. Poor Children and the Expansion of Schooling in Twentieth-Century America

Opportunities for schooling have expanded dramatically during the past century. Not only did almost everyone now attend elementary school, but an increasing proportion of the population went on to high school and college. As a result, the total amount of education for the population has increased substantially over time.[21] For Americans ages 25 and above, the median years of education rose from 8.1 years in 1910 to 8.6 years in 1940; in 1960 it was 10.5 years; in 1980 it was 12.5 years; and in 1993 it was 12.9 years.[22]

When we look at the changes in education by age-cohort rather than for the overall population, it is apparent that many of the major changes in school attendance occurred in the early decades of the twentieth century. School attendance became a normal phase of adolescence with 14.3 percent of all 14 to 17 year-olds enrolled in 1909-10; 50.7 percent in 1929-30; 72.6 percent in 1939-40; 83.4 percent in fall 1959; 92.0 percent in fall 1970; 90.3 percent in fall 1980; and 95.3 percent in fall 1993.[23] While there were sizable differences between whites and blacks in secondary school attendance, over time those differences have narrowed so that today both groups are almost equally likely to graduate from high school or receive a GED.[24]

As children received more and more overall education, the cost of that schooling increased even more dramatically. In constant 1992-93 dollars, per pupil total K-12 expenditures have risen from $480 in 1919-20 to $1567 in 1949-50; $2285 in 1959-60; $4573 in 1979-80; and $6305 in 1992-93.[25] There is considerable

debate, however, over whether the recent additional expenditures have really provided much improvement in a student's substantive knowledge or critical thinking ability. Many analysts argue that in recent years scores on standardized tests such as the SAT or NAEP have either declined or remained fairly static at levels now considered too low for the type of skilled labor force needed in our changing global economy.[26]

Twentieth-century K-12 education has been dominated by public schooling. Yet a small, but significant role was played by private schools which offered education to approximately 10 percent of secondary school children throughout this period. As a proportion of total attendance in grades 9 to 12, private schools enrolled 11.3 percent of students in 1909-10; 6.5 percent in 1940-41; 10.5 percent in 1949-50; 10.7 percent in 1961; 9.2 percent in 1980; and 9.1 percent in 1993.[27] Most of the private schools were Catholic parochial institutions which frequently provided an important alternative to the increasingly embattled and often troubled urban public schools.[28]

As high school attendance expanded in the twentieth century, educators sought to make that experience more relevant and accessible to working-class children who were not planning to attend college. Initially, the famous Committee of Ten in 1893 had recommended that all high school students should enroll in rigorous, academic courses. But two decades later another set of experts issued the Cardinal Principles of Secondary Education which downplayed the importance of the academic content of the

high school curriculum.[29] Some influential reformers also advocated and developed separate vocational schools or special vocational courses as more appropriate for students not planning to attend post-secondary education institutions.[30] This tension between a rigorous, academic curriculum for all children and special, less-academic courses for certain student subgroups has continued throughout the twentieth century. A survey of the actual courses taken in high schools shows that contrary to what the public debates suggest, there is a long-term trend toward less academic courses.[31]

Policy makers in the early twentieth-century were concerned about the schooling of those who were poor or immigrants. They created special K-12 programs and set up adult education courses to Americanize immigrants in the late-nineteenth and early twentieth centuries.[32] Similar efforts were made to expand educational opportunities for blacks--especially in the South where Jim Crow laws limited both the quantity and quality of education available.[33] And kindergartens, which had been introduced to help poor children in the second-half of the nineteenth century, became an accepted and normal part of the regular public schools--though in the process they abandoned much of their social work outreach efforts as well as their pedagogical distinctiveness which had been such an integral part of their strategy for reforming poor children and their families.[34]

Perhaps one the biggest changes in the twentieth century was

the expansion of the federal role into K-12 education. The federal government periodically supported education through land grants to states in the late-eighteenth and nineteenth centuries.[35] And the U.S. Bureau of Education was created after the Civil War to collect and disseminate information about promising educational practices to states and local school districts.[36] Yet there was continued hostility to the idea of expanding the federal role in education--partly because most Americans continued to see schooling as a state and local responsibility and partly because some people feared that federal intervention might eventually threaten segregated schools in the South or provide financial assistance for Catholic schools in the North. Nevertheless, the federal government occasionally did become more involved in educational matters. Usually this was in reaction to a particular crisis and only if the type of federal aid provided did not appear to increase too much federal control over local schools. Thus, in the 1950s the U.S. Congress authorized federal aid for school construction and then enacted the National Defence Education Act (NDEA) to promote educational research and training as a reaction to the Soviet launching of Sputnik in 1957.[37]

President John F. Kennedy made a concerted effort to expand federal involvement in education, but failed to persuade Southern Democrats to support him on this issue.[38] The major breakthrough came only after Kennedy's assassination. Following the landslide re-election of President Lyndon Johnson in 1964, federal

education expansion became the centerpiece of the new Great Society programs.

C. Origin and Development of the Title I Program

President Johnson, a former school teacher, was deeply committed to using education to help the disadvantaged in his "War on Poverty." Johnson's seemingly boundless faith in the efficacy of education in eradicating poverty was widely shared by many Washington policy makers, but not empirically supported by the few existing studies of compensatory education programs in the 1950s and early 1960s. The scattered results of most these early studies suggested that while compensatory education might be helpful in some circumstances, the relationship between education and social mobility was quite complex and not as strong as policy makers imagined. The assumption behind most of these compensatory programs was that the families of poor children were culturally and educationally deficient and that the role of the schools was help these students overcome their home deficiencies. Moreover, many policy makers and educators believed that the current schools were basically sound ånd only needed federal financial assistance to provide additional special services for disadvantaged students.[39]

Education had been slated to be a major component of the Economic Opportunity Act of 1964, but as that legislation made its way through the Congress there was a gradual shift in

emphasis toward community training and health programs rather than general federal aid to education.[40] To remedy the continued neglect of federal assistance to education, President Johnson and the newly elected 89th Congress, which now was much more heavily Democratic and liberal, quickly passed the Elementary and Secondary Education Act (ESEA) of 1965--the first major federal aid to education program targeted specifically at disadvantaged children.[41] Title I of that legislation accounted for five-sixths of the total authorized funds and set forth a new direction for federal educational policy that has remained in effect for more than three decades:

> In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.[42]

The President and most members of Congress had high

expectations of the new educational legislation. They believed that not only would ESEA help disadvantaged students, but that the federally funded programs would eliminate the large academic achievement gap between children of the poor and their more fortunate counterparts. It was believed that with enhanced educational opportunities and achievements, poor children now would escape the cycle of poverty that had trapped their parents.[43]

Unfortunately, the very sincere hopes of educational reform in the mid-1960s were not matched by sizable improvements in the academic achievement of disadvantaged students. Title I was more of a funding mechanism than a specific program or policy for helping at-risk students. To secure passage of the legislation, Congress mandated that almost all school districts should be eligible for at least some of the limited Title I funds. Unfortunately, this often meant that some of the poorest and most disadvantaged students in high poverty areas did not get any federal assistance while others who did not really need that help received it in more affluent school districts. And contrary to what its proponents had testified at the Title I authorization hearings, the educational experts and Washington policy makers did not really know which compensatory programs or practices were effective in helping disadvantaged students. Many local schools simply accepted the federal money without fundamentally altering the educational opportunities they offered poor children or used some of those funds to educate non-Title I students as well.[44]

One of the key assumptions behind the passage of ESEA was that schools play an important role in educating children. Yet a series of contested, but highly influential studies in the late 1960s and early 1970s raised fundamental questions about the relative importance of schools in helping students. James Coleman's seminal study, Equality of Educational Opportunity, concluded that parents rather than the quality of their schools were the major determinant of children's intellectual development.[45] And Christopher Jenck's book, Inequality: A Reassessment of the Effect of Family and Schooling in America, argued that there was little evidence that educational reforms enhanced academic skills or that improvements in school quality could significantly reduce income and wealth inequality.[46] Thus, there was growing scholarly skepticism of ability of school reforms to help poor children overcome their disadvantages in American society.[47]

ESEA was one of the first, major federal domestic programs to be mandated for evaluation by the Congress.[48] Although most of the early state and local Title I evaluations were not rigorous or comparable to each other, they did provide some preliminary indications of the ability of schools to help disadvantaged students. Despite efforts to present the best case on behalf of ESEA, the results from these initial Title I evaluations were not encouraging.[49] The American Institutes for Research's re-analysis of Title I evaluation studies and data through 1970, for example, concluded that:

> The national compensatory education program enacted by Title I of the Elementary and Secondary Education Act of 1965 was evaluated in terms of operational compliance to enacting legislation and associated regulations, resource allocation, and impact on participating children. National-level data indicated that (a) most states and many LEA's have failed to implement their programs in full compliance with existing regulations, guidelines, and program criteria; (b) funds and services have been under allocated for academic programs, over allocated for supportive (non-academic) services, and misallocated to children without critical needs for compensatory services; (c) there is little evidence at the national level that the program has had any positive impact on eligible and participating children. Data from state and local levels do, however, provide evidence that some Title I projects have had a significant positive impact on participating children. However, little evidence could be found at the state or local levels that countered the conclusions regarding general non-compliance to regulations and failure in resource allocations.[50]

Challenged by civil rights advocates and others to enforce the Title I guidelines requiring that federal funds only go to eligible recipients, the U.S. Office of Education tightened the program's regulations. Threatened with a loss of federal Title I

funds, the states and local school districts responded by separating even further the education of Title I students from that of regular students--often pulling Title I students from their regular classes and placing them in smaller, specially created instructional settings. While complaints about the misappropriation of federal funds decreased, educators and policy makers now complained that concerns about compliance with regulations governed the operation of Title I programs rather than the educational needs of the disadvantaged students.[51]

Did the improvements in the Title I program in the 1970s lead to a reversal of the earlier disappointing results? It depends in part on how one defines "success" and which data or studies are cited. Many of the analysts writing about Title I were program advocates and sought to downplay the initial disappointing evaluation findings. Frequently they cited the more promising results from the National Assessment of Educational Progress (NAEP) reading and math tests which showed that while the overall performance of American children was relatively stable and disappointing, those who scored in the lowest percentiles had closed the gap somewhat with those who had higher scores. Unfortunately, since the NAEP tests did not provide information on the income-level of the parents or whether a student was a Title I recipient, there was no real way of knowing whether the Title I program in particular was helping.[52]

Other scholars who reviewed the evidence of the effectiveness of Title I in the 1970s were more critical of the

program. Stephen Mullin and Anita Summers reviewed 47 studies and concluded that while the programs had a positive, but small impact on the achievement of students the results of most of those studies were biased upward due to the statistical procedures they employed. Moreover, there was no evidence that there was any relationship between the amount of money spent and the achievement of disadvantaged students--one of the fundamental assumptions behind the passage of ESEA in 1965.[53]

The most detailed and rigorous national analysis of Title I in the 1970s was the Sustaining Effects Study by the System Development Corporation. Data were collected on 120,000 students in a representative sample of 300 elementary schools. A longitudinal cohort of students was followed for three successive years beginning in 1976-77. Launor Carter, the Project Director, confirmed that there was "no demonstrated relationship between the costs of the instruction students received and changes in academic achievement."[54] Overall, Title I recipients did better than comparable non-Title I students, but unfortunately children who were the most disadvantaged (and a particular focus of Title I funds) were not helped much:

> Any attempt to evaluate the effectiveness of the Title I program is faced with the problem that Title I was better defined as a funding program than as an educational treatment. Nevertheless, when the students designated as recipients of Title I services were compared with students

> in need of such services but not receiving them, Title I students showed greater improvement in reading in grades 1, 2 and 3 [but not in grades 4-6] and in all grades of math. Closer examination shows this improvement to be selective, depending on the level of achievement of the students entering the program. Students entering the program at a near average achievement level profited most from the program, whereas students entering at a low level of achievement seemed to profit little, if at all.[55]

Moreover, Carter found that while some of the more moderately disadvantaged students benefited from the Title I program, their gains were not sufficient to close the gap with the regular students. Title I students remained below regular students in academic achievement year after year.[56]

Despite continuing problems with the Title I program, efforts to radically change its approach or focus were ignored or defeated in the 1980s.[57] President Ronald Reagan, who was hostile to a large federal role in K-12 education, declared the Title I program a failure and sought to return to the states the federal monies for helping disadvantaged students through a massive block grant.[58] Despite the public support for Reagan's general anti-federal government message and the election of a Republican Senate in 1980, Title I survived and was reauthorized as Chapter 1 in the 1981 Education Consolidation and Improvement Act (ECIA). This legislation reduced many of earlier federal

regulatory requirements such as the strong parental-involvement mandates.[59]

Dissatisfaction with the overall performance of Chapter 1 students continued to surface during the 1980s and led to some legislative shifts in the program.[60] The Chapter 1 program was reauthorized in 1988 as part of the Hawkins-Stafford Elementary and Secondary School Improvements. Schools were now held accountable for the performance outcomes of their students, required to stress "higher-order" thinking skills, and mandated to link Chapter 1 services to the regular school curriculum. The new legislation also allowed and encouraged high-poverty areas to develop school-wide programs rather than just focusing on individual Chapter 1 students.[61]

Unfortunately, just how well Chapter 1 worked during the 1980s is impossible to ascertain because no large-scale, individual-level national assessments of Chapter 1 students were undertaken.[62] Yet despite the disappointing findings of earlier evaluations of the impact of Title I/Chapter 1 and the lack of any appropriate national assessments in the 1980s, many advocates of the existing Chapter 1 efforts still emphasized its overall positive impact on at-risk children. For example, Albert Shanker, President of the American Federation of Teachers (AFT), testified before the Senate in June 1991 that:

> Chapter 1 has been a proven success, even though it has never come close to being fully funded. Over the past 20

years it has been around we've seen a dramatic rise in the school achievement levels of poor and minority youngsters. We've also seen the gap separating their achievement and that of other children narrow substantially.[63]

Many members of Congress shared Shanker's optimistic assessment that the restructured Chapter 1 program was working well--as evidenced by their willingness to increase funding for Title I. Yet Congress now also wanted additional evidence of the program's effectiveness and mandated in the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 that a large-scale national longitudinal study to assess the impact of Chapter 1 be developed. This study became known as "Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity."[64]

Abt Associates, a contractor for the U.S. Department of Education, designed and implemented Prospects. It was to be a representative longitudinal analysis of three cohorts of public school students in the first, third, and seventh grades and they were to be followed over a five-year period. The study used a multistage sample which was stratified by geographical region, degree of urban development, economic disadvantage, and concentration of limited-English-proficiency (LEP) students. Altogether approximately 30,000 students were included in the national sample.[65]

As the Chapter 1 program was being considered for

reauthorization, the newly elected Clinton Administration and the 103rd Congress eagerly awaited the preliminary results from Prospects. While the authors of the interim report properly cautioned against being too negative on the basis of just the first-year of student experiences, many educators and policy makers did not heed those warnings. The results from Prospects were disappointing--the Chapter 1 program did not appear to help at-risk students close their academic achievement gap with other students:

> Student Achievement. Prospects data depict stark differences in academic achievement between students in high-poverty schools and those in low-poverty schools. Regardless of the grade level, there are large differences in reading and math scores between students in low- and high-poverty schools, especially in higher-order skills. On average, students in low-poverty schools score from 50 to 75 percent higher in reading and math than students in high-poverty schools. The average reading and mathematics achievement of all students in high-poverty schools is almost the same as that of Chapter 1 students in low-poverty schools.
>
> The relative annual gains made by students in low- and high-poverty schools are approximately the same, leaving the achievement gap between these students unchanged. This finding applies to students in both the third- and the

seventh-grade cohorts.[66]

In addition to the pessimistic interim results from Prospects, national reading and math scores in the early 1990s indicated that the gap between low- and high-achieving students was now widening rather than narrowing. Confronted with the continued apparent failure of Chapter 1 and growing demands for higher academic achievement in Goals 2000, the Clinton Administration and the 103rd Congress significantly restructured the program. Renamed again as Title I of the Improving America's School Act (IASA) of 1994, the new legislation stressed standards-based education which mandated the creation of state-level high academic content standards, co-ordinated with authentic student assessments, and linked to local school curriculums and practices. This so-called "systemic reform" also called for targeting high-poverty schools and advocated school-wide reforms for Title I activities. Particularly controversial was a call for "opportunity-to-learn" standards which would have required that all students had access to the new standards-based curriculum.[67] As some of the Clinton Administration authors of Title I summarized the new approach:

> The 1994 reauthorization of ESEA embodied a significant shift in the federal role in education while simultaneously reaffirming the basic principles on which the first ESEA was founded. The new ESEA reshapes federal programs in support

> of state and local reforms, while it helps safeguard both equity and excellence for disadvantaged students by insisting that they learn to the same challenging state standards as all other students. Together, Goals 2000 and ESEA can support major improvements in American education. The next step is harnessing that potential to make high-quality teaching and learning a reality for all our children.[68]

Whether the high hopes for the restructured Title I program will be realized is still not clear. Certainly systemic reform in theory is a much more unified and cohesive approach to dealing with at-risk children than its predecessors. Yet how these ideas will be implemented in practice and whether it will lead to significant improvements in the academic achievements of disadvantaged children remains to be seen. Rather than a reform based upon extensive prior state and local development and testing, systemic reform should be viewed more as a plausible, but as yet empirically unproven hypothesis. Some critics have already raised questions about the basic assumptions of systemic reform and its ultimate ability to revitalize American education. Fortunately, another in-depth national longitudinal study of the impact of the new compensatory programs has been congressionally mandated. Yet even the preliminary results from this assessment will not be available for several years as the new standards-based Title I programs are now just being slowly developed and

implemented in most of the states.[69]

D. Head Start and Other Federal Early Childhood Education Programs

As we discussed previously, early childhood education programs periodically have become the focal point of our efforts to help poor children. In the nineteenth century infant schools and kindergartens were first developed abroad and then adopted in the United States. Private philanthropy also supported early twentieth-century reformers who maintained day care centers and nursery school training for disadvantaged immigrant children. The federal government provided early childhood assistance in the Depression through the Works Progress Administration (WPA); and during World War II the Congress enacted the Lanham Act which funded day care facilities for mothers employed in defense-related industries.[70]

Enthusiasm for early childhood education received a major boost in the mid-twentieth century as the idea spread that IQ was not fixed at birth but could be improved through special early childhood programs. Scholars such as Benjamin Bloom and J. McVicker Hunt argued that the first five years of life were a critical period for stimulating the intellectual growth children.[71] Private foundations funded experimental early childhood programs in Baltimore, Nashville, New York City, and Syracuse which tried to enrich the intellectual environment of

disadvantaged students.[72]

All of these developments came together in the mid-1960s as the Johnson Administration looked for ways to eradicate domestic poverty. Sargent Shriver, the Director of the Office of Economic Opportunity (OEO), quickly recognized the potential of early childhood training for assisting disadvantaged children to overcome the perceived deficiencies of their family and neighborhood. Moreover, he saw in the creation of Head Start a popular federal program which could also help his beleagured OEO survive politically. Ignoring the advice of his Planning Committee to proceed cautiously, Shriver called for a rapid expansion of Head Start in the summer of 1965 in order to serve more than 500,000 at-risk children immediately.[73]

As there were some preliminary indications that the summer Head Start programs were not sufficient to overcome the problems faced by young disadvantaged children, Head Start was gradually transformed into a year-round program. Although Head Start was intended to help at-risk children make the transition into elementary schools, its proponents were determined to keep it separate from traditional education programs which they saw as too narrow in the type of services they offered and ineffective in operation. Nor was Head Start co-ordinated with the massive new Title I program which had been almost simultaneously established to help disadvantaged children. To address the problem of transition from Head Start to the regular schools, however, Congress created the Follow Through Program in 1967--

although the anticipated close co-ordination between Head Start and Follow Through programs never materialized.[74]

One of the great attractions of Head Start for local areas was that the federal government paid for 90 percent of the costs whereas the Title I program covered only a small.proportion of total elementary and secondary school expenses. Moreover, whereas Title I initially had considerable difficulty in targeting disadvantaged children, most of the Head Start monies went to those most in need of assistance. And while some Title I programs worked valiantly, but often unsuccessfully, to involve local parents, most Head Start programs used poor parents as paid teachers, volunteer helpers, or partners in local decision-making.

Rather than being designed as a narrow educational program, Head Start was expected to provide a broad array of educational, health, nutrition, social, and psychological services. Yet in selling the program to policy makers and the public, advocates frequently focused on the ability of Head Start to improve dramatically the IQ of young at-risk children. Moreover, proponents portrayed Head Start in such glowing terms that the expectations for the program's success were unrealistically high from the very beginning.[75]

Head Start suffered a serious setback when the Westinghouse Learning Corporation and Ohio University evaluation of the program in 1969 found that the children's IQ gains were small and faded quickly:

> Summer programs have been ineffective in producing any persisting gains in cognitive or affective development that can be detected by the tests in grades 1, 2, and 3... Full-year programs are marginally effective in terms of producing noticeable gains in cognitive development that can be detected by the measures used in grades 1, 2, and 3, but are ineffective in promoting detectable, durable gains in affective developments.[76]

The Westinghouse study went on to praise some of the non-cognitive and non-affective benefits of Head Start.[77] But these favorable statements were lost as the mass media chose to emphasize the negative findings. For example, the New York Times front page headline bluntly stated, "Head Start Pupils Found No Better Off Than Others."[78]

The Westinghouse study created a public and an academic uproar. There was widespread scholarly criticism of the report for its conceptual and statistical shortcomings.[79] The strong local political and educational constituency developed on behalf of Head Start mobilized to save the program.[80] But support for Head Start was weakened and President Richard Nixon quietly postponed his planned expansion of the program.[81] One long-term result of this controversy was that the level of funding for Head Start remained relatively stable during the 1970s and 1980 (in constant dollars).[82]

While many detractors of the Westinghouse evaluation felt

that it unfairly criticized the effectiveness of Head Start, Edward Zigler, one of Head Start's staunchest and most knowledgeable supporters, candidly admitted many years later that the overall program probably was not very effective at the time:

> In short, there was no mystery behind the highly uneven quality of the Head Start programs in 1970. Despite the flaws in the Westinghouse report methodology, I doubt that any national impact evaluation at that time would have showed that Head Start had long-term educational benefits. Even if, as I suspected, a third of the programs were wonderful, their effects would most likely have been canceled out by an equal fraction of programs that were poorly operated.[83]

Not only was the long-term impact of Head Start on at-risk children in doubt, but the effectiveness of other federal early childhood programs were being challenged as well. The Follow Through Program, which been envisioned as a major service program to facilitate the transition of poor children from early childhood training to the regular schools, was transformed into a large-scale demonstration and evaluation effort. In the first 25 years of the Follow Through Program, about $1.5 billion (in constant dollars, 1982-84=100) were invested in trying to develop and test appropriate models.[84]

The results from the national assessment of the Follow

Through model programs were discouraging. While these disappointing findings have not received much publicity, they do raise additional questions about the effectiveness of federal early childhood education interventions. The Abt Associates, who had replaced the Stanford Research Institute (SRI) as the contractors for the national evaluation of Follow Through, summarized their conclusions in 1978:

> (1) Each Follow Through model had very different effects on test scores in the various communities in which it was implemented. Differences in effectiveness between sites within each model were greater than overall differences between models. None of the seventeen models in the evaluation demonstrated that it could compensate consistently for the academic consequences of poverty...local circumstances and behavior clearly have more to do with children's test performance than do intentions, theories, and rhetoric of outside interveners....
>
> (2) In most cases, the Follow Through groups scored about as one would expect similarly disadvantaged groups to score without Follow Through. Where differences were apparent, Follow Through groups scored lower more frequently than they scored higher. It appears clear, then, that the Follow Through strategy is not an effective tool for raising poor children's test scores. Not only are the effects unstable, but they are small, on the average, and a

disquietingly large minority of them are in the wrong direction....

(3) With few exceptions, Follow Through groups were still scoring substantially below grade at the end of three or four years' intervention. Poor children still tend to perform poorly even after the best and brightest theorists--with the help of parents, local educators, and federal funds, and supported by the full range of supplementary services associated with community-action programs--have done their best to change the situation.[85]

While critics of the Abt Report questioned some of the specific aspects of their analysis, most reluctantly agreed with the assessment's overall dismal findings.[86] Yet despite the devastating results from the Abt Report, some influential members of Congress, whose districts received Follow Through experimental monies, managed to continue funding for their local projects for yet another 15 years. Perhaps even more bizarre and disappointing, though understandable in terms of Washington politics, the U.S. Department of Education, as part of its attempt to phase out the Follow Through programs in 1990, suddenly, but belatedly simply proclaimed that "the [Follow Through] models have proven effective."[87]

One of the more imaginative and interesting recent variations on federal early childhood education programs is the Even Start Program which combines early education with adult

literacy training. Even Start was legislatively developed by Representative William Goodling (R-PA) in the mid-1980s and has been put forth by some as a more effective, two-generation approach for helping at-risk youths than Head Start. Rather than just trying to help young at-risk children by themselves, Even Start works simultaneously with the educational and parenting needs of their mother and/or father. Bolstered by promising preliminary evaluation results as well as strong bipartisan support, Even Start grew rapidly from $14.0 million in FY89 to $102.0 million in FY95 (since then funding for that program has stabilized).[88]

Abt Associates were contracted to undertake a sophisticated large-scale assessment of the effectiveness of the Even Start program. While there were some serious shortcomings in parts of the design and execution of the evaluation, the overall results are useful, but discouraging in terms of finding better ways to help the disadvantaged. The Abt evaluation found that while the children and adults participating in the Even Start Program did improve over time, those in the control group did equally well. Moreover, the gains for everyone were quite small.[89] There is a need for a refinement of the Even Start approach--including developing and testing any particularly effective local models. Meantime, given the relatively high cost of the current Even Start programs and their apparent limited effectiveness, this potentially important new approach to early childhood education needs to be carefully reexamined and reassessed.[90]

Robert St. Pierre and his colleagues at Abt Associates recently have reviewed six of the better documented two-generation programs like Even Start. They found that the evidence of the short-term effects of such programs are mixed:

> Two-generation programs increase the rate of participation of children and their parents in relevant social and educational programs.
>
> As currently designed, two-generation programs have small short-term effects on a wide set of measures of child development.
>
> Two-generation programs have scattered effects on measures of parenting including time spent with child, parent teaching skills, expectations for child's success, attitudes about child rearing, and parent-child interactions.
>
> Two-generation programs have large short-term effects on attaining a GED, but these are not accompanied by effects on adult literacy. There are few effects on income or employment. There are no effects on the psychological status of participating mothers as measured by level of depression, self-esteem, or use of social supports.
>
> Many correlated analyses show that the amount of participation is positively related to test gains and GED attainment.
>
> There is little evidence that two-generation programs

are any more or less effective for important subgroups of participants.

Where we find positive effects, those effects are generally small (except for effects on GED attainment).[91]

Not all of the results from the evaluations of early childhood programs are as limited or discouraging. Indeed, some of the experimental or higher quality early childhood education programs have produced promising results. Perhaps the most widely cited, but still somewhat controversial study, the Perry Preschool Program in Ypsilanti, Michigan, provides considerable hope for those advocating increased spending on early childhood education. Following a small cohort of at-risk black children who received early childhood training (and their control group) in the early 1960s, researchers at High/Scope have meticulously compiled in-depth longitudinal data on these subjects who are now at age 27. The Perry Preschool study found that their early childhood program was very successful and significantly increased high school graduation, reduced juvenile delinquency, and enhanced subsequent adult incomes of these at-risk children.[92]

Critics of the Perry Preschool study acknowledge the impressive findings, but point out that the high quality of care initially provided does not resemble that of most Head Start programs. Some questions also have been raised about the statistical design of the study and the cost-benefit analysis employed.[93] Perhaps most interesting, but hitherto largely

ignored, are the sizable gender differences in outcomes. Girls have benefited much more from the program than boys--although the authors of the study have downplayed this potentially important policy finding. Finally, given the small sample size and the particular location of the study in time and place, one wonders just how far we should generalize from this important study.[94]

As we mentioned earlier, funding for early childhood programs had remained relatively stable during the 1970s and 1980s. But during the 1990s both Presidents George Bush and Bill Clinton sought to expand Head Start funding. Despite increasing pressures to balance the federal budget, monies for Head Start continue to grow rapidly. President Clinton persuaded a reluctant Congress to increase FY97 Head Start expenditures to nearly $4 billion--a substantial 11.5 percent increase over the previous year.[95]

Does this renewed excitement and confidence in federal early childhood education programs in general and Head Start in particular reflect new information about their effectiveness? Probably not. As we have seen, most of the major evaluation studies have continually pointed to only modest expectations for these programs--if not to outright ineffectiveness. Ron Haskins, a developmental psychologist and congressional staff member, provided in 1989 one of the more balanced and thoughtful summaries of the impact of early childhood education:

1. Both model programs and Head Start produce

significant and meaningful gains in intellectual performance and socioemotional development by the end of a year of intervention.

2. For both types of programs, gains on standardized IQ and achievement tests as well as on tests of socioemotional development decline within a few years (or even less in the case of Head Start studies).

3. On categorical variables of school performance such as special education placement and grade retention, there is very strong evidence of positive effects for the model programs and modest evidence of effects for Head Start programs.

4. On measures of life success such as teen pregnancy, delinquency, welfare participation, and employment, there is modest evidence of positive impacts for model programs but virtually no evidence for Head Start.[96]

A more recent and very thorough assessment of early childhood education programs provides a somewhat more optimistic evaluation of their potential long-term benefits for at-risk children. W. Stephen Barnett, co-authors of one of the recent Perry Preschool studies, wrote in 1995:

The weight of the evidence establishes that ECCE [early childhood care and education] can produce large effects on IQ during the early childhood years and sizable persistent

effects on achievement, grade retention, special education, high school graduation, and socialization. In particular, the evidence for effects on grade retention and special education is overwhelming. Evidence is weaker for persistent achievement effects, but this weakness is probably the result of flaws in study design and follow-up procedures. Evidence for effects on high school graduation and delinquency is strong but based on a smaller number of studies.

These effects are large enough and persistent enough to make a meaningful difference in the lives of children from low-income families: for many children, preschool programs can mean the difference between failing and passing, regular or special education, staying out of trouble or becoming involved in crime and delinquency, dropping out or graduating from high school.[97]

Barnett's useful, in-depth review of the early childhood education programs found that some of the best of them did provide at-risk children with some long-term gains in academic achievement. But he was also acknowledged that there are significant differences in effectiveness between the higher quality model programs and the more modestly funded large-scale public programs such as Head Start:

Comparison of estimated long-term effects between model

> programs and large-scale programs indicates that the latter tend to have smaller effects, perhaps because model programs provided higher quality services than many of the large-scale public programs.... [T]here is a risk that today's public programs will not produce the desired benefits because they are lower in quality (larger classes, fewer staff members, less educated staff, poorer supervision) than the model programs.[98]

Moreover, even though some of the higher quality service programs like the Perry Preschool helped disadvantaged students, their impact was not sufficiently large to close the academic achievement gap with middle-class students. As Deanna S. Gomby and her colleagues in a review essay put it:

> The low-income children who attended these programs may do better than other children from their poor neighborhoods, but most still lag behind middle-class children. For example, even in the High/Scope Perry Preschool Project, which is known for its remarkably positive outcomes, nearly one-third of the program children were later arrested, and one-third dropped out of high school. This is not to say that what the children and their families have achieved is minimal. These children still out-performed their counterparts in the control group in significant ways, and it is on this basis that we have earlier recommended

expanding the availability of these programs. It is to say, however, that policymakers should not assume that the widespread enrollment of low-income children and families in early childhood programs will enable children living in poverty to perform later in school and life at the levels reached by more advantaged children. Realistic expectations are in order.[99]

At the same time that public and political enthusiasm for Head Start is growing in the 1990s, there is a quiet, but important reconsideration of many of the initial mid-1960s assumptions behind that program. Some scholars are questioning whether the program should be started much earlier in order to have a larger and more lasting impact. Even twenty years ago, Burton White argued that a child's development is already so set by age three that little can be done to alter it.[100] And now some analysts wonder if compensatory early childhood programs perhaps should begin with infants whose brains are rapidly developing.[101] Some psychologists such as David Elkind, however, warn parents and policy makers of the dangers of early intellectual stimulation and fears that we are "miseducating" our young.[102]

When Head Start was created the prevailing assumption among many child developmentalists and sociologists was that the period of early child development was crucial in determining the subsequent outcomes of adults. Since then many scholars have

abandoned the belief in the centrality of early childhood development and have adopted a life course or life-span developmental perspective which argues that individuals can change significantly as they age.[103] As a result, education researchers such as Robert Slavin, who has developed the popular "Success for All" Program at Johns Hopkins University, argues that intensive training in grades K-3 is just as important as early childhood education programs like Head Start:

> The evidence presented here dispels the idea that any one year of early intervention will have substantial lasting impacts on reading achievement. There is no "magic bullet" that sets students on the road to success.... Intensive early intervention must be followed by extensive changes in basic classroom instructional practices if all students are to succeed throughout their elementary years.[104]

One of the commonest and greatest failures in the assessment of alternative approaches to helping disadvantaged students is the lack of attention to cost-benefit analyses of different strategies. The issue is not just whether Head Start or Even Start help at-risk children, but whether those interventions are more cost-effective than others. This is particularly important in the area of early childhood programs since high quality services, which appear to be essential for even modest success, are also very costly. Indeed, Barnett has estimated that in 1990

dollars, the Perry Preschool program would have cost more than $12,000 per recipient--about three times higher than Head Start:

> Bringing ECCE services to all children who could benefit from them will not be cheap. Realistically, the cost of serving all poor children under age five years in quality part-time or full-time (depending on need) ECCE programs could be as high as $25 billion or $30 billion per year. If to this amount were added sizable subsidies to nonpcor families to encourage them to purchase quality ECCE, the total cost could approach 5% of the federal budget (though the cost could be shared by state government, as well). However, based on the evidence presented above, these costs would be offset over time by reductions in social problems that cost society far more each year.[105]

While Barnett may be correct that devoting five percent of the federal budget to early childhood education is cost effective in the long-run, perhaps we should have additional verification of the effectiveness of the proposed programs as well as assurances that those federal monies might not be more efficiently spent on other compensatory programs such as "Success for All" or special summer learning programs for at-risk children.[106] In other words, despite the recent increasing popularity of Head Start among the public and policy makers, important conceptual and statistical questions about the relative

effectiveness of early childhood education intervention still need to be addressed and resolved before we proceed too much further.

E. Conclusion

While the rationale for educating children has shifted somewhat over time, Americans have always viewed education as fundamentally important for the individual well-being of our citizens, the productivity of the economy, and the survival of the Republic. There has been a significant shift, however, from a heavy dependance upon parental and private responsibility for that education to a greater reliance on public schools. Throughout the past 350 years, providing at least a rudimentary education for the poor was a major goal--partly because of fears of an uneducated and dependent electorate and partly because of genuine compassion to help those less fortunate than ourselves. Today, however, our society is committed to providing the same high quality of education to everyone regardless of their socio-economic or ethnic background.

Historically support for K-12 schooling has been mainly a state and local responsibility with the federal government only playing a small, secondary role. But as part of President Johnson's "War on Poverty," the federal government created several compensatory education programs for the poor such as Title I and Head Start. These educational programs symbolized

the renewed commitment of American society to helping the disadvantaged; but they were premised on an unrealistic set of expectations of being able to eradicate poverty almost entirely by means of a few uncoordinated, under-funded, and untested new federal initiatives.

In the mid-1960s Title I and Head Start raised hopes that poverty for the next generation could be eliminated, but by all accounts they have failed to provide at-risk children with sufficient assistance to overcome their disadvantages and compete equally and successfully with their middle-class counterparts. Some of the individual Title I and Head Start programs, however, have provided at-risk children with better educations than they might have received otherwise. The difficulty is that having spent more than $150 billion on these compensatory educational services, we still do not know which practices and programs are particularly effective in helping these children--especially those living in the high-poverty areas of inner-cities. The major problem is not the limited amount of federal money available for assisting disadvantaged students, but how to spend the existing monies wisely. Many educators and political leaders have labored diligently to expand funding for Title I and Head Start, but have not focused on finding out what specific educational compensatory interventions really have a significant and lasting positive impact.

There are numerous, inter-related explanations for the overall limited results from the Title I, Head Start, and other

early childhood education programs over the past three decades. Our initial expectations of them were unrealistically high and our understanding of the nature and persistence of disadvantages among the poor was too simplistic and naive. Too often well-meaning proponents of these programs understandably defended Title I and Head Start at all costs against hostile critics, but in the process were reluctant to admit their weaknesses and limitations.

Neither the Executive branch nor the Congress has done a good job of ascertaining exactly what types of compensatory education services and programs are most effective for helping at-risk children. While there have been some useful national assessments of the overall impact of Head Start and Title I, usually these evaluations have not even attempted to ascertain in a rigorous and systemic manner which particular components of their programs have been successful. And although there have been a few good in-depth assessments of individual model programs, especially in the area of early childhood education, the federal government has devoted far too little attention and funds to develop and test alternative ways of delivering educational services to disadvantaged children.

The failure of the federal government to provide more guidance in educational program development and assessment is rather surprising and very disappointing given its initial interest and efforts in this area. At the same time that the Johnson Administration created Title I and Head Start, it also

established the regional education laboratories and the research and development centers which were to produce precisely the type of large-scale program assessments that are needed. Moreover, the Nixon Administration created the National Institute of Education (NIE) to sponsor long-term research and development initiatives to perfect compensatory programs which could reduce the educational and income inequalities in our society. Unfortunately, neither NIE, nor its successor, the Office of Educational Research and Improvement (OERI) produced much of the type or quality of research and development on specific educational practices and programs which now could be employed effectively by Title I and Head Start.

Robert Slavin has candidly and aptly summarized the disappointing record of federal development and research efforts on testing instructional programs:

> For decades, policymakers have complained that the federal education research and development enterprise had too little impact on the practice of education... With a few notable exceptions, this perception is, I believe, largely correct.[107]

Most of the current research and development activities in OERI and the rest of the U.S. Department of Education do not include the systematic development and rigorous assessment of different models of compensatory education programs. While the

Department is beginning a valuable large-scale, individual-level analysis of the overall impact of the Title I program and standards-based school reform, this study will not systematically ascertain which particular local educational practices or model programs are effective. This state of affairs is partly a reflection of the limited funds available for education research and development, but it is also an indication of the relatively low priority that has been assigned over the years by educators and policy makers to the need to develop and test rigorously what types of compensatory education interventions are most effective with different populations and in various settings.

Given the inability and unwillingness of the federal government so far to create a comprehensive and cohesive initiative to develop systematically and assess comparatively specific compensatory education programs, perhaps this might be an area which private foundations could play an important constructive role. Just as in the 1950s when some of the most useful and innovative research on compensatory education were funded by private foundations, perhaps the same could be done today--either by themselves or better yet, in partnership with the federal government. Nevertheless, it is important that the U.S. Department of Education and OERI in particular return to fulfilling its frequently stated mission that the federal government would develop, test, and disseminate information about appropriate methods and models of instruction.[108]

Now may be a particularly opportune time to revisit the

larger issue of the role of education in helping at-risk children--taking into consideration the recent changes in the socio-economic conditions, the new understandings we have gained during the past 30 years about the complex and more intransigent nature of poverty, and the current debates about welfare reform and assistance. While we all should applaud and reaffirm our commitment to providing equal educational and economic opportunities for everyone, we cannot pretend that the laudable goals of Title I and Head Start are being achieved. We need to reconsider broadly and constructively the proper federal role in compensatory education in order to try to devise better ways of helping those in need of additional assistance.

When existing federal educational programs, well-intentioned though they may be, are not as effective as they could or should be, the problem is not just wasted tax dollars, but wasted chances to help those most in need. We raise the expectations of those who have the least to look forward to and then dash their hopes by failing to really help them escape from their poverty. The overall experiences with Title I and Head Start also have been frustrating for the American public who have been willing to sacrifice for the achievement of the lofty goals of Title I and Head Start, but now find that little real progress has been made. For many of the at-risk students who pass through these programs and who are not significantly helped, however, the results are more than just frustrating--they are precious opportunities lost forever.

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John Hollifield

The Experience of a National Research Center: Contributions to a Vision for a National Educational Research, Development, and Dissemination System

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This paper describes the evolution of the CRESPAR national education research and development center over the past 30 years, presents its hoped-for achievements over the next ten years, and, based on the CRESPAR experience, provides suggestions for building and supporting a strong national educational RD&D system.

The Center for Research on the Education of Students Placed At Risk (CRESPAR) is one of the national research centers funded by the Office of Educational Research and Improvement (OERI) to conduct research on topics to improve the education of America's children. The Center was established under a five-year cooperative agreement in October 1995 with the Johns Hopkins University as the prime contractor, Howard University as a major partner, and other universities and organizations participating in collaborative work. The Center was established under OERI's National Institute for the Education of At Risk Students. Appendix A contains a brief description of the Center's mission and the programs under which it conducts its research, development, and dissemination activities.

CRESPAR is the latest title of the federally funded national research center at Johns Hopkins. Since 1967, when the national research centers were first established by Congress and the first national research center at Johns Hopkins was awarded, the Center at Hopkins has continued its existence and maintained its viability, successfully recompeting through various one-year, three-year, and five-year funding cycles. The Center's initial name in 1967 was the Center for Social Organization of Schools (which remains as an umbrella title), and funding as a national education research center was successfully continued under that name through 1982. From 1983-88, funding was continued under the title of the Center on Elementary and Middle Schools (CREMS); and from 1989-94, funding was continued under the title of the Center for Research on Effective Schooling for Disadvantaged Students (CDS). Since 1995, as noted, the national research center title has been the Center for Research on the Education of Students Placed At Risk (CRESPAR). Meanwhile, the Center for the Social Organization of Schools (CSOS) continues to be the umbrella center under all other centers and funded projects are incorporated. Appendix B contains a description of CSOS.

As a continuing national education research center for 30 years -- since 1967 — CSOS/CRESPASR can offer an historical overview of its evolution as a center over the years, as well as the concurrent evolution of other components of the RD&D system. It has to be stressed that the Center is unique -- no other Center has maintained as well over the years, and no other Center has evolved along similar lines. We think, however, that the evolution of CRESPAR has much to say about how Centers can and should fit into an overall RD&D system and, indeed, what a national RD&D system ought to be all about.

The Evolution of CRESPAR

The Center began in 1967 with a specific mission: "to study how changes in the social organization of schools can make them more effective for all students in promoting academic achievement, development of potential, and later-life career success." This mission has remained constant over 30 years although, as the Center evolved, its emphasis moved toward and continues to focus on the achievement of disadvantaged students, now designated as students placed at risk.

Beginning with basic studies of school organization (task, authority, grouping, evaluation, grading, tracking structures, and so on), the Center work evolved from basic research through applied research and development through dissemination and technical assistance, and evolved from research, development, and dissemination of classroom innovations to the research, development, and dissemination of whole school improvement programs. At the current stage of evolution, much Center work is focused on not only carrying out but also researching the scaling up process, which is the effort to move effective educational programs into widespread national practice in schools. At the current stage of evolution, much Center work is focused on continued development and dissemination of four major school innovation programs — Success for All, the Talent Development Middle School, the Talent Development High School, and the Partnership-2000 Network for implementing school-family-community partnerships. All of these programs have a strong research base, evidence of effectiveness, supporting professional development activities and materials, and are being moved into use in schools nationwide.

At the same time as the Center work has evolved toward school improvement through the development and implementation of effective research-based programs, we have established new lines of basic and applied research and development that should not only inform our revision of current programs but should also contribute to a next generation of effective

programs. We expect these contributions from our studies of the concept of resilience, our studies of the cultural ecology of schools, our studies of children's readiness for school, our studies of effective practices for language minority student learning, and our studies of how to apply constructivist learning principles to student learning in mathematics and science.

The Center, based on its work to date, has a definite view of what it would like to accomplish in the next 5 to 10 (more likely 10) years. We would like, as part of an educational RD&D System, to accomplish two goals: (1) We would like to scale up the use of Center effective programs and other identified effective programs to the point that students in schools nationwide, and especially those students placed at risk, are experiencing the elements of these programs and improving their academic achievement and other outcomes because of them. We would like to at least approach and hopefully reach the point of critical mass, at which enough schools are competently using enough effective programs that local, state, and national measures of student learning, and especially the learning of students placed at risk, all show significant increases. (2) We would like, during this time, to continue conducting the necessary amount of basic research and applied research, development, and evaluation to produce revisions of current programs that make them even stronger, and to produce prototypes of new programs that will constitute the next generation of effective programs.

We need to stress that the Center is unique among the national centers that are now and have previously been funded by OERI. No other Center has moved toward program development and evaluation in such a sustained way; no other Center has worked so extensively in field studies with schools; no other Center has so heavily emphasized the development of specific curriculum materials and instructional processes; no other Center has become so extensively committed to the dissemination of effective programs and the provision of professional development activities and materials for implementation of those programs. It may be that the uniqueness of the Center makes it an unlikely and even unworkable model for other centers, but the success and recognition that the Center has achieved makes it certainly worth considering in a discussion of what makes an effective center and what makes an effective RD&D system. Some of the elements that should be considered include the following:

-- The Center's accomplishments have been and continue to be long-term. Initial studies of cooperative learning began at the Center in 1970; now, in 1997, cooperative learning components are integrated fully into its effective programs for student learning, including Success for All and the Center's Talent Development Middle and High Schools..
Dissemination of the Success for All program began basically in 1989; now, in 1997, the

program is used in more than 500 schools, with 700 projected in the 1997-98 school year. . Most importantly, these schools are replicating the program effectively and improving the achievement of their students as a result. Research on school-family-community connections began at the Center in the late 70s; now, the Center's Partnership-2000 Network is providing guidance and support in implementing and maintaining effective school-family-partnerships to 7 states, 46 districts, and 555 schools, and these numbers are growing daily.

-- The Center has been able to maintain continuity of its R&D efforts despite changes in its title and funding vagaries. Current funding levels allow the Center to continue a full program of research, development, dissemination, and technical assistance activities.

-- The Center has maintained stability of staff and program leaders, which is key to producing long-term benefits. Program leaders have been able to conduct their initial research, follow its results into program development, oversee implementation in schools, and plan and carry out scaling up processes.

-- The Center has maintained a full-time, interdisciplinary r & d emphasis at a central, critical-mass location. Almost all Center researchers, although designated as Johns Hopkins faculty, have a full-time commitment to their research and development programs and few if any teaching and University departmental responsibilities. Their training is primarily as sociologists, psychologists, and social-psychologists. Throughout the various iterations of the Center and various collaborations with other institutions and organizations, the Center's critical mass has remained at and continues to remain at the Johns Hopkins University under the umbrella title of the Center for Social Organization of Schools.

We view all of the above components as important elements to be considered in the discussion of how centers can contribute most effectively in a viable educational RD&D system.

How the Center Has Worked within the RD&D System

In our long history, we have carried out many collaborative efforts with the Regional Laboratories and with the ERIC system. Many activities are conducted routinely as a function of being part of a system -- examples include the exchange of information between regional lab and center researchers in their work in common areas, the provision of all Center publications for inclusion in ERIC, the use of ERIC in research paper searches, the collaboration with regional labs as part of CEDaR activities, the writing of briefs and other

publications for ERIC, and so on. Regional laboratories use the Center's work and the Center uses the work of the regional laboratories, often in collaborative ways, but extensively as a routine part of the RD&D system. Regional laboratory publications report on and extensively disseminate the work of the Center in their regions.

We anticipate that the use of ERIC as a source of complete technical reports and other Center publications will be a major benefit to the Center in the dissemination of its work nationwide.

After many years, we seem to be approaching an extremely effective systemic collaboration with regional laboratories in the development and dissemination and provision of technical assistance for effective programs. The WestEd laboratory, building upon previous work of SWRL, is the designated regional training center for Success for All in their Southwest region. The laboratory is now working with more than 30 elementary schools on SFA implementation, adaptation to local conditions, and evaluation. The laboratory has also identified middle and high schools and begun early implementation work on the schools' use of the CRESPAR Talent Development Middle and High School models. The North Central Regional Laboratory (NCREL) is also in the initial stages of conducting similar work, beginning with SFA in three Chicago elementary schools and the Talent Development High School model in Thurgood Marshall High School in Chicago. Discussions are also underway with the SERVE regional laboratory to establish similar collaborations with them.

An RD&D System Vision

Regional Laboratories -- We consider our work with regional laboratories to be highly significant in the overall concept of an educational RD&D system. It illustrates that regional laboratories and centers can indeed collaborate effectively in the research, development, and dissemination of research-based programs for schools. At CRESPAR, we are working toward an ideal -- a time when all of the regional laboratories, as part of their routine operations, will operate as regional training centers not only for CRESPAR-developed effective programs, but also for other research-based and proven effective programs that would benefit the schools and children in their regions.

National R & D Centers — Our vision for national research centers, based on our own successes and non-successes, is that they could be structured to address multiple facets of the RD&D process — that they will conduct the basic research in their areas, build on that to develop, evaluate, and disseminate prototypes of effective programs and practices, work with

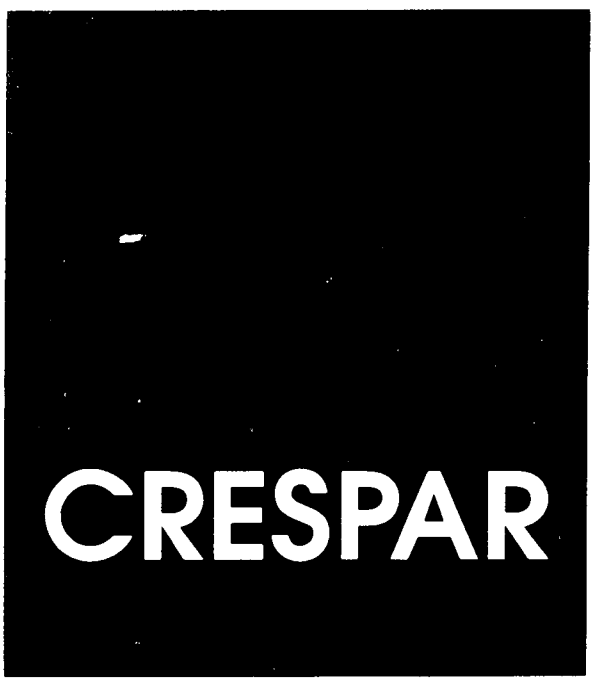
schools and other stakeholders in adoption, adaption, and revision, and scale up into national use (involving collaboration with regional laboratories and other organizations), resulting in improved student outcomes on a national scale. Various centers, of course, and various programs within centers, would be at different stages of this vision at different times.

RD&D System -- With National Institutes at OERI leading the effort, we believe that an effective educational RD&D system can be structured in which the central theme is the research, development, dissemination, and maintenance in schools nationwide of school-wide programs that improve student achievement and other outcomes. We believe that such an effort can achieve measurable nationwide results in the span of a 10-year time period. We believe that this will require effective leadership by OERI and effective collaboration among centers, regional laboratories, and ERIC, along the lines discussed above.

APPENDIX A -- CRESPAR DESCRIPTION

APPENDIX B -- CSOS DESCRIPTION

EVERY CHILD HAS THE CAPACITY TO SUCCEED IN SCHOOL AND IN LIFE. Yet far too many children, especially those from poor and minority families, are placed at risk by school practices that are based on a sorting paradigm in which some students receive high-expectations instruction while the rest are relegated to lower quality education and lower quality futures. The sorting perspective must be replaced by a "talent development" model that asserts that all children are capable of succeeding in a rich and demanding curriculum with appropriate assistance and support.



The mission of the Center for Research on the Education of Students Placed At Risk (CRESPAR) is to conduct the research, development, evaluation, and dissemination needed to transform schooling for students placed at risk. The work of the Center is guided by three central themes —ensuring the success of all students at key development points, building on students' personal and cultural assets, and scaling up effective programs—and conducted through seven research and development programs and a program of institutional activities.

CRESPAR is supported as a national educational research center by the Office of Educational Research and Improvement, United States Department of Education.

CRESPAR

CENTER FOR RESEARCH ON THE EDUCATION OF STUDENTS PLACED AT RISK

JOHNS HOPKINS UNIVERSITY AND HOWARD UNIVERSITY

-with-

University of California at Santa Barbara
University of California at Los Angeles
Arizona State University
University of Chicago
Manpower Demonstration Research Corporation
Southwest Regional Laboratory
University of Memphis
University of Houston-Clear Lake

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PROGRAM 1: RESILIENCE AND CULTURAL INTEGRITY

A. Wade Boykin and Saundra Murray Nettles, Co-Directors

This program is conducting two projects: a study of resilience in African American children as they proceed through key transitions from elementary to middle and middle to high school; and a study of the role of cultural factors in cognitive functioning among African American students.

Project 1.1: Lessons from Resilient Children and Youth

This project is conducting longitudinal studies that identify resilient children and analyze the protective mechanisms in their schools, families, and communities that help to foster their resilience. We are following the resilient and non-resilient outcomes of urban third- and fourth-graders through two years in communities that experience high or low community violence, and urban eighth-graders through their entry into twelfth grade. These studies are being supplemented by analyses of national data sets that focus on how the participation of middle and high school students in community activities can increase their commitment and investment in schooling.

1.1a: Exposure to Violence and School Functioning of African-American Children: Lessons from Resilient Children. This project is studying the impact of exposure to violence in the community, at school, and at home on the social, emotional, and cognitive development of elementary age children. Indicators of resilience and protective mechanisms will be investigated among children, their families, and their communities. The project will follow a sample of 175 third graders in two schools through elementary school.

1.1b: Student Life in High Schools: A Longitudinal Study. This project is conducting a longitudinal study of 90 students (30 in each of three diverse urban high schools) from the spring of their eighth grade through the twelfth grade. Interview data and quantitative data are being collected to examine how course failure and disengagement result from the stress of the transition into high school or from the impact of the new school environment into which students are transitioning.

1.1c: Fostering Student Investment. This project is analyzing national longitudinal data to examine how adolescents' participation in out-of-school activities, including community activities, through middle and high school enhance their investments in personal and educational growth.

Project 1.2: Cultural Factors in Cognitive Performance and Classroom Settings

This project is conducting experimental and naturalistic studies of classroom instructional practices and classroom contexts that emphasize the cultural integrity of low-income African American schoolchildren. These studies will provide the base for developing and evaluating formats and contexts that capitalize on the cultural experiences and competencies that all students bring to school with them.

1.2a: Cultural Factors. This project is conducting experimental studies of the relationships among culture, context, and cognition, to develop contexts for learning and performance that are responsive to children's prevailing cultural experiences and thereby facilitate academic outcomes. Cultural resources examined for their effects on student learning and development in classrooms include movement/music, communalism, physical stimulation, and orality.

1.2b: Classroom Cultural Ecology. This study is examining the current cultural dynamics that operate in schools that serve low-income African-American children. Rich descriptive information about the routines, practices, and frames of reference that characterize the classroom experiences of educationally underserved populations will provide a knowledge base for optimal implementation of reforms.

PROGRAM 2: EARLY EDUCATION AND DEVELOPMENT

Nancy Karweit and Barbara Wasik, Co-Directors

The Early Education and Development program is developing an early intervention program and assessing its effectiveness when used alone and in combination with other successful school-aged intervention programs. In addition, the program is determining how specific practices and beliefs related to school readiness affect the successful transition from home to school of students placed at risk.

Project 2.1: Longitudinal Study of Early and School-Aged Interventions

This project will first develop and evaluate an early intervention program that focuses on the development of pre-reading skills for children aged three to four. Once program development is completed, we will investigate the short- and long-term benefits of alternative arrangements of these intervention combinations: early intervention without school-aged follow-up, early intervention with school-aged follow-up, no early intervention with school-aged intervention, and no early and no school-aged intervention.

Project 2.2: Readiness for First Grade

This project is surveying kindergarten and first-grade teachers in a representative sample of schools, and selected parents of the children in those schools, to examine their beliefs and perceptions about children's readiness for entrance to kindergarten and for first grade. Based on the survey data, schools will be identified that have interesting practices related to readiness and transition from home to kindergarten and from kindergarten to first grade. Case studies of a number of children in these schools will be carried out to determine the effects of school and home practices on helping children make transitions between settings where very different expectations are held for them.

PROGRAM 3: SCHOOL AND CLASSROOM INTERVENTIONS: ELEMENTARY SCHOOLS

Robert Slavin and Nancy Madden, Co-Directors

This program is designing, evaluating, and disseminating programs that restructure elementary schools to make them capable of ensuring success for all children in the elementary grades. The program also is conducting separate studies of effective program components and issues involved in elementary school education.

Project 3.1: Restructuring Elementary Schools

This project is conducting a longitudinal study of Success for All, a comprehensive and highly successful elementary school restructuring program; evaluating math, science, and social studies instructional approaches based on cognitive science research; and developing and evaluating an approach to elementary restructuring built around the highly effective Reading Recovery tutoring model.

3.1a: Longitudinal Study of Success for All. Six years of longitudinal research on Success for All in urban and rural districts has found consistent positive effects on student reading performance in reading and substantial reductions in retentions and special education placements. This project is continuing the longitudinal evaluations in these districts, and in three other districts that use the Spanish version of Success for All, to examine lasting effects and effects beyond within-school outcomes. In addition, a five-year longitudinal study from the beginning of first grade through the end of fifth grade of the effects of the components of Success for All is being carried out in 76 elementary schools in Houston.

3.1b: Roots and Wings: Implementing Constructivist Curricula. This project is developing programs for elementary school math, science, and social studies that are based on the premise that children are active constructors of knowledge. These programs emphasize discovery, experimentation, cooperative learning, and open-ended problem solving. The programs are being developed and evaluated in high-poverty urban and rural schools.

3.1c: Literacy as a Lever for Change. This project is developing and evaluating the Literacy Development Model (LDM), a comprehensive urban elementary school change model that focuses on (1) children's early success, (2) enhancing teachers' pedagogic skills and understanding of children's development, (3) services for literacy support throughout the grades, (4) longitudinal assessment portfolios, (5) enabling teachers to work collaboratively and develop a professional community, and (6) engaging partnerships among schools, homes, and communities. The program is being developed in three Chicago public elementary schools over five years; in years four and five the schools will begin serving as urban professional development schools that provide preservice and professional education for other urban educators and the LDM model will be replicated in other urban cites.

Project 3.2: Supporting Student Development After School

This project is examining after-school programs for children placed at risk. An initial literature review will be followed by the development and evaluation of research-based models that focus on academic support and a variety of enrichment and recreational activities.

Project 3.3: Patterns and Consequences of Early Tracking

This project is examining types of tracking in urban elementary schools, such as reading groups, retention, and special education placement, and their effects on children's progress through the elementary and middle grades and beyond. The study is also examining how the tracking practices in urban elementary schools interact with the tracking practices of middle and high schools. Data for the study include longitudinal information on the academic progress and personal development of a large cohort of urban children who entered first grade in the fall of 1982.

Project 3.4: Successful School Transitions

This project is examining the supportive mechanisms that enable children to make successful transitions through elementary and middle schooling, using a national longitudinal data set (Prospects). Analyses will identify the individual and environmental characteristics of children in high-poverty schools who do and who do not make important school transitions successfully.

PROGRAM 4: SCHOOL AND CLASSROOM INTERVENTIONS: MIDDLE AND HIGH SCHOOLS

Sylvia Johnson, James McPartland, Douglas Mac Iver, and Serge Madhere, Co-Directors

This program is creating, evaluating, and disseminating Talent Development (TD) designs for middle schools and high schools in which all students can succeed in demanding curricula. The TD middle and high school models share a focus on comprehensive, schoolwide restructuring, high-quality professional development, high expectations for all students, and flexible, intensive assistance for students when they need it. This work includes studies of the use of responsive teacher teams, college connections programs, Career Academies, and Equity 2000, a program designed to enable all students to take mathematics courses that lead to college. Related studies are examining how equity in resources and classroom learning activities can be documented through indicators of opportunities to learn, and how performance assessment can be operationalized in middle and high school mathematics and science.

Project 4.1: The Talent Development Model Middle School

This project is developing and evaluating the Talent Development model middle school in collaboration with administrators, teachers, and parents in Philadelphia and Washington DC middle schools. This comprehensive middle school approach includes demanding curriculum for all students supported by appropriate pedagogies and technologies, school organization that supports stronger teacher-student bonds, classroom organization that enhances effective instruction of diverse students, guidance experiences that encourage college aspirations and provide realistic steps toward different postsecondary options, flexible use of time and resources to ensure student success, assessment approaches that motivate students, and parent and community partnerships that connect students' schooling with their families and communities.

Project 4.2: The Talent Development Model High School

This project is developing and evaluating the Talent Development model high school in collaboration with administrators, teachers, and parents in Baltimore and Washington DC non-selective high schools. This comprehensive high school approach includes high curriculum standards with adequate supports that ensure the success of all students, responsive teacher teams that create a supportive learning community while addressing individual needs, career academies that integrate academic and vocational curriculum, and college connections programs that provide information and counseling leading to college attendance. The project is conducting external evaluation studies of these components concurrently with their development within the Talent Development model.

Project 4.3: Opportunities to Learn

This project is analyzing data from multiple national longitudinal surveys (Prospects, NELS:88, High School and Beyond) to identify and examine the key learning resources and instructional processes (opportunities to learn) that ensure that students placed at risk will achieve high standards. Analyses are examining how school and classroom resources (such as per-pupil expenditure, teacher credentials and development) enable and foster types of learning environments (such as the Talent Development model components) that improve student learning and development.

Project 4.4: Broadening the Scope of Assessment in the Schools

This project is working collaboratively with middle and high school teachers and assessment personnel in schools serving students placed at risk to enhance and evaluate the use of authentic performance assessments focusing on higher order instructional goals. The project's work will contribute to the use of performance-based assessments by teachers in the Talent Development model schools and by teachers high-poverty school districts nationwide.

PROGRAM 5: LANGUAGE MINORITY STUDIES

Richard Durán and Robert Slavin, Co-Directors

This program is conducting studies of effective bilingual education programs and cooperative learning approaches in schools serving language minority children. The program also includes a series of studies of American Indian education and a study of the effectiveness of staff development through Teacher Learning Communities.

Project 5.1: Effective Bilingual Education

This project is investigating the quality of bilingual programs — how bilingual programs can best be organized to ensure the success of limited-English proficient students in their home language and thus ultimately in English. Experimental and ethnographic studies within the project are examining (1) three curricular interventions — Directed Reading and Thinking Activity, Writing Portfolios, and Student Research Projects; (2) *Lee Conmigo*, the Spanish version of the Success for All reading program; (3) a two-way bilingual program in El Paso in which both English and Spanish are taught, used, and supported; and (4) Communities of Effective Practice Schools — three urban schools that focus on schoolwide biliteracy.

Project 5.2: Effective American Indian Education

This project is conducting a series of studies on the education of American Indian students, including comprehensive reviews of research on American Indian education and on the financing of Indian education, a longitudinal study that examines the effects of secondary school experiences and personal factors on the ultimate college success of Cherokee students, and a case study of schools serving American Indian students that graduate a substantial proportion of their students.

Project 5.3: Teacher Learning Communities

This project is conducting a series of studies on effective staff development of teachers through building Teacher Learning Communities (TLCs). TLCs have previously been established in schools that were implementing innovative bilingual programs, to allow teachers to meet on a regular basis and engage them in coaching, reflection, exploration of new ideas, and joint problem solving. This project is establishing the TLC approach in an initial ten bilingual elementary schools, identifying matched comparison schools, examining the effects on professional development and innovation over a five-year period, and expanding the number of schools involved to approximately 100 over the five-year period.

Project 5.4: Review of the State of Research on the Education of Asian-Americans Placed At Risk

This project is examining research on Asian Americans who are at risk of school failure, especially to identify major gaps in the research and suggest directions for new research in the area.

PROGRAM 6: SCHOOL, FAMILY, AND COMMUNITY PARTNERSHIPS

Joyce Epstein and Hope Hill, Co-Directors

This program is developing, evaluating, and disseminating effective approaches to school-family-community partnerships to build a national program of partnerships for all schools that serve students placed at risk; increasing the preparation of educators so they can conduct productive partnerships; increasing the knowledge base on which partnership programs are developed, and developing and evaluating a working model of school, family, and community partnership for use in violence prone communities.

Project 6.1: Reaching the National Goal for School, Family, and Community Partnerships

This project is working in three areas to help schools reach the national goal of promoting partnerships that will increase parent involvement and participation in promoting the social, emotional, and academic growth of children. The three areas include (1) developing, evaluating, and disseminating processes and practices that all schools, including those that serve students placed at risk, can use to involve families and the community in children's education; (2) increasing the readiness and capabilities of colleges of education to prepare teachers and administrators for family and community involvement in schools, and (3) continuing to expand the research knowledge base on family and community involvement with schools.

6.1a: Expanding Capacity, Program Development, and Use of Effective Practices. This project is carrying out and examining processes by which the use of effective school-family-community partnership practices can be scaled up — from one or a few teachers to a whole school; from demonstration sites in a district to the entire district; from selected districts in a state to all districts; and from inconsistent use in various states to supported and guided use in all states. One activity is examining how the Baltimore City Public Schools will proceed over a five-year period through individual school use, regional-area use, and then district-wide use. A second activity is the formation of a nationwide network of "Partnership 2000" schools, districts, and states dedicated to implementing and evaluating effective school, family, and community partnerships.

6.1b: Preparing All Educators to Effectively Involve Families and Communities in Partnerships. This project is examining how prospective teachers and administrators can be more fully prepared in preservice and advanced education courses by colleges of education to understand, value, and initiate effective school, family, and community partnerships in their schools.

6.1c: Continuing Research and Development to Improve Partnership Processes and Practices. This project will supplement the primary work of the program to move effective processes and practices into widespread use. Data analyses of national and local longitudinal survey studies will provide further information and knowledge on the effects of partnerships for students placed at risk in elementary, middle, and high schools.

Project 6.2: The SAFE START Violence Prevention Program

This project addresses a special need in the area of school, family, and community partnerships — the development and evaluation of partnerships that improve the outcomes of children who attend schools in violence prone communities. The project is developing and evaluating a comprehensive school-based violence prevention program in two urban elementary schools that emphasizes the prevention of violence through pro-active cultural socialization and use of partnerships among schools, families, and community resources.

PROGRAM 7: SYSTEMIC AND POLICY-RELATED STUDIES

Hakim Rashid and Samuel Stringfield, Co-Directors

This program is studying how implementation of Chapter 1 / Title I policies can best support systemic school reform, how outstanding schools serving poor and minority students can be systemically supported and replicated, and how effective programs can be "scaled up" for use nationwide. Additional analyses of policy issues derived from international studies and studies of student mobility are being conducted.

Project 7.1: Increasing the Effectiveness of Title I

This project is conducting long-term studies of improvement efforts being carried out in schools serving students placed at risk that have been identified as in need of program improvement under Chapter 1 / Title I. The studies are examining the implementation and effects of Chapter 1 / Title I program improvement mandates, the characteristics that make program improvement more effective, how those characteristics can be reproduced in other schools and districts, and the effects of changes in the program improvement provisions as Chapter 1 becomes Title I.

Project 7.2: Exemplary Schools and Programs and Their Systemic Supports

This project is conducting four large-scale studies of systemic reform. The Super Schools study is examining schools that produce extraordinary outcomes with children placed at risk to determine how levels of district and community support influence and sustain their effectiveness. The 10-Year Followup of 16 Schools in the Louisiana School Effectiveness Study examines how schools with documented histories of greater or lesser effectiveness, stability, or change are able to sustain their effectiveness, improve, or deteriorate, and how improvement and/or deterioration are related to system supports. The Long-Term Effects of Implementing Promising Programs study will follow up on a previous three-year study of schools nationwide that are implementing various effective programs to examine how these schools have been able or not been able to institutionalize the programs, paying special attention to the levels of systemic support needed to achieve full institutionalization. The Beyond Piecemeal to Systemic School Reform study is examining the impact of an intensive collaboration of university educators, researchers, district and school personnel, parents, and community participants on the achievement, motivation, and success of children who enter and move through a complete urban public school feeder system from early childhood through intermediate through secondary education.

Project 7.3: Scaling Up School Improvement Models

Whole-school reform strategies have been slow to enter wide-scale practice. One study in this project is examining how one effective model of school improvement — Success for All — can be "scaled up" to approach nationwide implementation through the establishment of regional training sites and the development of district and regional mentoring networks. A second study is examining the scaling-up process being undertaken by the nine school restructuring projects being funded for development by the New American Schools Development Corporation, in which large school districts and states will sponsor five-year expositions to showcase these projects in schools.

Project 7.4: International Issues

This project is being conducted in collaboration with researchers in nine countries to examine the kinds of schooling that each offers to students placed at risk, the differences between schooling provided for low-SES and middle-SES students in each country, and the characteristics that are associated with more effective schooling for students placed at risk in each country.

Project 7.5: Effects of Student Mobility

This project is documenting the extent of student mobility in a large urban school district, examining how that mobility influences both school and district policy decisions and processes to cope with the transitory nature of their student bodies, and examining how these decisions and processes may be improved through school restructuring.

CENTER FOR SOCIAL ORGANIZATION OF SCHOOLS • JOHNS HOPKINS UNIVERSITY

THE CENTER FOR SOCIAL ORGANIZATION OF SCHOOLS (CSOS) WAS ESTABLISHED AS AN EDUCATIONAL RESEARCH AND DEVELOPMENT CENTER AT JOHNS HOPKINS UNIVERSITY IN 1966. FOR MORE THAN 25 YEARS, THE CENTER HAS MAINTAINED A STAFF OF FULL-TIME, HIGHLY PRODUCTIVE SOCIOLOGISTS, PSYCHOLOGISTS, SOCIAL PSYCHOLOGISTS, AND OTHER SCIENTISTS WHO CONDUCT PROGRAMMATIC RESEARCH TO IMPROVE THE EDUCATION SYSTEM, AS WELL AS FULL-TIME SUPPORT STAFF ENGAGED IN DEVELOPING CURRICULA AND PROVIDING TECHNICAL ASSISTANCE TO HELP SCHOOLS USE THE CENTER'S RESEARCH. THE CENTER CURRENTLY INCLUDES THE NATIONAL CENTER FOR RESEARCH ON THE EDUCATION OF STUDENTS PLACED AT RISK, THE NATIONAL CENTER ON FAMILIES, COMMUNITIES, SCHOOLS AND CHILDREN'S LEARNING, AND THE BALTIMORE PUBLIC EDUCATION INSTITUTE.

RESEARCH PURPOSE

The purpose of the Center for Social Organization of Schools has remained stable for over a quarter century – to study how changes in the social organization of schools can make them more effective for all students in promoting academic achievement, development of potential, and later-life career success. The emphasis on social organization is based on sound theory – that changes in the structure of an environment will produce changes in the attitudes, behaviors, and accomplishments of the people in that environment. Thus schools can be made more effective for all students through changes in the organization of the classroom, school, and district.

This emphasis drives the Center to address many major practical problems in education, including:

- How to develop learning environments that minimize student apathy or disruption and maximize student commitment, satisfaction, and learning;
- How to organize educational experiences that foster the learning of students with different interests and needs;
- How to facilitate the successful transition from education to work;
- How to structure and coordinate educational programs to provide fair access to educational and occupational opportunities.

RESEARCH METHODS

The research methods employed by the Center reflect the tasks to be accomplished and the expertise of the research personnel. Survey research is employed to discover and define relationships between school organizational practices and student outcomes – this type of research, carefully administered and interpreted, provides a knowledge base of how schools work and how they affect student learning and development. Experimental research is conducted in school settings – this type of research, conducted rigorously, provides solid evaluations of organizational practices and instructional processes that improve student learning and development. And Center technical assistance staff work hand-in-hand with schools to implement and evaluate the research-based practices and processes.

RESEARCH FUNDING

The Center was established in 1966 under a Congressional mandate that created a national network of 20 research centers to study the problems of education. Since that time, the Hopkins Center has remained true to its mission and received continuous federal funding as a Center from, first, the original Office of Education National Center for Educational Research and Development; then from the National Institute of Education, and now from the current Office of Educational Research and Improvement.

At the same time, the Center has solicited and received multiple grants from other sources to supplement, enhance, and extend its programmatic research. Thus Center research on school organization factors that promote the learning of mainstreamed students received support from the Office of Special Education; the National Science Foundation supported necessary curriculum development to accompany research on instructional processes and research on promoting minority student involvement in science; the National Diffusion Network supports the Center's dissemination of its research products into nationwide school use. In each of these cases, as with others, the purpose of this grant-seeking activity is to provide supplemental funding for research, development, and dissemination activities that are germane to the Center's mission.

Center for Research on the Education of Students Placed At Risk

The mission of the Center for Research on the Education of Students Placed At Risk (CRESPAR) is to conduct the research, development, evaluation, and dissemination needed to transform schooling for students placed at risk, especially by supporting a talent development model of school organization and instruction.

Scientific study and evaluation can provide a major basis for restructuring schools to meet the needs of students placed at risk, but so far have been seldom applied. The hallmark of the Center's programs is their use of scientific designs, measures, and methods to provide clear tests of the true impact of new educational approaches and to provide empirical evidence on how to improve the education of students placed at risk under different school conditions.

The work of the Center is conducted through seven research and development programs: (1)Resilience and Cultural Integrity; (2)Early Education and Development; (3)School and Classroom Interventions: Elementary Schools; (4)School and Classroom Interventions: Middle and High Schools; (5)Language Minority Studies; (6)School, Family, and Community Partnerships; and (7)Systemic and Policy-Related Studies. The Center also conducts a program of institutional activities.

Center on Families, Communities, Schools and Children's Learning

The mission of this Center is to conduct research, evaluations, policy analyses and dissemination to produce new and useful knowledge about how families, schools, and communities influence student motivation, learning, and development, and to improve the connections between and among these major social institutions.

The Center is a consortium of researchers from Boston University, Institute for Responsive Education, Johns Hopkins University, Michigan State University, Temple University, Wheelock College, Yale University, and ZERO-TO-THREE/NCCIP. Two programs guide the Center's work: Program on the Early Years of Childhood and Program on the Years of Early and Late Adolescence. A third program of Institutional Activities includes a wide range of dissemination projects to extend the Center's national leadership.

Guiding Principles

The Center has established guiding principles for conducting research that have served it well in carrying out its mission to help schools increase student learning and development.

Educational research must be a rigorous science. All correlational and experimental research must employ rigorous scientific methodology, so that the findings and conclusions of the research will be credible and applicable.

Educational research can be most effective if it deals with the aspects of schooling that are most amenable to being changed. In general, organizational factors in schools are much easier to change than are the attitudes, beliefs, and expectations of students, teachers, and other personnel. But changes in the school's social organization can then produce the desired changes in attitudes, beliefs, and expectations.

Research that attempts to produce knowledge about schools and to produce change in schools must take place in collaboration with the schools – not in an ivory tower atmosphere. Initial surveys and correlational studies can provide valuable beginning information about schools, but that information must then be developed into practical programs and processes that schools can use. The development and evaluation of these programs and processes must be conducted rigorously in full collaboration with school personnel.

Research findings and practical innovations, in order to make a difference in student learning and development, must be nationally disseminated through extensive collaboration with existing educational organizations and through direct contact with district and school personnel.

Accomplishments

Center researchers have published over 500 reports in major social science journals and in the regular Center Report series distributed to key leaders in the fields of education and sociology. They have presented research findings each year at the American Educational Research Association, American Sociological Association, American Psychological Association and other professional meetings. They have authored numerous articles for professional and association magazines and published numerous books and book chapters about their work. Thus Center research has contributed greatly to building a scientific knowledge base in education.

Examples of these contributions to the knowledge base include studies and definitive findings concerning the uses of microcomputers in schools, the relationship of student time-on-task to academic achievement, the effects of parent involvement in their children's schoolwork, the effects of education on later-life employment, the effects of various classroom instructional processes on student learning and development, the effects of student participation in school decision making, the effects of school desegregation on minority achievement and later-life education and employment, and many other findings.

In many cases, the Center has elaborated on its research findings to produce practical organizational forms and processes for school improvement. The Center's Student Team Learning instructional processes are used in schools nationwide to improve student achievement and race relations. The Quality of School Life scale and the Effective School Battery provide schools with effective ways to measure their progress toward school improvement. The Teachers Involve Parents in Schoolwork (TIPS) processes provide interactive homework experiences for children and parents in grades K-8. The Center's Program Development Evaluation model provides schools with a full-scale organizational development process for adopting innovations successfully and building their own capacity for self-improvement. The Center's Success for All and Roots & Wings elementary school restructuring programs provide viable and effective models for improving the schooling of disadvantaged children.

Audiences for CSOS Research and Products

The activities of CSOS address the interests or needs of several specific audiences: (a) scientists in the sociology of education and the social psychology of the learning process; (b) education policy specialists, and (c) school practitioners. A balance is maintained in Center work among basic research, studies of specific problems in schools, and development of useful products for education.

For Further Information

Lists of Center reports and detailed overviews of Center programs and products are available on request. Newsletters are published by the Center for Research on the Education of Students Placed At Risk, the Center on Families, Communities, Schools and Children's Learning, and the Success for All program. Requests should be directed to:

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May 28, 1997

Attached is the brief paper I developed for a follow-up to the OERI Planning Board meeting.

Sincerely,

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Outline of a Theory of Knowledge Utilization to Guide Strategic Planning
by the Office of Educational Research and Improvement

The Problem

While there is much to be learned about how to enhance education and human development, the utilization of research and systematic inquiry in educational problem solving falls well short of the availability of useful knowledge and proven strategies for data-based decision making. OERI has been concerned about this for some time and has engaged in many activities to remedy the problem. It seems fair to say that these activities have little planned relation to one another, that the decision to pursue them was not shaped by a strategic plan, and that their combined impact leaves much to be desired. Moreover, it seems likely that there are other strategies that might be pursued that would be more effective than those now in place. Thus, OERI needs a strategic plan for increasing the influence of Research and Systematic Inquiry Utilization" (hereafter referred to as RSIU)* that would (1) identify potentially effective alternatives, (2) point to priorities in the support of different strategies and (3) facilitate the allocation of resources among options.

Underlying any good strategic plan is a theory -- or a set of theories -- that posits causal relationships linking processes to desired outcomes. Such a theoretical framework for strategic planning should be tentative and continually reexamined. But, explicating understandings and

* Note: The somewhat awkward term "research and systematic inquiry utilization" is employed in this memo for two reasons: (1) it moves us away from the idea that there is a cupboard full of knowledge just waiting to be used and (2) it is unlikely that research findings will be of much interest to people who are not in the habit of engaging in systematic inquiry, a point made clearer below.

assumptions about why and how RSIU occurs in education are important to taking effective action to increase it.

A First Cut Theory

Five sets of variables appear to determine the extent to which research-based knowledge and systematic inquiry are used to develop and implement effective educational policies and practices:

1. The capability and motivation of the user. These personal characteristics vary with context and in relation to one another. Capability tends to lead to increased motivation; motivation without capability leads to misuse and negative effects.

2. The opportunity to use new knowledge and skills. This is contextual and involves variables such as time, facilities and equipment, organizational culture and prescribed and proscribed policies and practices.

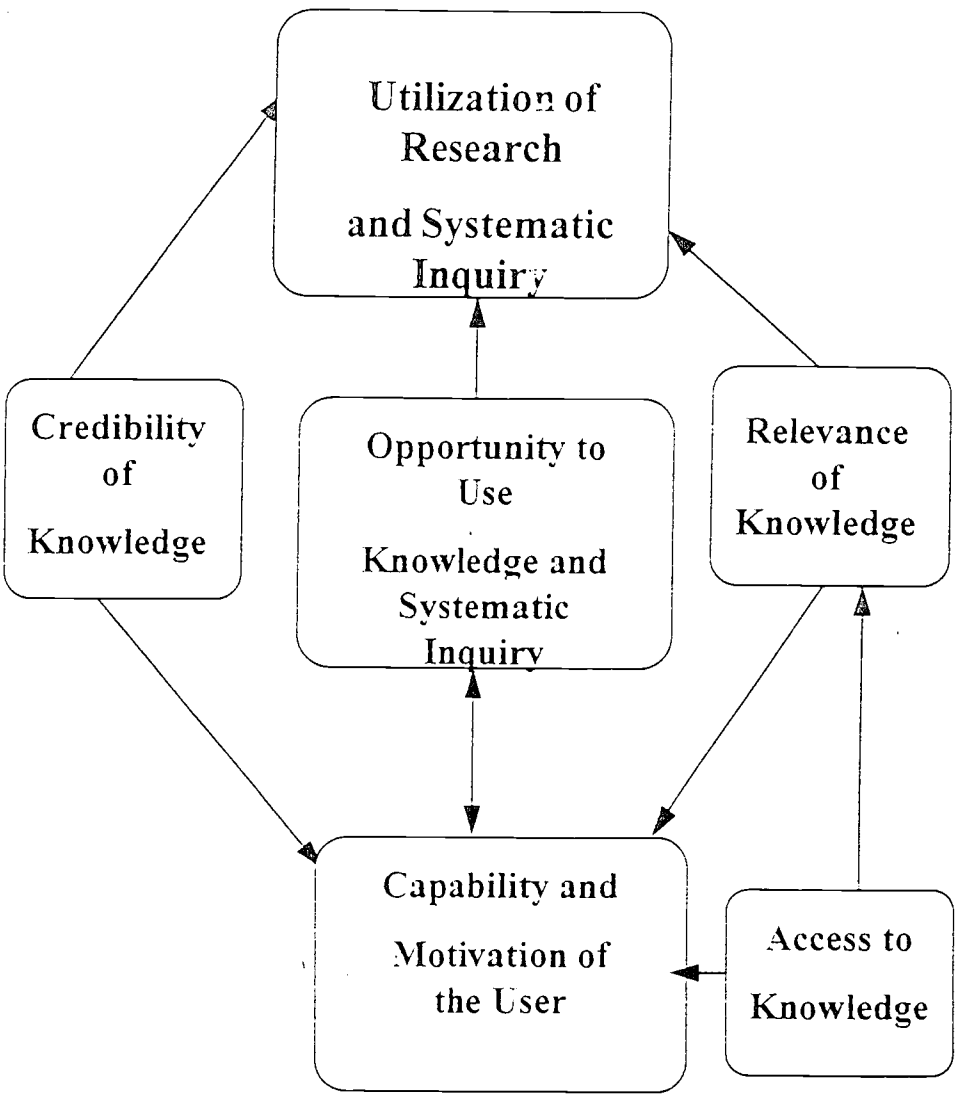
3. The credibility of the knowledge available. Credibility can be defined externally (i.e., by quality of research methods) and by the authority attributed to it by the potential user.

4. Accessibility of knowledge. Often defined in terms of the number of places the information can be found and the technical ease of obtaining knowledge, access is also related to whether the knowledge is available in a form and at a time that facilitates its use (hence the phrase, "just enough, just in time").

5. Relevance of knowledge. Relevance is defined by the potential user, not by the provider. This is one reason why the use of systematic inquiry and research are interdependent. What the potential user considers relevant is influenced by organizational priorities and cultures, immediate problems and the way they are defined, peer and environmental pressures and norms, and personal values and understandings.

These five influences on the use of R&SI are, as Figure 1 suggests, interrelated.

Figure 1
INFLUENCES ON THIS UTILIZATION OF
RESEARCH AND SYSTEMATIC INQUIRY



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Because the five influences on RSIU identified in Figure 1 are interrelated, increasing the quality of one of them may or may not lead to RSIU. Developing strategies and priorities that take into account the interdependencies among the influences is likely to be much more effective in facilitating RSIU than efforts to affect them individually. The dynamics implied in Figure 1 seem relatively simple.

Having access to knowledge that one doesn't believe will be helpful in accomplishing tasks one cares about, makes the knowledge irrelevant - - there is no motivation to take advantage of access. Motivation is also influenced by the predispositions one has toward the usefulness of research and systematic inquiry. In some measure, increasing access may be motivating because it decreases search costs, if the information provided is relevant. However, increasing access to information that is not relevant or is not credible will decrease motivation. Furthermore, increasing access may increase search costs, lead to information overload, and be confusing. Thus, having access to topically relevant knowledge and the motivation to acquire such knowledge can lead to greater use, but if the knowledge accessed is unreliable, use will be ineffectual (or worse) and the lesson learned will be that research-based knowledge is not useful.

Reliability of education-related "research" is particularly problematic because there is so much information available, so little quality control over the supply, and such limited technical expertise about RSIU among policy makers and practitioners. Only a few policy makers and practitioners have the expertise to distinguish between technically reliable knowledge and information with a weak empirical base or information whose usefulness is heavily context-specific.

Envisioning an Educational Research, Development, and Dissemination System

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March 20, 1997

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