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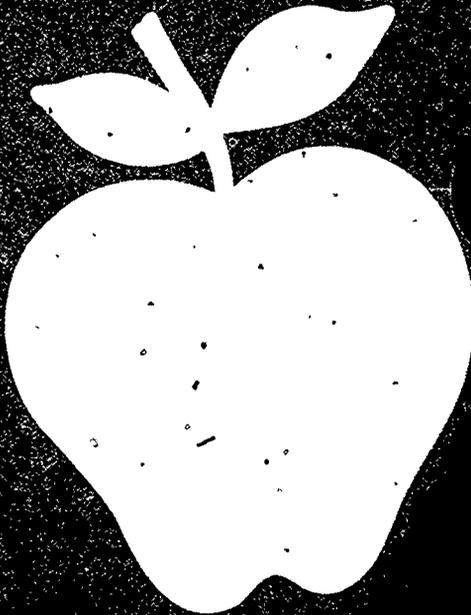
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ABSTRACT

In five chapters and two appendices, this report discusses the goals and activities for 1978-79 of the National Institute of Education (NIE) and the National Council on Educational Research (NCER), which is the policy-making body for the NIE. In the first chapter, outgoing NCER chairman John E. Corbally reviews problems involved in utilizing NIE research. The second chapter describes NCER's membership, organization, and role in overseeing the NIE's budget and programs. Several NCER activities in the two-year period are also highlighted, including a seminar on "Educational Issues in the 1980s," a journalism fellowship program, and a conference on testing. In chapter 3, NIE director P. Michael Timpane reports on NIE goals, programs, dissemination of results, and future responsibilities. The next chapter covers NIE activities, organization, research planning, program funding, research laboratories and centers, and assistance projects for the Congress, federal departments, and the education community. In a special report, the last chapter discusses literacy in the U.S. as both a concept and a research topic. The two appendices provide information for those seeking NIE funding support and an annotated list of 1978-79 NIE publications. (RW)

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**Fifth Report of
The National
Council on
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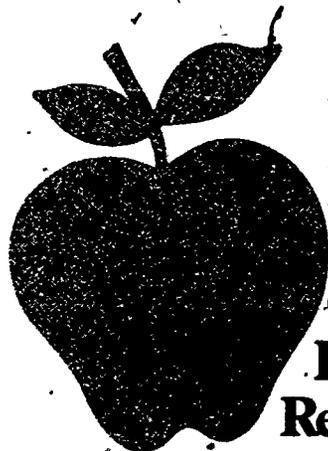
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**Fifth Report of
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**Fiscal Years
1978-1979**

Mission of the National Institute of Education

From Section 405 of the General Education Provisions Act, as amended, 20 U.S. Code 1221e.

"SEC 405. (a)(1) The Congress hereby declares it to be the policy of the United States to provide every person an equal opportunity to receive an education of high quality regardless of his race, color, religion, sex, age, handicap, national origin, or social class. Although the American educational system has pursued this objective, it has not yet attained that objective. Inequalities of opportunity to receive high quality education remain pronounced. To achieve quality will require far more dependable knowledge about the process of learning and education than now exists or can be expected from present research and experimentation in this field. While the direction of the education system remains primarily the responsibility of State and local governments, the Federal Government has a clear responsibility to provide leadership in the conduct and support of scientific inquiry into the educational process.

"(2) The Congress further declares it to be the policy of the United States to—

"(i) help to solve or to alleviate the problems of, and promote the reform and renewal of American education;

"(ii) advance the practice of education, as an art, science, and profession;

"(iii) strengthen the scientific and technological foundations of education; and

"(iv) build an effective educational research and development system.

"(b)(1) In order to carry out the policy set forth in subsection (a), there is established the National Institute of Education (hereinafter referred to as the 'Institute') which shall consist of a National Council on Educational Research

(referred to in this section as the 'Council') and a Director of the Institute (hereinafter referred to as the 'Director'). The Institute shall have only such authority as may be vested therein by this section.

"(2) The Institute shall, in accordance with the provisions of this section, seek to improve education in the United States through concentrating the resources of the Institute on the following priority research and development needs—

"(A) improvement in student achievement in the basic educational skills, including reading and mathematics;

"(B) overcoming problems of finance, productivity, and management in educational institutions;

"(C) improving the ability of schools to meet their responsibilities to provide equal educational opportunities for students of limited English-speaking ability, women, and students who are socially, economically, or educationally disadvantaged;

"(D) preparation of youths and adults for entering and progressing in careers;

"(E) overcoming the special problems of the non-traditional student, including the older student (with special consideration for students over age 45) and the part-time student, and the institution which the student attends;

"(F) encouraging the study of languages and cultures and addressing both national and international education concerns; and

"(G) improved dissemination of the results of, and knowledge gained from, educational research and development, including assistance to educational agencies and institutions in the application of such results and knowledge.

"In carrying out this paragraph, the Institute shall give attention to the needs of early adolescents and the schools which serve them. . . ."

Members of the National Council on Educational Research

Members 1978 and 1979

John E. Corbally, Chairman (1975-79)
Harold Howe II, Chairman (1979-)

Tomas A. Arciniega
Vice President for Academic Affairs
California State University at Fresno
Fresno, Calif.
(1976/81)*

John E. Corbally
President Emeritus
University of Illinois
Urbana, Ill.
(1973/79)

Alonzo Crim
Superintendent of Schools
Atlanta Public Schools
Atlanta, Ga.
(1978/80)

Chester E. Finn, Jr.
Senior Legislative Assistant to Senator
Daniel P. Moynihan
Washington, D.C.
(1976/78)

Dominic J. Guzzetta
President
University of Akron
Akron, Ohio
(1973/78)

Robert G. Heyer
Physical Science Teacher
Johanna Junior High School
St. Paul, Minn.
(1976/78)

Harold Howe II
Vice President for Education and Public
Policy
Ford Foundation
New York, N.Y.
(1978/80)

Jewel Lafontant
Lafontant, Wilkins & Fisher
Chicago, Ill.
(1976/79)

Betsy Levin
Professor of Law
The Law School
Duke University
Durham, N.C.
(1978/79)

Charles A. Nelson
Principal
Peat, Marwick, Mitchell & Co.
New York, N.Y.
(1976/78)

Carl H. Pforzheimer, Jr.
Senior Partner
Carl H. Pforzheimer & Co.
New York, N.Y.
(1973/79)

Wilson C. Riles
Superintendent of Public Instruction
State of California
Sacramento, Calif.
(1973/79)

Frederick H. Schultz
Chairman of the Board
Barnett Investment Services, Inc.
Jacksonville, Fla.
(1978/79)

Catharine C. Stimpson
Board of Trustees
Whatcom Community College
Bellingham, Wash.
(1978/80)

*Years shown are from year of initial appointment to year term expires; members continue to serve pending new appointment actions.

Members Appointed in 1980

Tomas A. Arciniega
(reappointed in 1980 to serve until 1981)

Helen S. Astin
Professor, Graduate School of Education
University of California
Los Angeles, Calif.
(1980/82)

Maria B. Cerda
9629 South Bennett
Chicago, Ill.
(1980/83)

Joseph J. Davies, Jr.
904 LeBeau Street
Arabi, La.
(1980/82)

Harold L. Enarson
President
Ohio State University
Columbus, Ohio
(1980/81)

Jon L. Harkness
Science Specialist, Physics Teacher
Wausau West High School
Wausau, Wis.
(1980/81)

Timothy S. Healy, S.J.
President
Georgetown University
Washington, D.C.
(1980/82)

Robert Nederlander
Senior Partner
Nederlander, Dodge & McCauley
Detroit, Mich.
(1980/83)

John S. Shipp, Jr.
Director of Administration
Florida Department of Agriculture and
Consumer Services
Tallahassee, Fla.
(1980/82)

Barbara S. Uehling
Chancellor
Professor of Psychology
University of Missouri
Columbia, Mo.
(1980/81)

Bernard C. Watson
Vice President for Academic
Administration
Temple University
Philadelphia, Pa.
(1980/81)

NCER Staff

Peter H. Gerber
Chief, Policy & Administrative
Coordination

Ella Jones
Administrative Coordinator

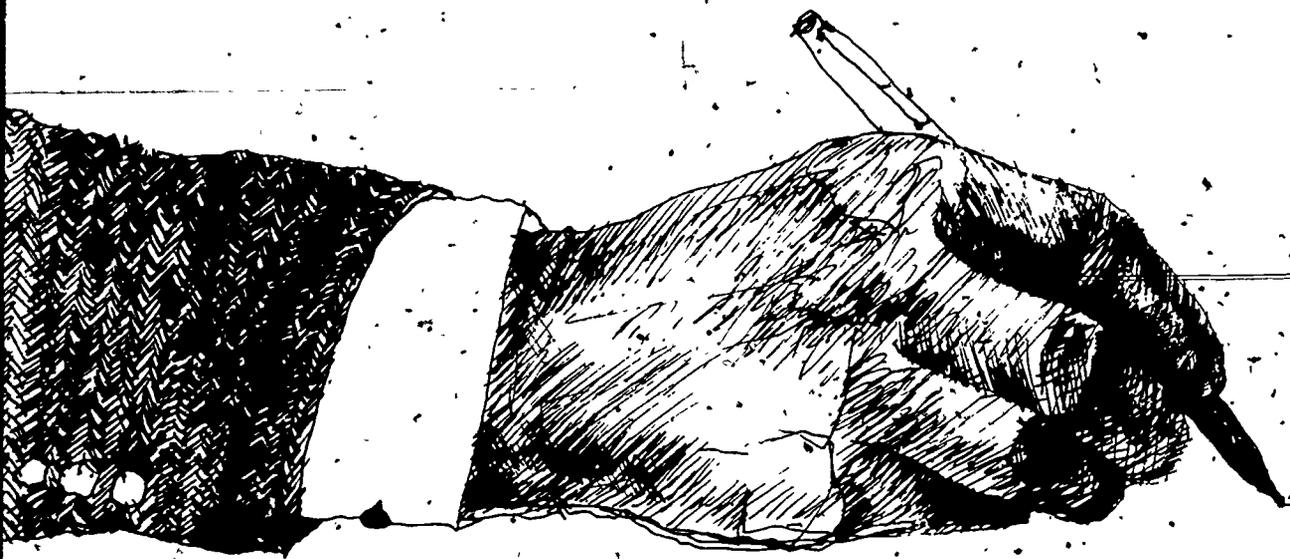
Eileen T. Nicosia
Liaison Specialist and Project Director/
Editor of the NCER Annual Report

Martha H. Catto
Secretary

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Chapter 1



Report of the Chairman

John E. Corbally

The annual reports of the National Council on Educational Research (NCER) usually contain some formal comments by the chairman. As my 6 years as a member of the NCER and 4 years as chairman come to an end, some more personal remarks seem in order. In other sections of this report, one can find specifics about the substance of National Institute of Education (NIE) work during the period reported upon—about projects, publications, products, and personnel. Here I will content myself with more general and much more personal observations.

In 1977, in comments made at a meeting of deans of colleges of education, I described my NCER experiences as frustrating with only rare moments of satisfaction. That pronouncement is undoubtedly a bit harsh, because it implies that the task of providing policy guidance for a new Federal agency with a complex assignment should offer a seasoned administrator more than rare moments of satisfaction. Perhaps in reality one should be thankful for those rare moments rather than be greedy for more.

As is so often the case when we deal with education and schools, NIE began with expectations that were too high on several counts. The speed with which a massive new program in research and development in education could be mounted was overestimated; the need for coordination and mediation among existing programs of research and development in education was underestimated; the time required to design and conduct studies and to gain findings from research was likewise underestimated, as were the problems involved in relating research findings to practice; and, most important, the degree to which new research findings could revolutionize education and, thus, society in positive ways was immensely overestimated.

After the first year of its existence, NIE was subject to sharp questions from members of Congress, congressional staff, and various individuals and groups interested in one aspect or another of schools and schooling. The brunt of those questions was, "You spent all of that money [around \$140 million in the first 'golden year'] and the schools still aren't any better." It is in this area of shaping expectations to an optimistic reality that NIE-NCER has had its greatest communication problem and where it now appears to have had some success. We are beginning, I believe, to moderate personal demands and expectations of NIE, to clarify what may and may not be possible through research, to focus attention upon fewer crucial areas of concern, and to work effectively with those in the field who are contributors to the resolution of problems, rather than merely being critics or "viewers with alarm." There are many of both types. Unfortunately, the latter type receives the most attention; the contributors are too often neglected, just as the contributions of NIE have been slighted while demands for, and disappointments about, "solutions" to problems such as reading and student discipline inundated the staff of NIE and the Council.

The struggle is not only to win patience and support from those involved in what might be called "general government"—for example; the Congress and State legislatures, which are increasingly involved in educational policy-making—but it is also to earn the respect and cooperation of educators and education policymakers such as school board members. School people have a high regard for research as an enterprise, but in their daily work they rely upon their experience and training and upon the advice of similarly situated individuals. There is a heavy discounting of

generalized research findings. Researchers must learn to accept this fact as well as to respect "craft knowledge." As the Council pointed out in its Fourth Annual Report, researchers must recognize that action in the classroom and in the boardroom cannot be put on "hold" while research seeks discoveries and tests findings.

During my years on the Council, I have experienced the fascination of Federal employees for the Federal Government's "systems." They often forget that those of us in State and local government not only have very similar systems, but we deal with a broader range of Federal agencies than do the employees of one Federal department. There is a tendency of some people within NIE to have more faith in the perspective of problems from Washington, D.C., than from Chicago or San Francisco or San Antonio (along with the related tendency of some to view increased appropriations to NIE as the major goal and primary measure of the Institute). The Council also wrestled with the problems of reassessing support for research and development organizations that assert historic claims to Federal support—a contention that created a strong undertow when NIE sailed on congressional waters. As a prerequisite to our confirmation in 1973, the charter members of the Council pledged to examine carefully all continuing projects and commitments assigned to NIE upon its creation. This strenuous and often joyless task has been accomplished with success for many of NIE's major inheritances, and it has brought NIE to the threshold of a new foundation in its relationships with the regional laboratories and R&D centers. We have made progress.

In order that NIE not fail, all of us must be critically realistic about what research can and cannot do to improve our schools. The schools have borne, and are bearing, the brunt of a whole host of social changes and social problems in our Nation. Until we can stabilize our schools and permit them to be schools, the utilization of educational research will be less than effective. In the 1930's, George Counts talked about building a new social order through our schools; in many ways we seem to be trying to do just that. In my view, neither the new social order nor the education of our children is faring too well at the moment.

One fact continues to trouble me, particularly as we speak about our schools and about the possible impact of research and development upon our schools and upon the educational process. In addition to a tendency to assign responsibility for curing all of society's ills to the schools, we still do a great

deal of pretending as we discuss our schools. We pretend that there is a waiting and ready audience for new ideas, research results, and innovations. We pretend, even as we work in other programs to make it so, that the teachers are out in the land watching their mailboxes with research on their minds. I often read NIE documents, listen to NIE staff reports, or engage in discussions with those who outline the research agenda for education—and then I read my Chicago Tribune. Although NIE is likely no worse, or maybe a bit better, than the typical agency or research company, I find little or no similarity between the teachers and schools discussed in the Tribune and those described in the other materials. For example, I find it difficult to discover a real live teacher who is, day to day, anxiously awaiting the results of research into teaching the basic skills. Teachers may occasionally have the time, energy, and desire to read or listen to such reports. They may pick up ideas from colleagues when they take time to discuss professional issues. But these instances are too rare for anyone's satisfaction. Those teachers with whom I talk are too often demoralized individuals who feel threatened by students, parents, and principals and who too often find their greatest professional satisfaction when taking out their frustrations on an equally demoralized district administration or board of education. Many teachers seem to be worn down by the manner and speech of their students and demoralized by criticism from outside the schools; many are working extra jobs and have little time for reading students' essays or projects; and many are coping with problems of discipline and control that leave them exhausted well before their workday's end.

If research is to have any significant impact, its findings must go into an environment where they can and will be welcomed and used. Agricultural research, a 50-year partnership of farmers and researchers, has earned the confidence of farmers who make use of its findings and who look to the researcher for solutions to real problems. But education takes place on different ground with different ground rules. Can research into reading help a teacher deal with a student with a switchblade knife who will bring both parents and lawyers down on the teacher if the teacher follows natural instincts in a confrontation? Is a teacher likely to look to research for an answer to this problem? Can an administrator faced with a full in-basket and a shrinking budget take time to study research reports on school organization? Many would quickly respond with a resounding

"no," but they should not be too quick to dismiss the possibility that teachers who value their professionalism, or administrators who can look beyond the flow of daily work to opportunities for a change in that flow, might want to receive new ideas. It is that possibility and the fact that some educators do seek, use, and generate ideas that offer the encouragement for NIE and the NCER to continue trying to stimulate and nurture cooperation among researchers, educators, and policymakers concerned about improving education for all in this country.

Each one of us who has served or who now serves as a member of the NCER brings his or her own individual concerns to the policy table of NIE. Fortunately, each one of us has not been shy, and we have been prepared to differ

among ourselves and to differ with NIE staff members. From this classic example of the interaction among members of a lay board and a professional staff has come slow and steady progress in the maturation of NIE. Successive annual reports have revealed increased clarity in what NIE believes its mission to be, and—of real importance—what NIE believes not to be within its scope of responsibility. NIE has been blessed with impressive leadership—leadership that, for the most part, has understood the strength that an active, questioning, evaluating NCER can bring to NIE.

Much of what you will read in this report creates in me some of those rare moments of satisfaction. I hope it does the same for you, regardless of your role or the interests that lead you to read this report.



Chapter 2



Council Activities

The National Council on Educational Research (NCER), the policymaking body of the National Institute of Education (NIE), was established by Congress to help guide NIE in its twofold mission: to promote educational equity and to improve the quality of educational practice. In addition to policymaking, the Council is charged by law with reviewing the work of the Institute and reporting to the President and the Congress on the activities of NIE and on education and educational research in general.

Membership

The 15 members of the NCER, who are appointed by the President with the advice and consent of the Senate, are representative of the education community and the general public.

The Council is an independent body with oversight and policymaking authority. The Congress directed the NCER to carry out these functions to enhance and strengthen the contributions of those outside the Federal Government in the planning and development of a national educational research program. The experience and insight of Council members serve to broaden the vision of the Institute and make it more responsive to the needs and concerns of those involved in education.

NCER Meetings

The Council meets at least four times a year at the NIE offices in Washington, D.C. All sessions are open to the public, and the date and agenda for each meeting are announced in the Federal Register. Council business is conducted in compliance with the Government in the Sunshine Act.

Council Organization

The Council conducts its preliminary business through three standing committees: the Executive Committee, the

Program Committee, and the Review and Reports Committee. These committees are responsible for recommending policy to the Council and for consulting with NIE staff on Institute activities. The Review and Reports Committee is also responsible for the preparation of the Council's annual report to the President and the Congress. Each committee provides a focal point for staff work leading to Council deliberations about policy actions, policy implementation, and NIE activities and accomplishments. Most important, the committee structure fosters cooperation between NIE staff and the Council, since staff participation in committee activities is substantial.

Program Oversight

One of the primary purposes of the Council is to provide continuing oversight of the Institute and its programs. Under its review authority, the Council assesses NIE's progress toward its congressionally mandated mission and its success in meeting the program and budget objectives set by the Council. The review process provides the framework needed by the Council to effectively carry out its policymaking function.

In 1978, the Council revised its review procedure to focus its oversight process and allow more time for substantive discussion and analysis of program activities. The revised procedure calls for a series of in-depth presentations to be made by NIE staff and guests during the Council's regularly scheduled meetings. Each presentation details the goals and accomplishments of the area under review and focuses on the relationship of that area to existing NCER policy.

A member of the Council serves as "manager" for each discussion. The manager guides the preparation of the NIE staff presentation, leads the Council's discussion of the topic under review, and prepares a summary report. Reviews may lead to the development or revision of Council policy.

Under the new oversight procedure, the Council has reviewed NIE activities in the following areas: desegregation studies, educational equity, literacy, and dissemination. The Council was generally pleased with the Institute's

direction and accomplishments in these four areas. The desegregation studies activities, for example, were found to be a strong example of how the Institute carries out its mission of helping to improve equal educational opportunity.

In the realm of educational equity, the Council decided that no new policy statement was needed at the time of the review. The Council believed that its work on the NIE budget, its development and review of other general NIE policies, and its review of NIE through regular discussions were adequate vehicles for reinforcing the importance of educational equity as a focus for NIE. The Council, however, did recommend establishing indicators to examine NIE's progress in the area of educational equity at periodic intervals.

In addition to receiving a comprehensive staff presentation for its review of NIE's literacy initiative, the Council invited several leading researchers, recommended by NIE staff, to discuss the progress and prospects of literacy research. Guest speakers included Shirley Brite Heath, associate professor of anthropology and linguistics at the University of Pennsylvania; Roger Shuy, professor of linguistics at Georgetown University; Concepcion Valadez, assistant professor at the University of California at Los Angeles (UCLA) Graduate School of Education and faculty associate at the UCLA Center for the Study of Evaluation; and Lee Shulman, codirector of the Institute for Research on Teaching at Michigan State University.

The presentations provided the Council with a comprehensive view of current literacy research and were the impetus for chapter 5 of this report, "Literacy: Current Problems and Current Research." No Council policy action was deemed necessary in the literacy area.

The Council is currently reviewing NIE's dissemination activities and expects to develop a comprehensive dissemination policy for the Institute by the end of 1980. The review, which has not yet been completed, and its resulting action will be discussed in the next Council report.

Budget Oversight of NIE

The Council's oversight responsibilities include review of the Institute's internal budget allocations and its annual budget request to the Office of Management and Budget and to the Congress.

As in previous years, Council members were invited to testify before the congressional appropriations committees on behalf of NIE. In 1978, Wilson Riles, superintendent of public instruction for the State of California, and Harold Howe II, vice president for education and public policy for the Ford Foundation, accompanied the NIE Director to Senate and House hearings to urge congressional approval of the Institute's budget request for fiscal year 1979.

Both Council members spoke of the progress that had taken place under the Institute's leadership and of the need

for continued and strengthened Federal support for educational research and development programs. Riles told the Senate appropriations subcommittee that sustained, substantial Federal support for educational research is essential to educational progress.

Howe's statement before the House appropriations subcommittee also captured the sentiments of the Council:

The funds you provide under the appropriation requested today constitute the seed corn of education's future. Their leverage on that future is, in my view, more powerful than any other funds you appropriate.

NIE is increasingly demonstrating its capacity to make effective use of research and development funds. The recent studies of Title I of the Elementary and Secondary Education Act have brought valuable information to both Congress and the Administration and undergird the decision of President Carter to seek much enlarged funding for that program. NIE's mission and organization are clearer than they have been before. Its dealings with both researchers and practitioners in education are improved. The activities it supports are fundamental to the advancement of American education.

In early 1979, Council members Carl Pforzheimer and Robert Heyer testified in support of NIE's FY 1980 appropriations request. Pforzheimer reported to the House appropriations subcommittee that from his point of view as a businessman deeply involved in educational affairs at the local, state, and national levels for more than 30 years, "NIE has already gone through a 'shakedown' period; it has adjusted more than most agencies, I suspect, to the discipline of selecting priorities, of paying attention to needs of those on the firingline using its output, and of reviewing regularly strategies for applying its resources."

Minnesota junior high school teacher Bob Heyer looked back on 25 years of classroom experience and told the Senate appropriations subcommittee:

Educational research is a valuable tool and catalyst in the development of a quality education that will provide equal opportunity for students across the country. My fellow classroom teachers and I need all the help we can get in the examination and modification of strategies and techniques which are needed to effectively educate the children we face day after day. NIE is striving to select priorities on which our resources are focused and to establish means for assessing the quality and significance for new and continuing work. Such assessments should be the principal basis for allocation of our limited funds.

Heyer added that, during his 3 years on the Council, NIE had become increasingly concerned about the real needs of teachers and students. "As a classroom teacher," he said, "I am not sure I would have supported such research 5 years ago—but after reflecting on my years as a member of the

NCER and on the changes in education since I began teaching, I am convinced of the importance of what NIE is doing."

The Department of Education

In March 1978, the NCER's Executive Committee invited Professor Willis Hawley of Duke University, consultant to the President's Reorganization Project, and Arthur Sheekey, a member of the project staff, to brief the Council on the status of proposals to establish the Department of Education. The presentations outlined the options being considered by the Administration and the Congress in structuring the new Department and the position that educational research would be given under each plan.

Shortly after this briefing, the Council transmitted to the President's Reorganization Project and the Congress a statement supporting an expanded and prominent role for educational research in the proposed Department. The Council recommended that the Department's research unit retain the concept and breadth of NIE and that it be given priority in the new organizational framework. The Council also recommended that all activities that bear on research and improvement be assigned to NIE except for those related directly to program development and evaluation and to departmental policy development and planning.

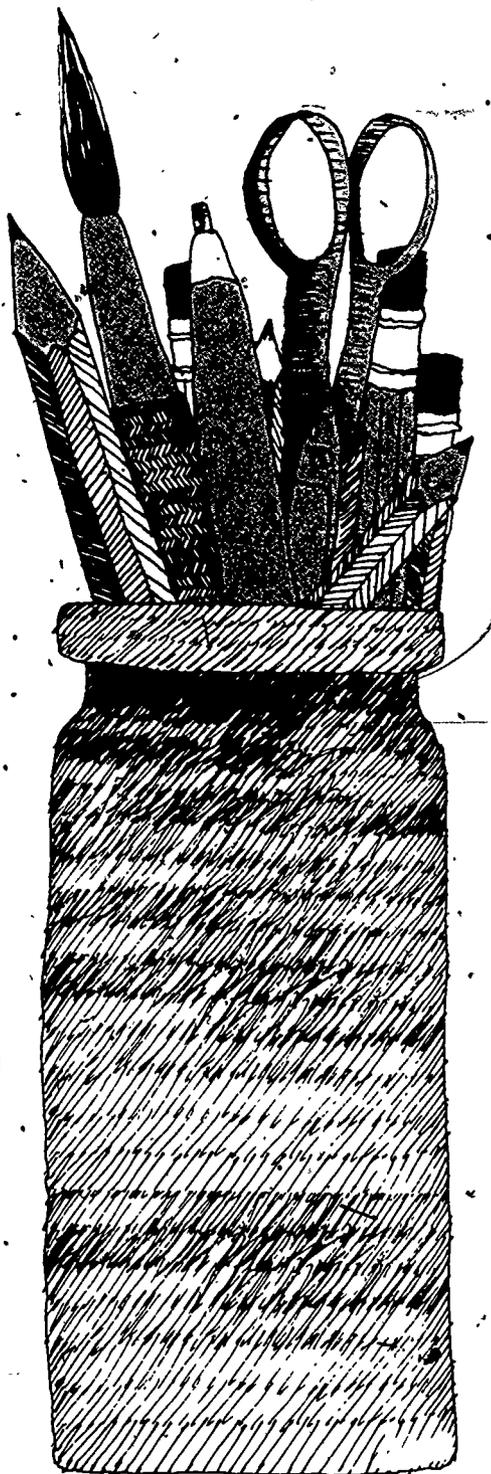
The NCER is pleased that the Administration and the Congress agreed on a vital Federal role for educational research in the new Department and that F. James Rutherford, formerly assistant director for science education at the National Science Foundation, has been appointed by the President to be assistant secretary of the Office of Educational Research and Improvement. The Council is also pleased that the President has appointed Michael Timpane, formerly NIE Deputy Director, as the Institute's Director under the new Department.

Future Seminar

In addition to its regularly scheduled meetings, the Council held a 2-day seminar in December 1978 on "Educational Issues in the 1980's." The session provided an opportunity for the Council, NIE senior staff, and invited experts to identify major political, economic, and social factors that will likely occur in the 1980's and to discuss the ramifications of these conditions for educational programs and policies.

Four papers commissioned for the seminar and presented by the authors are available from the NCER staff office:

- Harry S. Broudy, professor emeritus of philosophy of education, University of Illinois, "Predicaments, Problems, Puzzles, and Paradoxes in Educational Research."
- Robert Glaser, codirector of the Learning Research and Development Center, University of Pittsburgh, "Some Notes About Research on Learning and Schooling."



- Michael Kirst, associate professor of education, Stanford University, "The New Politics of Resource Allocation."
- Laval Wilson, superintendent, Berkeley (Calif.) Unified School District, "Trends in Society's Demands on Educational Institutions."

NIE Journalism Research Fellowship Program

The 1979 Journalism Research Fellowship Program was developed in response to concerns expressed by the Council that the general public should be better informed about the attributes of a good school. NIE awarded fellowships to six education reporters from newspapers across the country to conduct an indepth analysis of factors that seem to make a school good and to prepare a series of articles on this topic. The journalists spent 2½ months observing classrooms and administrative operations of schools with outstanding reputations in their regions and interviewed school personnel, parents, and students. A list of NIE Journalism Research Fellows and their articles follows.

- Jane Eisner, education writer for The Virginia-Pilot, Norfolk, Va., "What's Effective in Virginia's Integrated Schools."
- Jack Kennedy, education writer for The Lincoln Journal, Lincoln, Neb., "Rural vs. Consolidated School Districts: What's Effective in Nebraska."
- Janet Kolodzy, education writer for the Arkansas Democrat, Little Rock, Ark., "What's Effective in Arkansas Schools."
- Wayne Reilly, education writer for the Bangor Daily News, Bangor, Maine, "What's Effective in the Rural Schools of Maine."
- M. William Salganik, education writer for The Sun, Baltimore, Md., "Academic Achievement in Urban Schools: What Works in Baltimore."
- Margo Pope, education writer for The Florida Times-Union, Jacksonville, Fla., "What's Effective in Florida's Suburban Schools."

The Institute for Educational Leadership (IEL) coordinated the program for NIE and published a compendium of the articles entitled "The Journalism Research Fellows Report." Copies may be obtained for \$5 from the Publications Coordinator, Institute for Educational Leadership, 1001 Connecticut Avenue, N.W., Suite 310, Washington, D.C. 20036.

Testing Conference

In March 1978, the Department of Health, Education, and Welfare (HEW) and NIE sponsored a National Confer-

ence on Achievement Testing and Basic Skills. The 3-day conference looked at ways that HEW could help states and localities use tests more effectively to improve the quality of elementary and secondary education. NCER members attending the conference included Harold Howe II, who gave the keynote address, "Tests and Schooling"; and Frederick Schultz, who served on the panel discussing "Achievement Tests and Educational Quality: State and Local Perspectives." Mr. Schultz, who was then chairman of the Florida Education Council, reviewed Florida's experiences in initiating a statewide testing program for awarding high school diplomas. Robert Heyer and Carl Pforzheimer also participated. NIE has followed the recommendations of the conference in developing its program of research and information on testing and on how tests can be used to improve instruction.

Laboratory and Center Panel

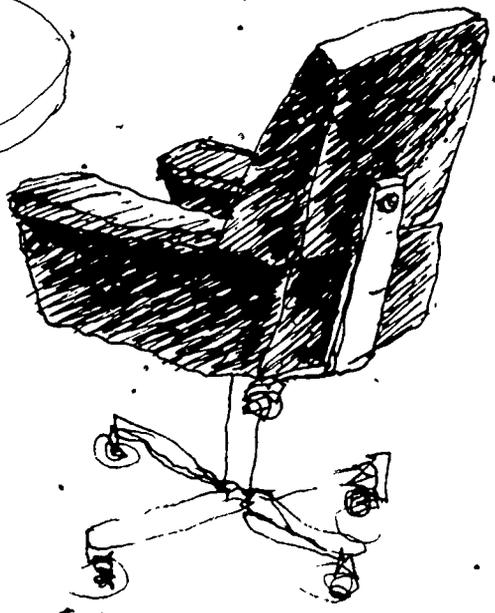
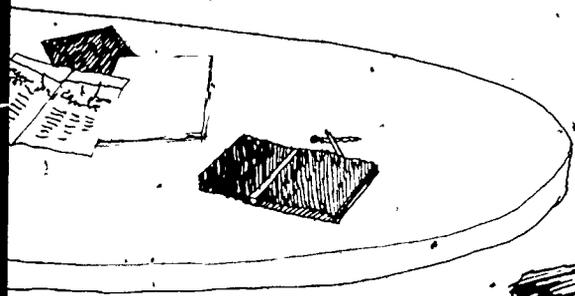
The 1976 reauthorization for NIE established a panel of educators to review the operation of the 17 Regional Educational Laboratories and Research and Development Centers that receive much of their support from NIE.

During 1978 and 1979, the Panel for the Review of Laboratory and Center Operations was invited to participate in two of the Council's regular meetings to discuss their reviews and recommendations. The Council appreciates the enormous amount of time and effort the panel devoted to its task. The support, evaluation, and output of research and development institutions, particularly of the laboratories and centers, have been of special concern to the Council. The panel's work provided important impetus for NIE's efforts to realize a more harmonious and productive relationship with the laboratories and centers—a goal long sought by the Council.* The Council believes that NIE has achieved significant success in integrating the work of labs and centers into the mainstream of the Institute's program.

Council Staff

The NCER staff office is located at the National Institute of Education, 1200 Nineteenth Street, N.W., Washington, D.C. 20208, (202) 254-7900. All inquiries or requests for information about the Council and its activities should be addressed to the staff office.

*A discussion of the activities and recommendations of the Lab and Center Panel is included in chapter 4.



Chapter 3



Report of the Director

P. Michael Timpane

The past 2 years have been a time of gathering momentum at NIE as we have begun to realize our potential as a research and development agency formed to enhance equity and quality in American education. In the NCER's Fourth Annual Report, we were able to discuss the new priorities established for the Institute, the reorganization, and the many new senior staff members gathered from inside and outside the Institute. We anticipated that NIE was ready to fulfill its earlier promise to make significant contributions to the improvement of education in the United States. Unspoken in that report was the belief that finally the Institute had put behind it the anxiety, unforeseen calamity, and cynicism of its early years.

One would be premature, and perhaps foolish, to declare victory over the difficulties that face the Institute. I must report, however, encouraging evidence that the tide has indeed turned. In fact, the signs are positive that the Institute should view itself, and be viewed, as an important source of information and assistance to the many persons who struggle with educational problems in our Nation.

NIE As a Place To Work

For me, these indications start closest to home, with NIE staff and their many activities. The staff response to the new stability of program and organization that now characterizes the Institute has been excellent; morale, trust, and confidence have risen to match the high quality level that always has characterized NIE staff. Evidence of increased staff vitality is hard to overlook: zestful weekly staff newsletters have been created in each program group; an exceptionally creative and widely praised employee handbook has been produced; a burgeoning award program for employees is underway; and extensive coordination and cooperation among staff units have helped accomplish procurement plans well ahead of the schedules of previous years.

Perhaps the most encouraging sign of progress is the reduction in the level and intensity of formal and informal staff complaints alleging unfairness. So much can be accom-

plished when the members of an enterprise believe they can find simple justice in it.

Program Management

Two aspects of program management merit particular attention in this report. The first of these has been the establishment of the Research Area Planning Process to help us think ahead in a limited number of research areas so that our efforts will have significance, focus, and cumulative effect. The second has been the extensive and continuing process by which we have reordered our relationship with the Regional Educational Laboratories and Research and Development Centers. Our working in tandem with the congressionally mandated Panel for the Review of Laboratory and Center Operations has created a new sense of stability and mutual trust that will help us strengthen these institutions in our long-term dealings together.

Program Themes

In the development of the research program of the Institute, the past year has seen a substantial development of the twin themes of *equity* and *improvement of educational practice*. The clarity of these objectives has paid unexpected dividends: not only do they help the Institute communicate the essence and intent of its work, but they also serve as essential benchmarks in making decisions about possible research topics. Through the Research Area Planning Process and other program development activities, we have infused these two themes into every aspect of the Institute's program.

In the area of *equity*, we have come to understand the significance of moving beyond considerations of opportunity and access to a new concern with the effects that programs, teaching practices, textbooks, society, and schools have on the lives and educational achievements of all ethnic, racial, sex, and socioeconomic groups. As former NIE Director Patricia Albjerg Graham recently wrote:

Equity . . . requires that changes in the educational agencies occur so that all groups have the experiences that the educational system assumes so that all can compete without disadvantage. . . . Up to now we have paid much attention to measuring what went into the educational process—that is, facilities, average expenditures per pupil, teacher preparation measured by degrees and courses—and we have sought equivalence in those factors. We have also paid a good deal of attention to measuring student achievement by testing at the completion of the school year. We have paid remarkably little attention to affecting the educational process which the student underwent. . . . Equity in education, then, embraces both the skills that must be learned and the assumptions that govern the organization of our educational institutions.

This new attention to the relationship of educational policies and equitable outcomes is growing throughout the Institute. As a result, our portfolio of projects is increasingly focused on such key problems as equal opportunity in our schools, urban and rural problems, bilingual studies, desegregation, and the employability and literacy of disadvantaged youth.

Our concentration on the *improvement of educational practice* has also altered our way of thinking. The improvement of practice anchors both ends of our work in developing research programs: The issues selected for new emphasis should arise from problems that occur in the instruction and learning of students; and the research program managers must demonstrate how they expect their inquiries will lead, directly or indirectly, to the improvement of educational practice. The application of this priority does not necessarily, as some feared, shift the Institute's focus from basic to applied work. Rather, it clarifies the issues that both basic and applied studies address. Procedurally, our emphasis on the improvement of practice has led to the greater use of practitioners in the design, conduct, assessment, and use of our work. This involvement has been, in every respect, beneficial. Far from diminishing research quality through the involvement of "untrained practitioners," the active participation of the men and women who staff and manage our schools has injected new realism and vitality into the work NIE supports.

Use of Completed Research

I have been impressed by the growing extent to which the Institute's work seems to be helping to improve American education. Much of the credit for this state of affairs belongs to the Institute's early leadership and staff, who nurtured this now-finished work through difficult years.

In the arena of Federal program development, our mandated study on Federal compensatory education programs has been repeatedly lauded as a key influence on the amendments to Title I of the Elementary and Secondary Education Act (ESEA) adopted by the Congress in 1978. It

is not as widely known that the perspective gained from research in the management and organization of schools was also used by the Administration and the Congress in 1978 to help redesign many aspects of the delivery systems of Federal demonstration programs, particularly Title IV of ESEA and the conversion of the National Reading Improvement Program into the Basic Skills Act. Currently, our findings are being relied upon in the development of educational initiatives to combat youth unemployment, as well as in the continuing development of Federal policies to promote successful school desegregation and in the national debates on student achievement testing. Their successes have led to high hopes for the Vocational Education Study, which is now underway, and to a key role for NIE in a new study of school finance that the Congress has requested from the Department of Education.

Perhaps a more significant discovery has been the realization of how our research helps people outside Washington. I have heard our work on demographics and school finance cited frequently by chief state school officers as they probe issues of the 1980's. NIE-sponsored work on class size and on teacher education increasingly forms the core of presentations at forums of the Nation's education leaders. I have seen such diverse issues as metric education, Black English, and a variety of others rise unexpectedly to prominence, and have discovered completed NIE work ready to help policy-makers explore the problem. In areas such as school finance equalization, individualized instruction, and math and reading curriculums, NIE-sponsored research has been used extensively to improve policies and practices.

In recent months, in extensive conversations with the principal professional organizations in education, I have encountered a substantial, and as yet unmet, demand for our information and assistance. These groups have journals, conventions, leadership training, and other professional development activities that they would hope to enhance with our help—and in the process help us.

Reasons for the New Perception

There are several explanations for these phenomena; each explains part of what is occurring.

First, the research and development that NIE has supported and disseminated has been more on target than originally could have been demonstrated. It may be that some time must pass before a research agenda can be expected to bear fruit. Our first harvest is now coming in.

Second, NIE-sponsored research has improved in quality and relevance. NIE has passed beyond sponsorship to leadership in identifying first-rate and relevant research in such areas as reading comprehension, the rudiments of effective instruction, and the improvement of local school organization, to mention just a few.

Third, the demand for research is rising. Certainly more actors in the educational system (legislators, parents, taxpayers, and others) are demanding answers to hard questions about educational programs, and, as my recent experience suggests, professional educators are also becoming more knowledgeable and interested in the information that research can provide.

Fourth, NIE is doing a better job in making the results of research available. We have begun to report more results, to synthesize larger bodies of research, and to adapt our dissemination activities to the various and changing needs of the educational community.

Whatever the case, it is clear that programs under development attend to issues that have ready and important audiences awaiting our findings. Research in literacy and in bilingual education, specific projects focusing on urban and rural problems, studies anticipating emerging issues in technology and productivity, and plans to assist institutions and professional organizations in using research findings at the local level all have a common bond: They will try, through research, to provide answers to current and future problems about which educators and the public are deeply concerned.

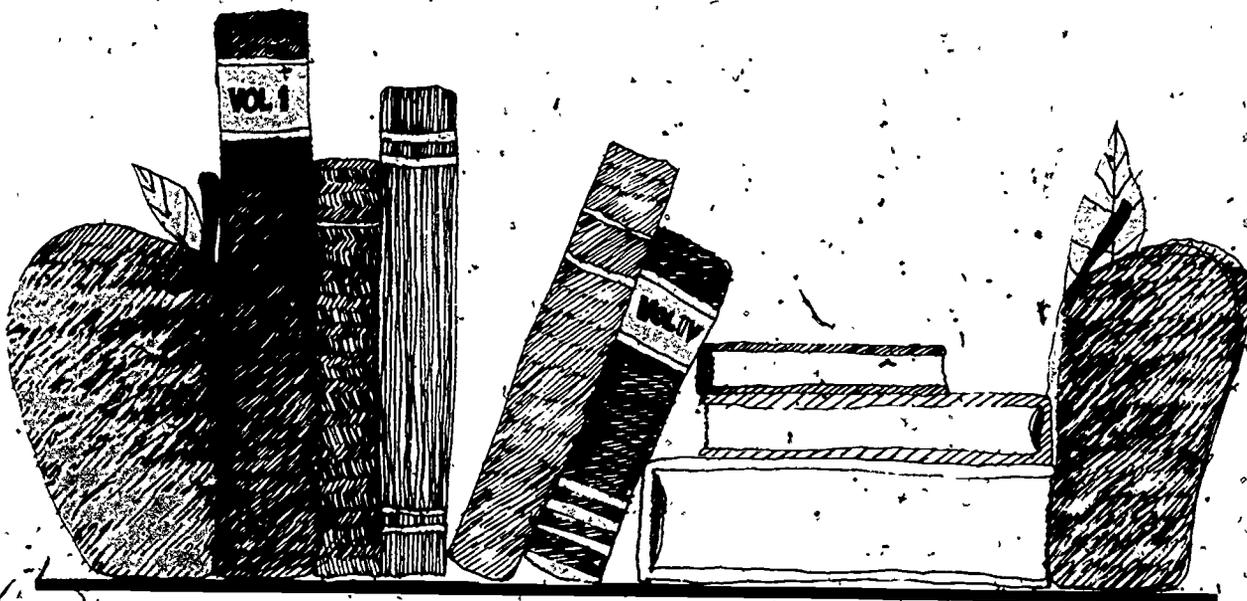
Role and Responsibility of NIE

In two areas the Institute is beginning to develop programs of such broad conception that they may change our current notions of what the Institute is. With respect to the question of literacy, we are developing a vigorous research program to be sure; but we may also, in that process, take a national leadership role in an area that affects the fundamental goals

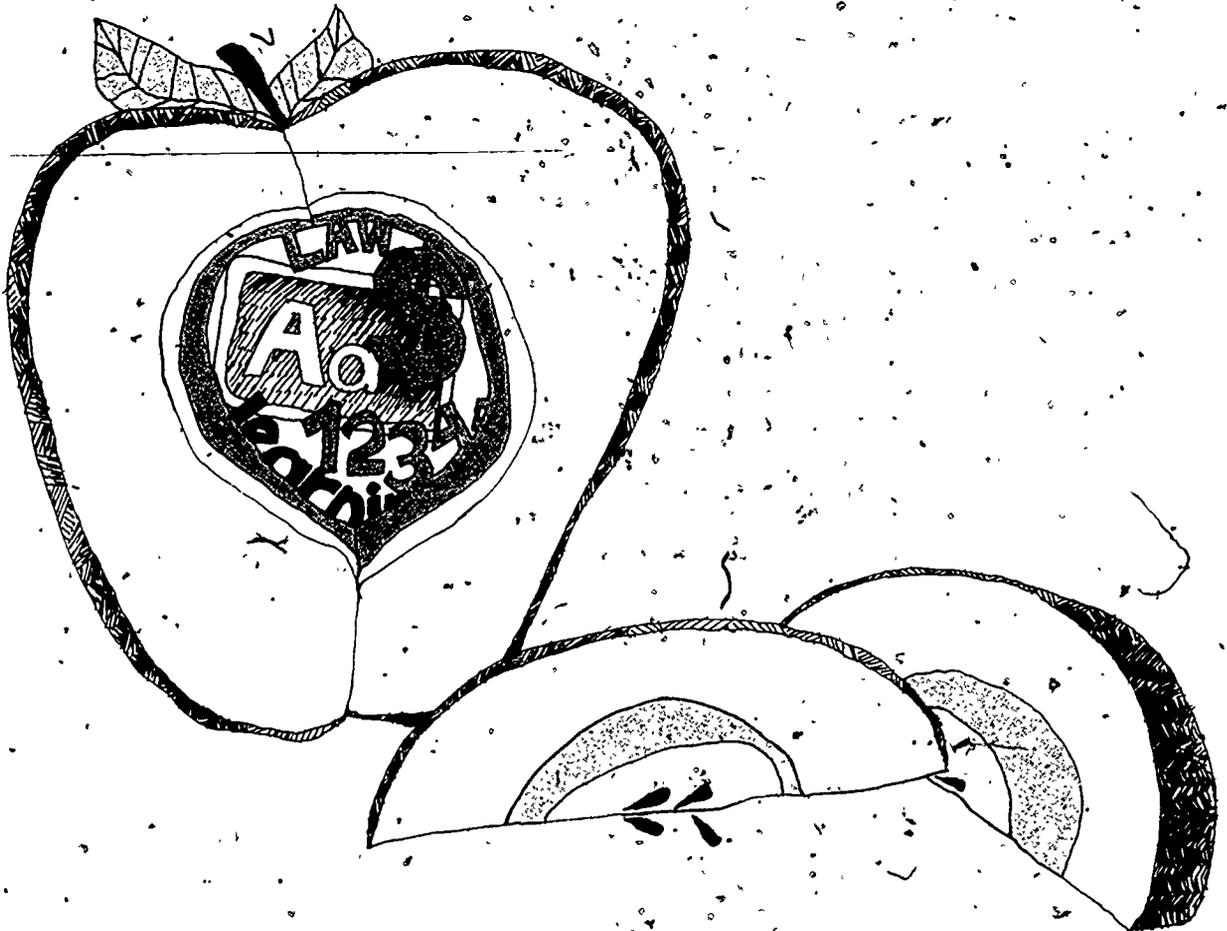
of American education. We have not often been in front of such a large parade. The other emerging focus, the question of "what makes a good school," is in a sense redefining appropriate research strategy. It encourages respected members of the research and education communities to tell us how past inquiries and efforts have helped improve local school programs throughout the Nation and suggest what can be done so that all schools can be better schools.

One way to interpret all of this is to say that NIE, a child of an era of criticism of education, may provide a substantial portion of the knowledge and perspective that is required to begin a new era of educational improvement. The criticism of schools that has flowed from much of educational research has been implicated by many in tracing the decline of public and professional confidence in education. It is ironic indeed that NIE is now beginning to redress that balance by helping educational systems resolve their problems.

I have included as many hopes as happenings in this essay. I am aware that many problems remain in the Institute's future. Problems of resources will be especially acute in the times ahead. I wonder how long we can continue to deny support (because of lack of funds) to such a high proportion of qualified investigators who apply to us for funding without discouraging the entire national enterprise of educational research. We are doing surprisingly well with what we have, but there are many more competent and interested persons who could, with our support, use the tools of research and analysis to help find solutions and improvements for our schools.



Chapter 4



NIE Activities

NIE, established by the Congress in 1972, is the principal Federal agency supporting and conducting educational research. Its purpose is to advance the frontiers of knowledge about the processes of teaching and learning and about all aspects of the educational system.

Organization

NIE has organized its work around three broad program areas: Teaching and Learning; Educational Policy and Organization; and Dissemination and Improvement of Practice.

Teaching and Learning

NIE's Program on Teaching and Learning (T&L) supports research about literacy, the nature of good teaching, how children and adults learn, how to measure what is learned, and how to improve the substance of what is taught. The program is concerned with education all levels—preschool through adulthood—in both formal and informal settings.

Within this program, the Learning and Development unit investigates the development of learning and thinking skills and the effects of social processes on learning. The Reading and Language unit focuses on the development of language and literacy and how they are affected by cultural, technical, and social factors. Teaching and Instruction examines the art of teaching—teacher preparation, the teaching environment, and new approaches to instruction. Education in Home, Community, and Work is concerned with out-of-school learning and the relationship among educational experiences in different settings. Testing, Assessment, and Evaluation supports projects concerned with assessing, describing, and analyzing student achievement in instructional processes, learning environments, and promising educational practices. It seeks to provide information about the effectiveness of such programs and the factors that contribute to their outcomes.

Educational Policy and Organization

The Program on Educational Policy and Organization (EPO) supports research on issues of education law, finance, organization, management, and government as these issues arise in the context of policy and operations.

Within the program, the Law and Public Management unit is concerned with research to improve the organization and administration of the intergovernmental system and to examine high-priority policy issues in education. The Educational Finance unit focuses on issues related to the production, allocation, and expenditure of education resources and ways that school financing is affected by economic and demographic trends. The Educational Organizations and Local Communities unit examines the governance, organization, and management of schools, school systems, and institutions of higher education; the relationship between these institutions and their community; and how they have integrated educational and social services. Of particular interest are institutions serving the urban and rural poor.

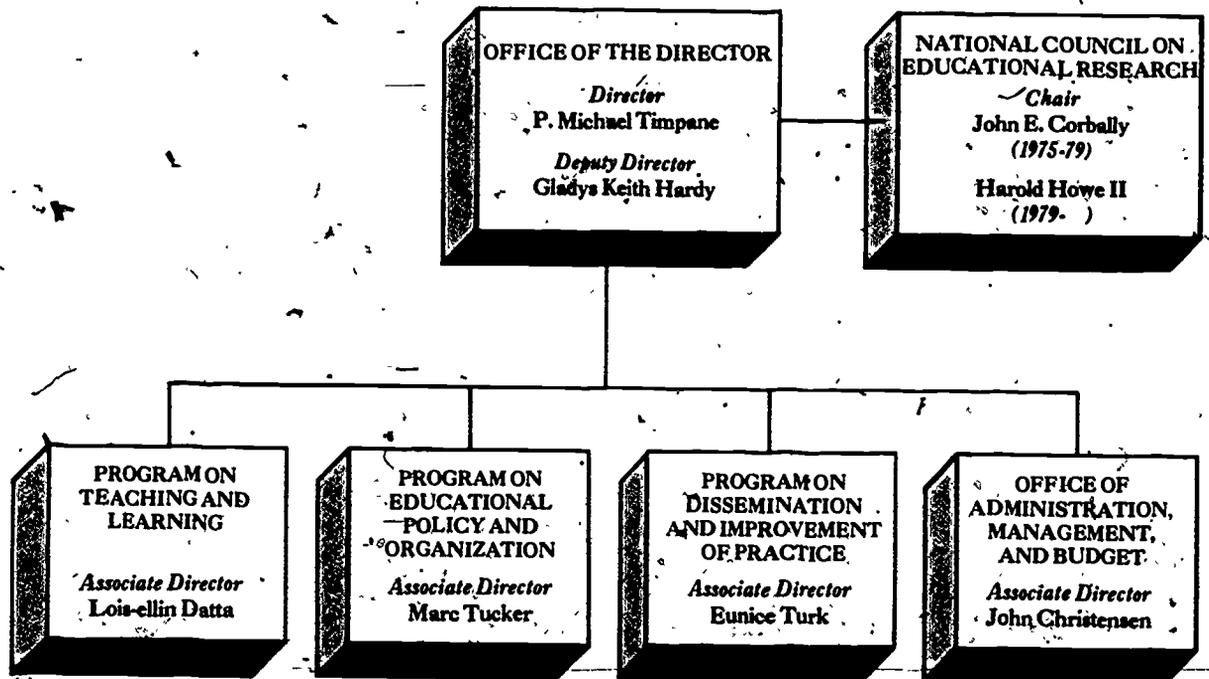
Dissemination and Improvement of Practice

The Program on Dissemination and Improvement of Practice (DIP) seeks to ensure that the results of educational research and development are made available in usable form to those who need them. To that end, the program supports research and regional dissemination activities designed to increase the effective use of research and development results in improving educational practice.

The Information Resources unit supports national and state information services and pilot demonstrations of new communications technology. The Regional Program unit supports cooperative efforts among state departments of education, school districts, universities, regional laboratories, and other organizations to provide information and technical assistance for school improvement. Research and Educational Practice seeks to identify successful ways of communicating and using knowledge to improve education.

The Minorities and Women's Program supports projects that increase the participation of minority group members and women in the field of educational research. The pro-

National Institute of Education



gram was established by NIE in response to a 1975 NCER resolution that stated:

It shall be the policy of the National Institute of Education to increase the participation of minority persons and women in the research and development effort of the nation through ensuring that qualified minority firms and individuals and qualified women are given informed opportunity to participate in NIE programs, and through efforts to increase the numbers, qualifications and performance of minority firms and individuals, and women engaged in education R&D.

Research Planning at NIE

The Institute's planning process, which was revised in 1979, addresses a wide range of issues of national concern and helps NIE generate information about the results of research activities for the education community.

Research areas are selected because of their potential contribution to the Institute's goals of equity and improvement of practice. Each area includes groups of projects that relate to a particular issue (e.g., testing and assessment, cognitive skills, desegregation, and the role of knowledge in school improvement) and is planned to provide a coherent

strategy for advancing knowledge and answering policy questions. Research projects are thus part of a conceptual framework and are designed especially to produce an integrated body of knowledge.

The planning approach also is designed to ensure that research results are clearly communicated. NIE staff are responsible for preparing reports that summarize the results and implications of the research and describe how the results might be interpreted for use in educational practice and policy formulation. In short, the research area plans set forth the major issues to be addressed by the Institute and lay the groundwork for the dissemination of information about the uses and implications of what has been learned.

Input From the Field

To ensure the responsiveness of its overall program to the needs of the education community, the Institute relies heavily on input from the public and on the expertise of the educational R&D community. During preliminary phases of the Research Area Planning Process, for example, the Institute consults widely within the research and education communities and at several levels within government to gain a well-rounded perspective about the knowledge and infor-

mation needs of practitioners and policy analysts. In addition, the peer review process is used to help the Institute judge the merits of proposals submitted to it for funding.

NIE Budget Overview

In FY 1978, NIE's budget was \$90 million, a 28 percent increase over the previous year's budget of \$70 million and the first funding increase since the Institute's inception in 1972. The budget remained approximately at this level through FY 1980. Tables 1 through 3 indicate NIE program funding by type of activity, recipient, and organizational area between FY 1974 and FY 1979. The number of contracts and grants awarded by the Institute during this period is shown on table 4.

Types of Activities

Since FY 1978, there have been four significant and related shifts in the composition of NIE's activities. These figures are shown in table 1.

Fundamental Research.* There has been an increase in the proportion of NIE program funds devoted to fundamental research. Recognizing the importance of scientific inquiry into basic educational processes, the NCER in 1978 adopted a policy establishing a 20 percent set-aside of program funds to be reserved for fundamental research in FY 1979. This set-aside is to reach 30 percent by FY 1985. As a result of this policy, NIE's obligations for fundamental research have grown from a low of 4 percent in FY 1975 to 22 percent in 1979. It is anticipated that obligations in 1980 will be approximately 24 percent.

Development Projects. Development and demonstration project obligations have decreased from a high of 86 percent in FY 1975 to 46 percent in FY 1979. In large part this reduction reflects the completion of several development and demonstration projects such as the satellite, experimental schools, and experience-based career education model projects. The downward trend in development project expenditures will continue as these projects come to a conclusion, although some new projects may continue to be initiated within NIE's research areas.

Dissemination Activities. Dissemination obligations have shown an overall increase from 9 percent in FY 1974 to 23 percent in FY 1979. This increase is a direct result of the Institute's emphasis on improving educational practice. It is also in accord with the intent of the Congress, which speci-

fied in its enabling legislation a major dissemination role for the Institute.

Policy Studies. There has been a steady increase in obligations for policy studies—from less than 1 percent in FY 1974 to 9 percent in FY 1979. This increase stems in part from executive and congressional requests, as well as from the Institute's own maturation and recognition of important policy questions that can be addressed by research.

Types of Awards

NIE funds are awarded through grants competitions and requests for proposals (RFP's) sponsored by the Institute's three program groups.* Table 4 shows the shift in the nature of NIE's research funding that has occurred since the Institute's inception. The Institute inherited a number of large-scale studies and demonstration projects that were designed by the funding agency and procured under contract via requests for proposals.

Since 1978, NIE has moved away from RFP-based funding of large-scale projects in order to establish a more balanced research portfolio. As a result, there has been an increase in the proportion of grant as opposed to contract funding. This increase reflects a commitment on the part of the Institute to give the research community a greater voice in shaping NIE's research program. This shift is consistent with the research area planning process that established the general areas of Institute interests, but it permits the proposers to define specific research questions, identify data sources, and establish methodologies.

Unsolicited Proposals Program

The Unsolicited Proposals Program encourages eligible individuals and groups to originate ideas that complement the Institute's goals and mission. Unsolicited proposals tend to respond to specific local conditions or to specific research findings that have yet to make their way into the mainstream of the literature. Their diversity and originality help to increase the breadth of the Institute's focus and its responsiveness to the concerns of the field.

In 1973, the Council adopted a policy reserving from 3 to 5 percent of the Institute's budget for the support of unsolicited proposals. Since that time Institute funding for unsolicited proposals jumped from a low of 1.6 percent in 1974 to 3.5 percent in 1978 and 3.6 percent in 1979. Fifty-four awards were approved in FY 1978, with total obligations of \$3.2 million. In FY 1979, 45 unsolicited proposals were approved, totaling \$3.4 million. In both years, unsolicited proposals accounted for 4.2 percent of the Institute's program budget. All awards were made in the form of grants, which averaged \$60,000.

*The NCER's Fourth Annual Report, "Reflections and Recommendations," featured a National Academy of Sciences study on "Fundamental Research and the Process of Education." Copies are available from the Council office.

*Appendix A to this report contains information on NIE funding opportunities.

NIE Program Funding by Type of Activity Fiscal Years 1974 through 1979¹

Table I

Type of Activity	FY 1974		FY 1975		FY 1976		Transition 1976		FY 1977		FY 1978		FY 1979	
	%	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%	\$M
Fundamental Research	12	7.6	4	2.3	10	5.5	22	4.2	17	9.7	20	15.3	22	17.3
Development	79	50.9	86	50.3	68	39.4	34	6.3	52	29.9	50	37.8	46	37.1
Dissemination	9	6.0	10	5.9	18	10.4	39	7.0	26	15.3	22	16.9	23	18.5
Policy Studies	--	.2	--	.2	4	2.2	5	1.0	5	2.9	8	6.2	9	7.3
Totals	100	64.7	100	58.7	100	57.5	100	18.5	100	57.8	100	76.2	100	80.2

1. Does not include program direction and administration costs.

Program Funding by Type of Recipient, Fiscal Years 1974 through 1979¹

Table 2

Type of Recipient	FY 1974		FY 1975		FY 1976		Transition 1976		FY 1977		FY 1978		FY 1979	
	%	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%	\$M	%	\$M
Colleges/Universities ²	29	18.8	26	15.0	37	21.3	21	3.9	33	19.1	38	29.3	38	30.5
Nonprofit Organizations ³	54	35.1	57	33.6	39	22.7	30	5.5	45	26.0	42	31.8	43	34.4
For-Profit Organizations	6	3.9	5	2.7	8	4.4	16	3.0	9	5.1	8	5.7	7	5.3
State and Local Education Agencies	6	3.8	11	6.7	13	7.2	24	4.5	10	5.9	10	7.6	10	8.1
Individuals/Others	5	3.1	1	.7	3	1.9	9	1.6	3	1.7	2	1.8	2	1.9
Totals	100	64.7	100	58.7	100	57.5	100	18.5	100	57.8	100	76.2	100	80.2

1. Does not include program direction and administration costs.

2. Includes all funds at R&D centers.

3. Includes all funds at educational laboratories.

NIE Program Funding by Organizational Areas Fiscal Years 1974, 1977, 1978, and 1979

Table 3

Organizational Areas	FY 1974		FY 1977		FY 1978		FY 1979	
	%	\$M	%	\$M	%	\$M	%	\$M
Teaching and Learning	66	42.6	55	32.0	52	39.7	49	39.2
Dissemination and Improvement of Practice	19	12.2	26	14.9	29	22.2	30	24.5
Educational Policy and Organization	15	9.9	19	10.9	19	14.3	21	16.5
Totals	100	64.7	100	57.8	100	76.2	100	80.2

Note: This table reflects the NIE budgets for FY 1978 and FY 1979 under program areas as reorganized in 1978. Budgets for FY 1974 and FY 1977 are shown for comparative purposes as they might have appeared under the present reorganization. This does not include NIE program direction and administrative costs.

Contracts and Grants Awarded by NIE Fiscal Years 1974 through 1979¹

Table 4

Fiscal Year	Contracts		Grants		Total Awards	
	%	\$M	%	\$M	%	\$M
1974	325	47.7	129	14.7	454	62.4
1975	259	50.2	45	8.1	304	58.3
1976 ²	374	63.2	164	12.6	538	75.8
1977	288	48.2	140	9.1	428	57.3
1978	313	30.0	311	46.2	444	76.2
1979	243	26.5	334	53.7	577	80.2

1. Does not include program direction and administrative costs. Also, FY 1974 through 1977 exclude transfer funds, field readers, and purchase orders.

2. FY 1976 figures include Transitional Quarter.



Labs and Centers

Approximately one-third of NIE's annual budget supports the activities of eight Regional Educational Laboratories and nine Research and Development Centers.

Wishing to establish a stronger relationship between NIE and these institutions, the Congress, in the Education Amendments of 1976, directed NIE to make grants to and enter into contracts with the labs and centers after (1) soliciting long-range plans from these institutions, and (2) ensuring that the proposed activities were consistent with the Institute's research and development program and dissemination activities. The Congress also mandated the establishment of a special panel to review the operations of the labs and centers and to make recommendations about how to improve the relationships between these institutions and NIE.

The NIE Director selected the 14 members of the Lab and Center Panel from nominees proposed by the education community. The panel held its first meeting in September 1977 and spent the next year and a half conducting site visits to all the labs and centers to review their activities and long-range plans. During this period, the panel remained in close communication with the NIE Director and met several times with the NCER to discuss the reactions of the panel members to the site visits.

In January 1979, the panel released its final report, "Research and Development Centers and Regional Educa-

tional Laboratories: Strengthening and Stabilizing a National Resource." The Report offered conclusions and recommendations regarding support for each lab and center and general recommendations regarding policies and procedures:

Immediately following the release of this report, NIE issued an administrative policy providing for the establishment of long-term agreements with the existing labs and centers. The NIE action implemented a 1976 Council policy that directed NIE to support the development, strengthening, and utilization of high-quality research and development institutions within the Nation. The action took into account the panel's recommendations and its dialogue with NIE. Along with subsequent action taken by the Institute, the administrative policy is meeting the goals set by the panel in its final report.

Since 1979, NIE has awarded long-term (5-year) special institutional agreements to 15 of the 17 labs and centers. The two remaining centers received support for a year of planning and strengthening. If at the end of that year the identified problems have been remedied, NIE will award those two centers long-term agreements. The procedures for long-term funding implemented by NIE will protect the stability of the labs and centers, which was one of the main concerns voiced by the panel.

In accordance with the panel's recommendations for accountability and quality, NIE's directive states: "Laboratories' programmatic priorities will be determined through systematic assessments of the needs of their respective regions." The laboratories' governing boards must include a broad representation of the region's educational interests, have strong ties with state, intermediate, and local agencies, and include parent, teacher, female, and minority representation. Under each long-term agreement, periodic reviews of progress and proposals will be conducted to determine annual levels of support.

Centers also are to establish strategies and programs in pursuit of their mission through consultations with scholars and practitioners interested in their respective fields and in collaboration with NIE staff. NIE has strengthened its relationship with the labs and centers by including representatives of these institutions in the Institute's planning process. In addition, NIE created the Educational Organizations and Institutions staff to serve as a liaison between the lab and center monitors and the Office of the Director. The monitors also have access to the Office of the Director through the NIE Lab and Center Review Committee, which includes NIE's top managers. Each institutional monitor ensures that connections are made between the labs and centers and other activities sponsored by the Institute. At the same time, linkages between the labs and centers and other R&D institutions are being strengthened through such NIE programs as the RDx, Regional Services, and State Capacity Building Grants.

Because of concern about regions of the country that are unserved or only partially served by the existing labs (the Northeast, Southeast, and the upper Midwest), NIE has reiterated its commitment to supporting institutions responsible for R&D services and leadership in all regions of the country and has appointed a task force to follow up on the panel's recommendations. The task force has undertaken a variety of activities to stimulate discussion and obtain advice about how best to serve these regions. If the task force's analyses indicate that new institutions are needed (rather than expanding the boundaries of existing labs), and if NIE receives a sufficient appropriation in FY 1981, the Institute will solicit proposals from the field for an initial year of planning and organization activity in this area.

Congressionally Mandated Studies

Starting with the Compensatory Education Study and the Safe School Study, which were mandated by the Congress in the Education Amendments of 1974, the Congress has increasingly turned to the Executive Branch to examine major educational issues and make recommendations for legislative initiatives. The Education and Labor Committee report that accompanied the House version of the 1978 Amendments, for example, noted that the committee used the results of the NIE Compensatory Education Study in the revision of Title I of the Elementary and Secondary Education Act of 1965. The report states that "the committee has found the quality of the research by NIE to be excellent and consequently relied upon these reports in formulating an amendment to Title I."

The Safe School Study now stands as the basic reference for those seeking to understand the problems of violence and vandalism in schools. Currently available are the executive summary, a compilation of the substantive findings, the methodology report, and a documentation of the magnetic data tapes. NIE is encouraging the broadest possible analysis of these data, which are the most comprehensive to be found anywhere.

Vocational Education Study

The Congress mandated a third NIE study in the Education Amendments of 1976. The legislation directs NIE to undertake a thorough study of vocational education programs conducted under the Vocational Education Act of 1963 and other state and Federal statutes. NIE receives an additional \$1 million a year for 4 years for this study. The Congress directed NIE to include in its inquiry a study of the present distribution of vocational education funds in terms of services, occupations, target populations, enrollments, and educational and government levels. In addition, NIE is directed to address ways to achieve compliance with the applicable U.S. laws and ways to assess program quality and

effectiveness. A review of consumer and homemaking education programs is also included. The final report of the Vocational Education Study is due to the President and the Congress by September 30, 1981. It is the intent of the Congress to use the study's findings and recommendations in considering measures reauthorizing existing vocational education legislation.

National Assessment of Educational Progress

The National Assessment of Educational Progress, formerly supported by the National Center for Education Statistics, was transferred to NIE by the Congress in 1978. The program is administered by the Education Commission of the States.

The National Assessment is a census-like data collection representing an educational barometer for the Nation. It is a continuing survey of the knowledge, skills, understanding, and attitudes of young Americans. Each year the program tests from 75,000 to 100,000 persons in one or more subject areas normally taught in school.

Over the past 11 years the National Assessment has conducted major assessments in art, career and occupational development, citizenship, literature, mathematics, music, reading, science, social studies, and writing and in several other areas on a smaller scale. Six of these areas have been reassessed, allowing changes in achievement to be reported. The age groups tested are 9-year-olds, 13-year-olds, 17-year-olds, and 26- to 35-year-olds. The assessment is designed to provide broad national data—information is not reported by individual schools or states.

School Finance Study

During congressional consideration of the Education Amendments of 1978, several emerging issues highlighted the need for rethinking how elementary and secondary education, both public and private, should be supported and what role the Federal Government should play in this process during the 1980's. As a result, the Congress included language in the 1978 Education Amendments directing the Secretary of Health, Education, and Welfare to conduct a study of the financing of public and private elementary and secondary education in the United States. The study, which was transferred to the Department of Education after its establishment, is located at NIE and draws upon the Institute's management for support services.

The purpose of the study is to provide information that will describe the condition of education finance, explore developing trends, and assess options for the Federal role in this area. The Congress mandated the School Finance Study to help it in its deliberations on renewal of the Elementary and Secondary Education Act, which expires in 1983. The study's findings are expected to play an important role in the formulation of congressional and Executive Branch views of future education policy in this area.

The study's authorizing legislation called for a 15-member presidentially appointed advisory panel to make recommendations for legislation and provide advice to the Secretary about work planned and conducted by the study staff. Panel members include representatives of public and private school teachers, administrators and board members, local and state government officials, and school finance scholars.

Under the statute, all components of the study are to be completed by December 31, 1982, but delays in appropriations decisions may cause the study to be extended over a longer period of time.

Investment in the Future

Administration Support for R&D

The decade of the 1980's promises to be challenging and exciting for NIE.

The decade opened with the Administration voicing support for a strong and vital national research enterprise. President Carter, in his FY 1981 budget message to Congress, expressed his concern that the country "invest in the future through research and development." The President said:

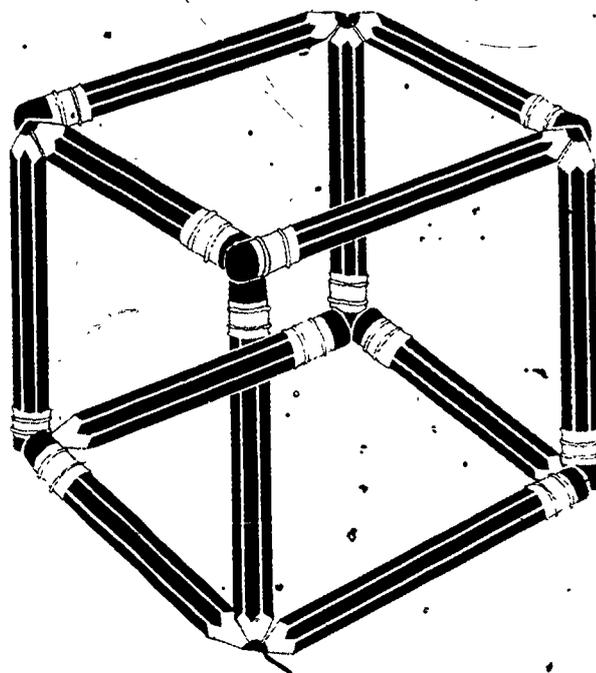
I believe that these are among the most important expenditures we can make. The payoff, particularly for basic research, is long term but immense. We benefit today—in new industries, in millions of jobs, in lives saved and in lives protected—from the investments in science made decades ago. We must continue such investments today to reap similar actions tomorrow.

The Department of Education

Support for research and development was also expressed by Department of Education Secretary Shirley Mount Hufstедler, both during her Senate confirmation hearings and during her testimony at the NIE congressional budget and reauthorization hearings. During the 1980 House Select Education Subcommittee hearing on NIE's reauthorization, Secretary Hufstедler discussed the Federal Government's emerging leadership role in the realm of educational research. She noted the importance of making research improvement and dissemination key responsibilities of the new Department and added:

... it is my firm belief that national educational concerns, such as improving educational practice and equity, demand attention at the national level. I am also convinced that an agency like NIE, by providing leadership at the Federal level, acts as a catalyst to improvement at every other level. That leadership results in enormous benefits to schools, colleges and to libraries and museums in their work with children and the public.

The new Department, and most especially the Office of Educational Research and Improvement, which includes



NIE, will strengthen NIE's research focus and provide a structure that will enhance the coordination of NIE's activities with other departmental programs.

NIE Activities: A Profile

NIE is proud of the fact that, over the past 5 years, it has gained recognition as a leader in the nationwide effort to improve American education. In discussing NIE's range of activities, the House Education and Labor Committee Report to the Education Amendments of 1978 stated:

... the Institute has grown and matured. It now represents a unique and solid resource which educators and educational policy-makers can depend on for the study of difficult and previously unknown areas which affect learning and the educational process, as well as national education policy issues."

NIE has a growing record of success in providing essential services to people involved in the improvement of education at every level. Examples of NIE's outreach to policymakers and the education community follow.

Assistance to Congress

Congressional Testimony. The Institute is often called upon to provide expert testimony (e.g., on the nature of basic skills problems, the meaning of the National Assessment of Educational Progress mathematics results, the policy implications of declining enrollments, and the problems of private and public high school principals). In addition, NIE

has been mandated by the Congress to conduct three major, national studies: The Compensatory Education Study, the Safe School Study, and the Vocational Education Study.

Assistance to Federal Policymakers

DHEW Office for Civil Rights. The NIE Desegregation Studies team has been actively involved in the development of Federal policy as it relates to school desegregation. Its activities include reviewing school district desegregation plans; providing the Office for Civil Rights with research-based information concerning educationally effective components of school desegregation plans; and serving as a clearinghouse by sponsoring the Desegregation Dialogue Group, which enables Federal officials to stay on top of relevant information and research findings.

President's Youth Initiative. NIE staff members have worked with departmental and White House staff throughout the development of the President's Youth Initiative in helping to define the educational and organizational components of the Initiative.

Experience-Based Career Education. NIE supported the development of the Experience-Based Career Education (EBCE) Program, a model for integrating school and work experiences for youth ranging from dropouts to National Merit Scholars. EBCE has been implemented nationally in over 200 school systems in cooperation with the Bureau of Occupational and Adult Education, Youthwork, and Department of Labor programs. Many of the features of EBCE are those called for by the President's Youth Initiative.

Department of the Navy—Literacy Training. Because of the successful development of NIE-supported programs related to experience-based education, the Department of the Navy provided NIE with funds to develop a computer-assisted career-related literacy program for Navy recruits. Now being pilot-tested in Orlando, Fla., the early findings have been so encouraging that the Navy is considering installing the program in its major training centers.

Department of Labor—Career Intern Program. NIE supported the development and evaluation of the Career Intern Program (CIP), an alternative high school for potential school dropouts. Because of the program's effectiveness, the Department of Labor has provided funds to NIE to support replication of this program in Detroit, Seattle, Poughkeepsie, and New York City.

Basic Skills Steering Committee. Institute staff participate in a Basic Skills Steering Committee, which is responsible for coordinating basic skills programs (e.g., Title I, Right to Read, Teacher Center) in the Department of Education. NIE furnishes research material to the committee (e.g.,

"Dialects and Educational Equity," a guide for teachers of children who speak vernacular Black English).

Push/EXCEL and Cities in Schools Evaluations. NIE is conducting a 3-year evaluation of these programs, which are funded by the Department of Education. Evaluators are tracking the progress of the high-risk inner-city youth the programs are designed to help, and will draw connections between the interventions made by the programs and changes in student achievement, motivation, and behavior. Findings that are provided to the program and to other "stakeholders" on a continuing basis are designed to contribute to the development and the strengthening of the programs.

Document Design Project. Through the Document Design Project, NIE provided an analysis of the Basic Educational Opportunity Grant (BEOG) form for the Office of Education, which resulted in a revision of the 1980-81 forms and instructions.

National Science Foundation/NIE Joint Program on Mathematics Education. NIE's research on mathematics learning has led to a new collaboration with the National Science Foundation in a program of development and research on the use of modern information-handling technology in the classroom.

Bureau of Indian Affairs (BIA) Educational System Study. NIE and BIA funded a study to develop data for policy decisions regarding the equitable funding of the BIA educational system. Using the study's recommendations, NIE and BIA staff produced an implementation plan for the BIA system, which took effect in January 1979.

Assistance to State and Local Policymakers
Big-City School Superintendents' Network on Urban Education. The network provides a forum for superintendents from 19 cities to discuss possible solutions to problems they identify as critical to urban schools (e.g., educating non-English-speaking children and those with handicapping conditions), for exchanging related research information, and for identifying those areas where more research is needed. Superintendents from Albuquerque, Atlanta, Boston, Chicago, Cincinnati, Columbia, Dallas, Detroit, Hartford, Honolulu, Houston, Kansas City, Los Angeles, New York, Oakland, Philadelphia, Portland, Seattle, and Washington, D.C., have joined the network.

School Finance. "Plain Talk About School Finance" has been used in 11 states by the American Federation of Teachers to educate teachers about school finance reform issues. NIE has also conducted workshops on issues, practices, and policies for teachers and legislative staff in

California, Connecticut, Florida, Illinois, Michigan, Missouri, New York, Ohio, Pennsylvania, Rhode Island, and Texas. Ten thousand copies have been requested by state legislatures, a wide segment of the education community, and the general public.

NIE has sponsored a broad range of technical assistance, policy studies, and dissemination activities focused on school finance equalization. Since 1976, direct technical assistance has been provided to 29 states. A number of these activities have resulted in the enactment of reform legislation.

NIE has also sponsored independent policy analyses of the effects of new finance equalization legislation ("The Search for Equity in School Finance") and produced a series of guidebooks ("School Finance Reform: A Legislator's Handbook"), a quarterly newsletter ("Finance Facts"), and an annual chart that summarizes current state practices ("School Finance At a Glance").

The National Review Panel on School Desegregation Research. The panel, with its advisory board of judges, lawyers, researchers, policymakers, school administrators, and teachers, synthesizes knowledge about the effects of school desegregation. Results of the panel's work, sponsored by Duke University, have been published in two two-volume sets of "Law and Contemporary Problems." The panel, which is funded by NIE, OE, and the Ford Foundation, is also developing handbooks for educators and policymakers on what we know and what we need to know about school desegregation. *

The National Project and Task Force on Desegregation Strategies. With NIE support the task force has compiled a profile of state desegregation activities, has published reports geared to states' concerns, and is serving as a clearinghouse for desegregation-related information of interest to the states. Two regular publications of the task force are "Progress," which provides news about judicial and legislative activities at the national and state levels and summarizes research literature and other publications on desegregation; and "Legal Analysis," which gives nonlawyers up-to-date expert analyses of recent legal developments related to school desegregation.

Alternatives to Suspension. "In-School Alternatives to Suspension" reports on a national NIE conference that explored ways to help school districts decrease their reliance on suspension as the primary means of disciplining students who violate school rules. Recommendations included the identification and treatment of problems leading to school disruption.

Rural Education Policy Study. "Education in Rural America: A Reassessment of Conventional Wisdom" was

the first major study of rural educational policy published in over three decades. NIE received over 20,000 requests for a chapter reprint entitled "Economy, Efficiency and Equality: The Myths of Rural School and District Consolidation." The book is being used by students at Harvard, Dartmouth, the University of Vermont, and other colleges and universities. It is also being used by state legislators in deliberations about school district reorganization policies and by people in local school districts. Selected as one of the 11 "must books" for 1977 by the National School Boards Association, "Education in Rural America" is now being sold commercially.

"State Legal Standards for the Provision of Public Education." This compilation of education laws of the 50 states and the District of Columbia, produced in 1974 and again in 1978, has been made available to governors, attorneys general, and legislative and law school libraries in every state. NIE has also filled hundreds of requests for this compilation from teachers, principals, legislators, and lawyers.

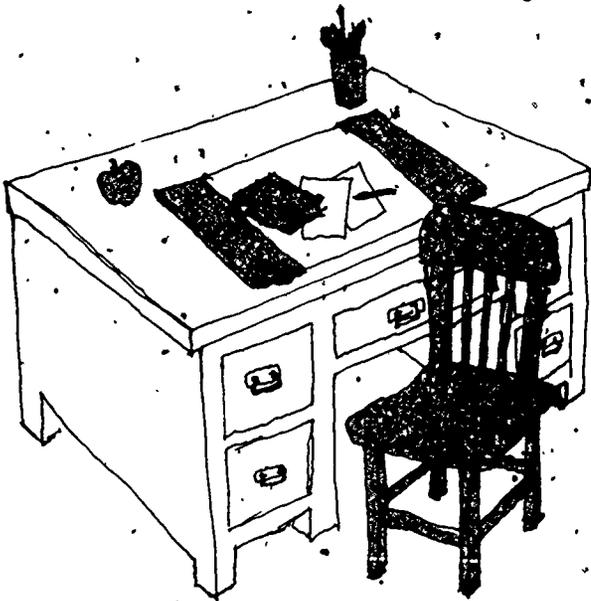
State and Local Input Into National Policy for Bilingual Minority Students. The study examined the relationship between Federal bilingual requirements and those of selected states. Illinois used the findings to develop a new bilingual policy. The other states involved in the study (i.e., Texas, New York, Massachusetts, Florida, and California) are expected to make use of them as well.

Assistance to the Education Community
The National Conference on Achievement Testing and Basic Skills. This NIE-sponsored conference provided the first national forum for the discussion of testing issues. The conference reinforced the limitations of the Federal role and gave a new emphasis to research and technical assistance that would render tests more useful to teachers and more understandable to parents and other citizens.

The Institute supports a clearinghouse on tests, measurements, and evaluation, and one on applied performance testing, both of which distribute testing information nationwide.

"Declining Enrollments: The Challenge of the Coming Decade." This publication, now in its second printing, represents the first collection of declining enrollment research. It addresses the issues from a broad range of policy perspectives.

Seminars on Emerging Roles for Black Colleges and Universities. The Institute has organized a study group of researchers and administrators to help define research priorities that are of concern to black colleges and universities. The first two seminars were held in 1979, and the third will be held in mid-1980. The agenda includes a look at future



roles for black colleges and universities, how Federal and state policies might affect these roles, and ways black colleges and universities can be strengthened and their research capabilities increased.

National Center for Bilingual Research. NIE recently entered into a 5-year cooperative agreement to establish the National Center for Bilingual Research at Los Alamitos, Calif. Activities will include research on language acquisition, language use, and bilingual education. The Center will also conduct educational language policy analyses. The Center has a national scope and will include in its focus studies related to Native American, Spanish, Asian-Pacific, and European languages.

"Research Within Reach." This NIE-supported series of publications makes research findings available to educators. The first in the series, "Research Within Reach: A Research-Guided Response to Concerns of Reading Educators," has been disseminated to national, state, and local institutions, agencies, and programs concerned with reading instruction. The International Reading Association is making copies available to its 70,000 members.

The second, on mathematics, is nearing completion. It consists of 21 research bulletins dealing with such topics as remediation, diagnosis, problem solving, and staff development. Several of the bulletins have been reprinted in the journal of the Center for Teaching/Learning of Mathematics. The third in the series will focus on oral and written communication.

Grants to Minority and Women Researchers. The Institute has developed a program that offers opportunities for members of minorities and women to participate more fully in educational research. To date, 361 scholars have participated in the Minorities and Women's Program to provide new balance, skills, and perspectives to the educational research community.

The Comprehensive School Mathematics Program. NIE supported the development of the Comprehensive School Mathematics Program (CSMP), a math curriculum designed to increase math skills of students from kindergarten to sixth grade. The K-3 component, which is available in Spanish as well as English, is being used by more than 45,000 students. The curriculum for grades 4-6 is being pilot-tested in 10 school districts. CSMP is designed as a total mathematics program for all students.

Seminar on Black English. In September 1979, an NIE-sponsored seminar featured eight leading language researchers and practitioners who analyzed the implications of the Ann Arbor Federal court decision on the teaching of reading to children who speak vernacular Black English. In June 1980, NIE and the Ann Arbor school system sponsored a followup conference, which was attended by educators from across the country.

"Social Development in Young Children" and "Cognitive Development in Young Children." These NIE-supported publications provide teachers of preschool and elementary school children with brief summaries of current research in these areas. NIE has distributed over 20,000 copies of these publications, which are widely used by elementary school teachers and by teacher training programs.

"Freestyle." "Freestyle," a 13-part series produced by KCET-TV/Community Television of Southern California, was developed to reduce the limiting effects of sex role stereotyping on the career-related interests, activities, and behavior of 9- to 12-year-old youngsters. Since October 1978, the series has been shown nationwide on PBS stations. It received the 1979 daytime TV Emmy award and an award for outstanding achievement in children's television from Action for Children's Television. School systems may tape the series off the air for in-school viewing. Teachers' guides and student materials are available.

Education Satellite Programs. The NIE-supported Alaskan and Appalachian satellite projects have developed communications satellite systems that provide access to quality educational services to approximately 500,000 families (1,500,000 persons) in the contiguous 48 states and several thousand high school students in isolated and rural schools in Alaska.

The Appalachian Community Service Network (ACSN), a nonprofit corporation, is the offspring of the NIE-sponsored Appalachian Educational Satellite Project. ACSN, now using a commercial communications satellite, reaches the 48 contiguous states and is received by more than 50 cable TV systems, as well as by 20 communities that have no access to cable. Over 50 universities and colleges have given credit for ACSN-delivered graduate and undergraduate courses and numerous workshops.

In Alaska, all 52 school districts, some 200 communities, and approximately 5,000 teachers receive educational assistance by satellite.

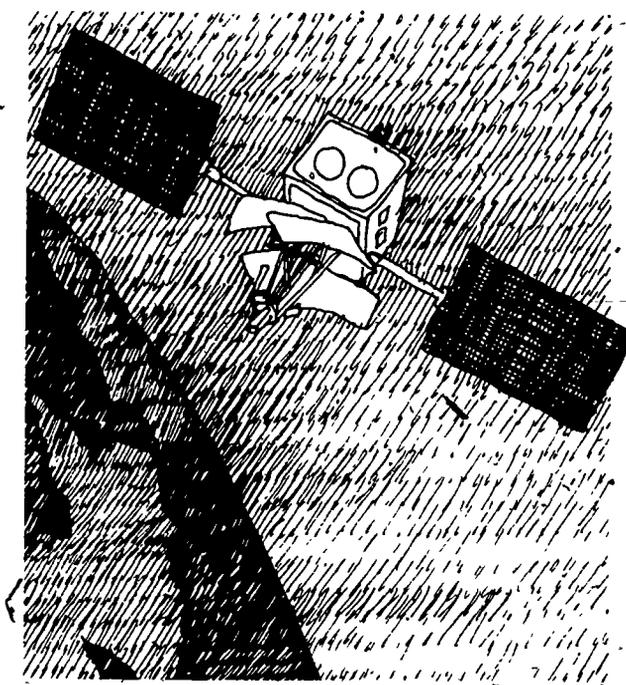
"Assessment of Testing Instruments for Limited English-Speaking Students." This publication provides teachers and school administrators with information on the appropriateness of testing instruments to assess the performance of elementary school students whose first language is Chinese, French, Italian, Navajo, Portuguese, Spanish, or Tagalog.

"Options in Education." NIE helps to support "Options in Education," a weekly program broadcast over National Public Radio (NPR). "Options" investigates most of the "burning issues" in education (e.g., finance, discipline, drugs, teacher competence, and mainstreaming). The only nationally broadcast radio series devoted exclusively to education, it is NPR's second most popular series and is carried regularly by 89 percent of NPR's stations.

Beginning Teacher Evaluation Study (BTES). With NIE support, the Commission for Teacher Preparation and Licensing in California initiated a comprehensive program of basic research on teaching and learning that has led to improvements in teacher training and to better educational experiences for children. One of the study's findings shows a direct correlation between the amount of time teachers allocate to direct instruction in a particular content area and learning in that content area. Results of the study are influencing the training and licensing of teachers in California and are being disseminated through the National Diffusion Network. School system interest in the study is high.

In one application of the BTES findings, the Austin, Tex., public schools gained \$4 million in effective instructional time without additional direct cost.

National Commission on Working Women. NIE supports the National Commission on Working Women (NCWW) in its effort to identify the educational and training needs and opportunities of blue- and pink-collar women. NCWW has held regional dialogs on these issues and will hold six state dialogs and a national conference in 1980. It has provided technical assistance to four states, labor leaders, and the business and education communities. The results of a national survey of 150,000 working women to determine



their education, training, and job-related needs has been disseminated to labor unions, corporations, and state officials across the country.

School Desegregation and the Law. The NIE publication "A Citizen's Guide to School Desegregation Law" summarizes recent major court decisions for teachers, administrators, students, and citizens.

Development of Material on Testing for Teachers. This project, being conducted at NIE's Center for the Study of Evaluation (CSE) at UCLA, trains teachers in the uses and abuses of tests. Teacher workshops were held and materials were disseminated across the country.

"Your Child and Testing." This handbook for parents, developed and published by NIE, will be listed in the November 1980 GSA Consumer Information Catalog for distribution by the Consumer Information Center (CIC), Pueblo, Colo. The handbook is in response to a survey conducted by CIC, which indicated that testing was the most popular subject of interest to consumers.

Student Team Learning. The NIE Center for the Organization of Schools at Johns Hopkins University designed a set of teaching techniques called Student Team Learning to help students in desegregated classrooms work together more closely. This approach significantly increases achievement in the basic skills, and builds relationships between

black and white students both inside and outside the classroom as well.

Technical Assistance to Teacher Centers. Since 1975, NIE has supported the Teachers' Center Exchange, which links and provides a range of services to more than 400 Teacher Centers throughout the country. After the inception of the Federal Teacher Center Program in 1977, NIE funded two additional assistance projects to help teacher organizations develop effective project designs.

The Aesthetic Education Program. A curriculum for children grades K-7 that uses all the arts to teach aesthetic perception and includes a teacher training package has been developed at CEMREL, an NIE-sponsored regional laboratory. The curriculum is being commercially published and distributed, and the lab continues to offer support to classroom teachers through a network of regional resource centers. Students in the program demonstrate increased creativity and the acquisition of higher order learning skills.

The Effective Schools Project. The Institute's effective schools effort focuses on discerning the reasons schools are doing an unusually effective job in raising students' achievement. Findings from one such study provided the basis for the development of a school improvement program recently initiated by the New York City school system.

NIE also sponsored a Journalism Research Fellowship Program for education writers that allowed working journalists to spend 10 weeks probing what made certain schools in their hometowns more effective than others in the same area with the same student makeup. The fellowship program is described in greater detail in chapter 2 of this report, "Council Activities."

The Southeast Regional Council for Educational Improvement. Chief state school officers from 10 southeastern states established the Council in 1978 to conduct research and analysis on policy issues related to the long-range planning needs of the member states. The Council is giving its initial attention to rural education, and is working closely with the Southern Youth Policies Board and the Appalachian and Southwest Regional Laboratories.

The Northeast Planning Consortium. Chief state school officers from six New England states and New York have come together in this consortium. They are seeking ways to provide assistance (e.g., training and material) to teachers and administrators in that area of the country.

"Handbook of Basic Citizenship Competencies." This publication suggests effective designs for educational programs that will prepare young people for responsible citizenship. The Basic Citizen Competencies Project also publishes a

leadership guide for principals and a checklist for teachers, parents, and community leaders.

Regional Programs To Help Education Problem-Solving. Seven NIE-supported regional exchanges, working through 43 state departments of education, facilitate communication between researchers, developers, policymakers, and teachers. The emphasis is on giving teachers the opportunity to influence research and development agendas as well as policies.

In addition, five educational laboratories are offering resources to help solve the policy problems of education agencies in their regions. For example, the Southwest Educational Development Laboratory sponsors policy seminars and symposia for state legislators and state department of education policymakers across a six-state area on such pressing educational issues as minimal graduation requirements and educational finance.

Illustrative Projects of the Laboratories and Centers

NIE supports eight Regional Educational Laboratories and nine Research and Development Centers. The primary purpose of the labs is to determine and help meet regional R&D needs, whereas the centers provide national research leadership in a problem area of national importance. They conduct a variety of R&D activities, including fundamental research, dissemination, and technical assistance. Following are brief descriptions of some of their accomplishments.

CEMREL, Inc. in St. Louis, serves 10 midwestern states. The lab developed two major curriculums for elementary schools: Aesthetic Education and the Comprehensive School Mathematics Program. The Aesthetic Education materials provide a theoretical and practical structure for integrating the fundamentals of aesthetic perception through the arts. To date, more than 1 million children have worked with these materials and 30,000 teachers around the country have had training for the program. NIE's support of the basic research program in symbolic language (Project Zero-Harvard) led to a major conference, sponsored by CEMREL, on the arts, cognition, and basic skills. The published papers from that conference have been used widely by researchers, teacher educators, and arts program planners.

The Comprehensive School Mathematics Program is an innovative approach to mathematics instruction in the elementary grades (K-6). The curriculum focuses on understanding the nature of mathematics and its application in the real world. Currently, grades K-3 materials are being used by more than 45,000 children and 1,400 teachers nationally. Materials for grades 4-6 are being field-tested around the country.

CEMREL's Regional Exchange, Research and Development Interpretation Service, and Urban Education Program are collaborating in the development of guidebooks for teachers and administrators called "Research Within Reach." A guidebook, "Composing Childhood Experience," has been featured at four regional conferences sponsored by the National Council of Teachers of English.

Wisconsin Research and Development Center for Individualized Schooling. Much of the work performed at the Wisconsin Research and Development Center for Individualized Schooling (WRDCIS) at the University of Wisconsin has centered on the development of programs in Individually Guided Education (IGE). One of these—the Wisconsin Design in Reading and IGE Mathematics—has been piloted in schools serving several hundred thousand students. The teaching and administrative problems and the advantages of these approaches have also been studied, providing valuable information on the implementation of individualized schooling in general.

Northwest Regional Educational Laboratory. The Northwest Regional Educational Laboratory (NWREL) in Portland, Ore., has developed an alternative program for high school juniors and seniors. Students in this experience-based career education program spend the last 2 years of high school gaining work experience in the community. Sixty-seven such programs are now being offered in 100 school districts in 26 states, where the lab has assisted in training local staff and providing instructional materials.

In an additional eight states, NWREL has assisted in preparing educators in implementing these experience-based career education programs. The laboratory is now helping schools and other agencies apply this concept to students with special educational needs: career development for young women interested in pursuing nontraditional careers (Portland School District), CETA-qualified Indian youth (Warm Springs, Ore.), migrant youth (Mission, Tex., and Yakima, Wash.), out-of-school adults (Western Nevada Community College and Alaska), and gifted and talented junior high school youth (Jefferson County, Colo., and North Clackamas, Ore.).

NWREL has been working with 17 Indian reservations in four northwestern states to develop supplemental classroom materials. Some 70,000 copies of storybooks, teachers manuals, and other materials have been purchased for classroom use. The storybooks are based on Indian legends, and stories are designed to enhance the self-image and reading ability of Indian children.

Appalachia Educational Laboratory, Inc. The Appalachia Educational Laboratory (AEL) in Charleston, W. Va., created home-based preschool TV, home visitor programs, and mobile preschool classrooms that serve 3- to 5-year-old

children and their families in rural West Virginia. The program also serves an audience of 62,000 families and young children living in rural areas in Ohio, Tennessee, and Alabama. HOPE (Home Oriented Preschool Education) consists of four components: (1) 500 half-hour daily television lessons for 62,000 families with preschool children, and 100 printed parent guides to help parents understand what the child was learning and to follow up with related activities at home; (2) weekly visits to 2,100 families by local, trained paraprofessionals; (3) a weekly half-day group experience for 80,000 children in mobile classrooms under the supervision of qualified teachers and aides; and (4) parent discussion groups, which served 3,000 families between 1974 and 1976.

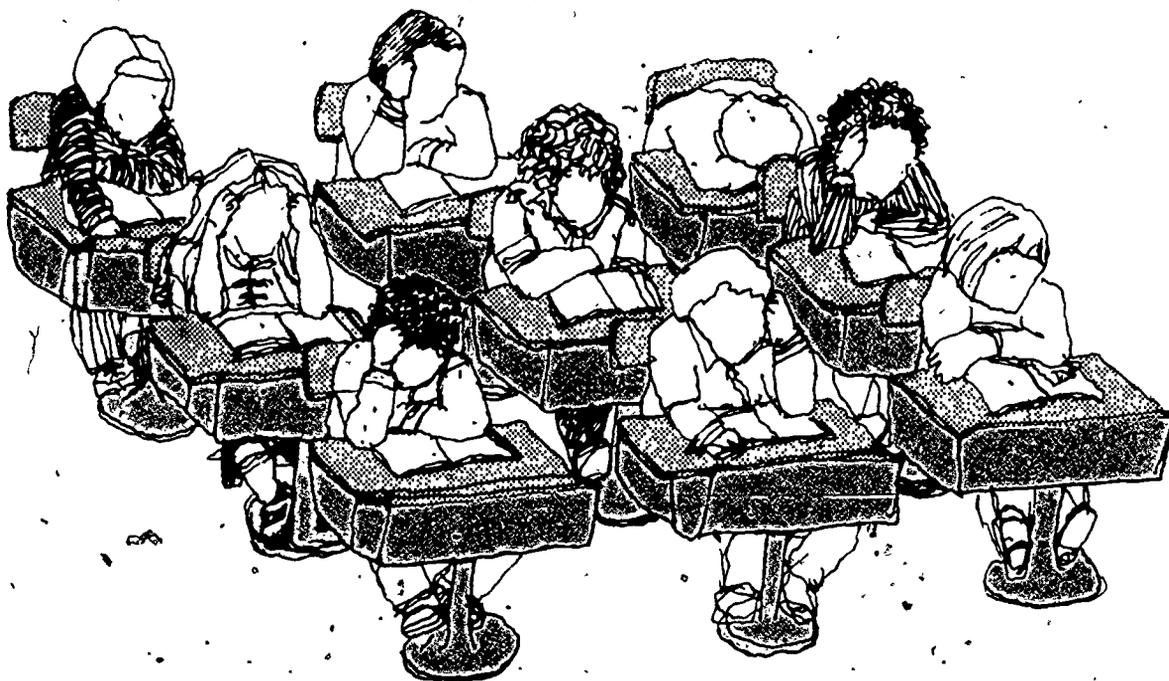
National Center for Research in Vocational Education. The Resource and Referral Service (RRS) at the National Center for Research in Vocational Education (NCRVE) at Ohio State University has become a central organization for linking researchers with practitioners. The RRS has developed comprehensive files on the work of more than 400 research organizations to coordinate the use of research and development resources by state and local education agencies. It provides prepackaged information, and, through direct referrals, assists in matching the information needs of clients with appropriate R&D centers. Approximately 25 to 30 referrals are processed each month.

Center for the Study of Evaluation. To provide step-by-step instructions on evaluation for principals, teachers, and school district staff, the Center for the Study of Evaluation (CSE) at UCLA prepared an eight-volume "Program Evaluation Kit" which has been enthusiastically received by school district personnel.

Mid-Continent Regional Educational Laboratory. Fifteen thousand parents, teachers, and administrators are receiving training that, through a project at the Mid-Continent Regional Educational Laboratory (McREL) in Kansas City, Mo., is designed to increase the participation of parents in instructional activities. Laboratory resources were used to develop training materials and to prepare instructors.

National Center for Higher Education Management Systems. The National Center for Higher Education Management Systems (NCHEMS), located in Boulder, Colo., has developed a set of measures of the outcomes of higher education. NCHEMS and the Educational Testing Service, have conducted workshops across the Nation and, in cooperation with the College Board, have established the Student Outcomes Information Service.

Learning Research and Development Center. The Learning Research and Development Center (LRDC) at the



University of Pittsburgh has developed instructional mastery of learning programs providing individualized instruction in mathematics, science, reading, and early learning skills. These have been disseminated nationally through Project Follow Through and by Research for Better Schools (RBS).

In conjunction with the Pittsburgh public schools and the Pittsburgh Urban League, LRDC conducted policy research. Further studies to assess the national minority perceptions of minimum competency testing have been done for the National Urban League.

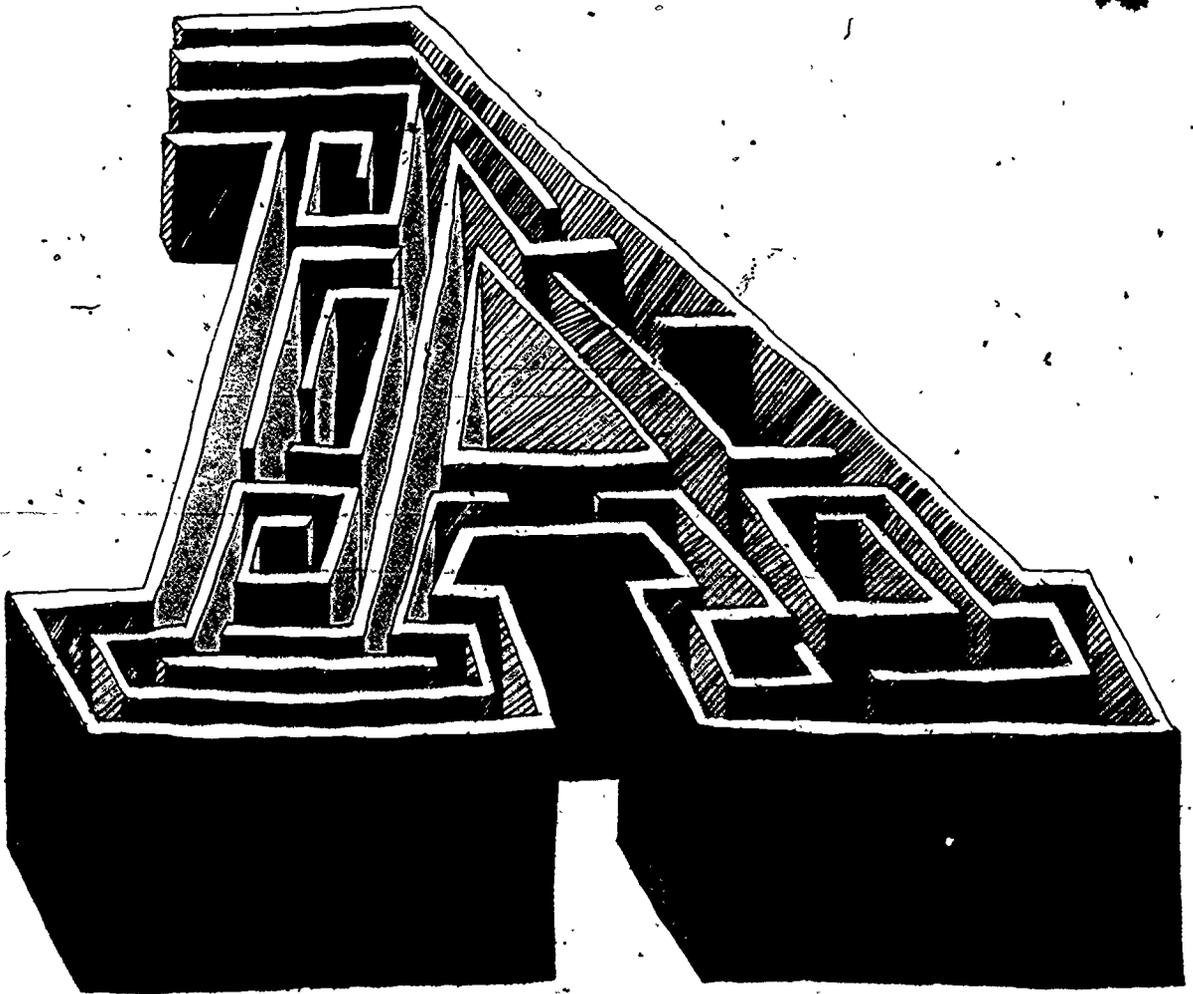
Research for Better Schools. Over the past 4 years, Research for Better Schools (RBS) in Philadelphia has developed and monitored the implementation of detailed management and reorganization plans in the desegregation of New Castle County, Del.; Erie, Pa.; and the General Braddock School District in Pennsylvania. Together, these three districts serve over 100,000 school children. RBS continues to provide technical assistance to the districts by building improved accountability and salary structures, planning curriculums, encouraging parent involvement, and establishing improved program monitoring and evaluation procedures.

Research and Development Center for Teacher Education. The major project at the Research and Development Center

for Teacher Education (RDCTE) at the University of Texas, "Classroom Organization and Effective Teaching," has developed information on the characteristics of effective classroom teachers and on the way in which these characteristics interact with students' characteristics, classroom organization patterns, and group management techniques. The present emphases of the project are on integrating its findings with those of other research institutions and on providing workshops, materials, and services to teachers, teacher educators, and administrators.

Southwest Educational Development Laboratory. The Southwest Educational Development Laboratory's Regional Exchange (SEDL/RX) in Austin, Tex., helps six state departments of education to develop, expand, and strengthen statewide and regional dissemination systems. It also disseminates R&D outcomes and other resources related to school improvement. The lab conducts state and regional workshops, conferences, and seminars, and provides consultant services as well as a regional program file and a resource center for personnel from the state departments of education.

Chapter 5



The NCER, in response to its congressional mandate to report on the status of education and educational research in this country, is devoting this chapter to an examination of the condition of literacy in American society and the status of research on literacy problems. Previous NCER annual reports have featured the subjects fundamental research and curriculum development. The Council selected literacy for this report because it is one of the Institute's priority

research areas and was the subject of a two-session Council review in 1979. This chapter, which was written by Ramsay Selden, NIE Team Leader for Literacy, discusses this subject first as an educational goal and then as a research question. It attempts to explain the role of NIE's research program in dealing with the challenges to reading and writing instruction now facing the schools.

Literacy: Current Problems and Current Research

What is the condition of literacy in the United States, how can the schools improve it, and how can research help in this effort? Literacy may be defined as the purposeful use of written language—either producing it or understanding it. Beyond this global notion, opinions differ as to what we mean by literacy, ranging from making one's mark, to completing a certain level of schooling, to fluently analyzing a complicated text. Part of the research problem (and a problem facing the schools) is deciding *what* we mean by literacy—what this “purposeful use of written language” really means for people in a variety of circumstances and with a variety of needs and aspirations.

Around this elusive concept, a number of issues emerge. First, we will try to define the most pressing problems concerning reading and writing achievement now confronting the schools. These include the extent and current trends of illiteracy among groups in our population, the problems raised by multiple and elusive definitions of literacy, and our knowledge about how to teach people to read and write. Second, we will describe research responding to these problems: efforts to explore the prevalence of literacy in our society, to clarify our definitions of literacy, and to inform and improve the teaching of reading and writing, especially among groups now lowest in achievement.

Current Status of Literacy

Literacy is perhaps the public's primary interest in the schools. Concern about declining scores on the Scholastic Aptitude Test prompted careful analysis by the Advisory Panel on the Scholastic Aptitude Test Score Decline chaired by Willard Wirtz (“On Further Examination,” 1977) and by the National Academy of Education for then Assistant Secretary for Education Mary F. Berry (“Improving Educational Achievement,” 1978). These studies considered the role of school programs, changing family patterns, and general social change in the apparent decline of both verbal and mathematical abilities among the college-bound.

Concern about the basic skills also lies behind statewide and local efforts to specify minimum competencies as

outcomes for public school programs. At this time, approximately 38 states have specified minimum objectives for the schools, emphasizing functional and basic skills in reading and writing. Given this public concern about achievement in literacy and the many attempts to ensure some basic level of literacy as an outcome for schooling, a first question for research on literacy is: How are the schools really doing in teaching children to read and write—what is the problem?

Literacy Rates and Trends

There are three basic sources of information to answer this question in terms of national trends: the U.S. Census Bureau estimates on the proportion of illiterates in the population; surveys of the functional-literacy skills of youth and adults; and patterns of achievement on standardized tests of reading and writing.

Figure 1 shows trends over a 100-year period of the proportion of illiterates in the general population and among whites and minority group members. The conclusion is striking. According to the Census Bureau, the literacy rate has risen from 80 percent in 1870 to virtually 100 percent for the general population, and has risen from 20 percent to about 96 percent for members of minority groups. These figures would indicate that the expansion of general education has increased our level of literacy dramatically, especially for groups not served by the schools in the past.

The Census Bureau defines as literate anyone who has completed 6 years of school or who reports herself or himself as able to both read and write a simple message either in English or another language. Kirsch and Guthrie (1977-78) point out that completion of a number of years in school does not necessarily indicate any particular level of skill in reading or writing:

Literacy estimates which depend on the number of years of school completed are inadequate as an index of specific skills and abilities. This is due in part to a wide variation of abilities among persons at each grade level. Results from a recent press report on citywide reading scores indicate that among eighth grade students in

Chicago, reading achievement scores ranged from an average grade level of 4.4 in the lowest school to a median level of 10.5 in the best school. (p. 493).

Since the competency of people who have finished 6 years of school may vary widely, from functional illiteracy on one end to fluency on the other, the definition used by the Census Bureau raises a serious question and, as a result, does not appear to be conclusive.

This problem has led researchers to develop either grade-equivalent scales of reading and writing ability or functional measures of literacy. The National Health Survey (Vogt, 1973) defines literacy as reading ability comparable to that of the average school child entering fourth grade. Virtually all standardized tests of reading and writing are scaled according to the average performance of school students at various grade levels. In contrast, the National Assessment of Educational Progress (Gadway and Wilson, 1975), the Harris study of survival reading skills (Harris and Associates, 1970), the Adult Performance Level Project (1973, 1975), and the Adult Functional Reading Study (Murphy, 1973) all define literacy as the ability to perform reading and writing tasks needed to function adequately in everyday life (filling out a driver's license application, reading a train schedule, writing a check, applying for a job, or reading an article in the newspaper). Studies of either type (standardized tests or functional literacy surveys) present a less optimistic picture of the current status of literacy than the Census Bureau estimates. The National Health Survey estimated that about 5 percent of youth aged 12 to 17 years old were illiterate, reading below the level of the average fourth grader. Harris estimated that about 13 percent of adults were marginal or worse in survival writing and reading skills, and, according to Kirsch and Guthrie, the Murphy data indicated that nearly 20 percent of adults could not perform "maintenance" literacy tasks involved in everyday life. Finally, the Adult Performance Level Project has suggested that as much as 50 percent of the adult population reads and writes at a level associated with functional incompetence, or at best functioning only with difficulty.

These figures are important for two reasons: First, they are all rather high, challenging the effectiveness of schools in developing literacy skills. Second, they differ greatly from one another (ranging from 5 percent to 50 percent in estimating rates of illiteracy), still leaving unanswered the question of what we really mean by literacy and where we stand on it.

A Second Look. In 1978, NIE commissioned the study "Functional Literacy and the Schools," by Donald Fisher, to locate sources of error in functional literacy surveys. Fisher concentrated on estimates of literacy among high school graduates. After accounting for obvious errors or exaggerations in the estimates, he concluded that less than 1

percent of these graduates are functional illiterates. Further, he concluded that illiteracy among 12- to 17-year-olds has remained relatively constant at 5 percent over the years, consisting largely of students who repeat one or more grades and who often drop out of high school before they finish.

For Fisher, this implied that although the schools have been able to identify students who are failing to learn to read and write, they have been unable to develop these students' basic literacy skills. Meanwhile, for the vast majority of students, literacy rates are high and seem to be improving; among younger students there is sound evidence in the National Assessment (1978) that reading and writing abilities have been increasing in recent years, especially for disadvantaged students whose achievement has been low in the past.

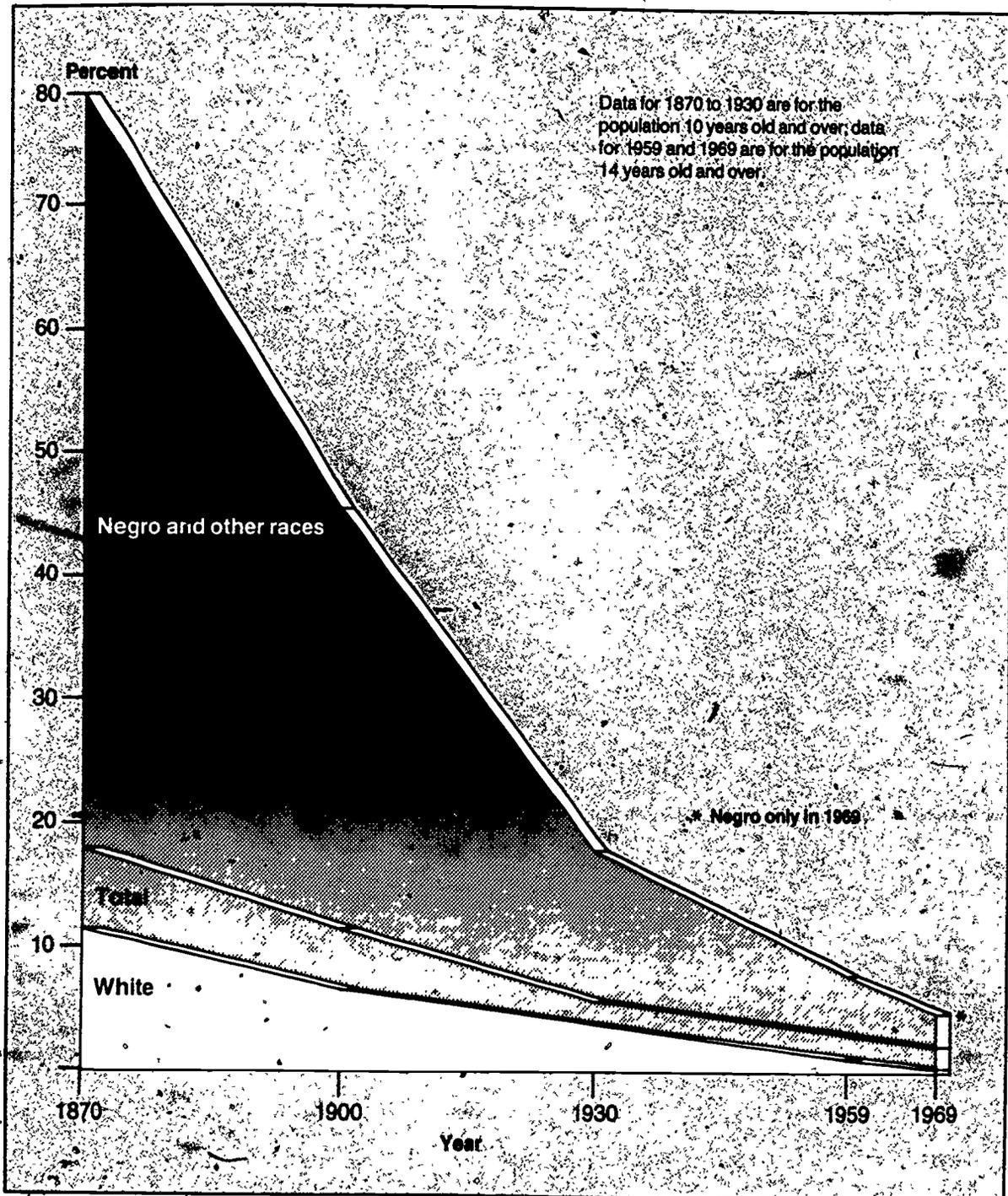
Reviews of standardized test scores reinforce these conclusions. The Wirtz Advisory Panel reviewed the steady 14-year decline in the Scholastic Aptitude Test (SAT) scores and found that, although there was a general slippage across the range of scores, much of the decline was due to changes in the test-taking population—those students wishing to enter college ("On Further Examination," 1977). More students with low reading and writing abilities began taking the test during the 1960's and 1970's than in the past. Only a small percentage of the decline was attributed to a decrease in the effectiveness of the schools in serving traditional students. In addition to changes in the test-taking population, factors cited as responsible for most of the decline in the SAT scores were changes in family structure, the prevalence of television, and general social unrest.

These conclusions are substantiated by the analysis of the National Academy of Education and by a study published by Farr, Fay, and Negley (1978). In that study, reading tests used statewide in Indiana in the 1940's were administered to a contemporary population consisting of a younger and more diverse group of students than those tested in the 1940's. The contemporary students were found to read about as well as their predecessors, and seemed to be doing somewhat better, if one accounted for the difference in their ages.

Because there was little difference in the grade equivalent performance of the 1944-45 and 1976 students on the "Iowa Silent Reading Tests" and because the age-adjusted performance of the 1976 students was markedly higher than their 1944-45 counterparts, the assumption that the reading abilities of students is declining is unsupported by this study. (p. 101)

Implications. A major challenge facing schools today seems to be the number of students requiring new approaches in teaching, compared with the students the schools typically served in the past. The National Assessment of Educational Progress has documented clearly the learning needs of blacks and Hispanics compared with their white counter-

Percent Illiterate in the Population by Race: 1870 to 1969



Source: Bureau of the Census, U.S. Department of Commerce, Current Population Report Series P-20, No. 217, March 10, 1971.

parts. In 1974-75, NAEP found 9-year-old black and Hispanic students about 13 percentage points below white 9-year-olds in the proportion of reading tasks they were able to perform. Black 17-year-olds lagged 19 percentage points and Hispanics 14 percentage points behind white 17-year-olds in performance of NAEP reading tasks. NAEP reported in its 1974 assessment of writing that black students were less likely than whites to produce competent or adequate papers according to several criteria, and were more likely to produce incomprehensible compositions than white students (see Brown, 1980). Other available indicators of achievement in literacy show similar discrepancies among racial, economic, and geographical groups.

There are clearly identifiable groups of students mainly from low-income, low-educational-attainment backgrounds and from minority groups whose achievement in literacy has been low in the past. Although their achievement may be improving somewhat, it continues to be lower than that of middle-class, majority students. The schools must learn to serve these students to head off illiteracy and equalize achievement in the future. Largely, these are the groups Fisher found among functionally illiterate high school graduates and low-achievement high school students. The description is also consistent with a profile developed by Hunter and Harmon (1979) of adult illiterates.

Definitions

Closely aligned to the task of identifying literacy rates in this country is the task of trying to define what we mean by literacy. Differences in prevalent notions are demonstrated in the contrast between the definition of literacy adopted by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the notion underlying traditional programs of schooling in the United States. UNESCO defines as literate a person "who can with understanding both read and write a short, simple statement on his everyday life" (Hunter and Harmon, 1979). In contrast, reading instruction in the United States has been gauged against grade-level norms; success is measured by the number of students performing at a level similar to the national average for students in that grade level. UNESCO's definition is a minimal, functional criterion, couched in terms of an individual's circumstances. It is difficult to measure because it requires individualized definitions and testing procedures, but it holds the logical advantage of defining literacy in terms of personal needs. The grade-equivalent scale is entirely normative, being based on group averages. It offers a standard means of comparing groups, but it has no clear functional anchor.

This problem becomes apparent when grade-equivalent definitions are applied to adults. What do we mean when we say an adult reads at the 10th grade level, or that tax forms are written at the 12th grade level? At best, we mean that the adult would perform typical 10th grade reading tasks at

about the same level as the average 10th grader, or that the tax forms are similar in difficulty to a 12th grade science text. These notions may be fine for 10th and 12th graders, who spend most of their day reading high school science and social studies books, but adults spend the day reading newspapers, bus schedules, memos, shopping lists, operating instructions for machines, blueprints, and best sellers. Similarly for writing, grade-equivalent norms are based on the writing activities in high school English classes. Adults, meanwhile, spend their time writing memos, filling out forms, composing letters, or revising the writing of their coworkers. The question of definition becomes very complex as we try to determine how to scale all these tasks or skills in simple numerical terms.

Moving Targets. As society changes technologically and becomes more diverse culturally, these considerations become even more important. In the 1950's, computer languages were used only by a few scientists. Now data processing is a major labor area, and computers are becoming household appliances. The literacy of computer operation has become important enough in our culture to result in data processing courses in vocational high school programs (keypunching, computer operation, programming) and the inclusion of units on computers in mathematics and science curriculums (computer logic, microelectronics). Similarly, broadcasting, videotaping, word processing, and teletext have changed the ways in which we receive, store, and use information.

Meanwhile, specialization in our work has replaced the need to read for *general* information (we get much of our news and entertainment through television) with the need to read *very specialized* and often technical information for our jobs. Now we compose and edit on word processors instead of writing and revising on paper. These kinds of changes have affected the relationship between schooling for literacy and the nature of literacy outside the school. Schools using conventional approaches to teach traditional, academic reading and writing tasks will find themselves out of step with the ways their students read and write in the course of their daily lives.

Cultural Pluralism. The cultural composition of our population also bears deep implications for literacy. An NIE and National Center for Education Statistics (NCES) (1980) study estimates that 3.5 million children from non-English-language homes are limited in their English proficiency. In 1978, NCES estimated that 28 million people in the United States lived in households with language backgrounds other than English. The special value of literacy for various non-English-language groups and the processes by which people develop reading and writing skills in more than one language raise critical questions for schools. Hispanic and Asian-American communities use native-language newspapers, billboards, letters, books, and other materials, while also



ceived as the functional use of grocery lists, bus schedules, or operating manuals. Confronted with notions of functional literacy or even institutionalized minimal competency objectives of this nature, teachers can no longer use only traditional materials and approaches for teaching reading and writing. We must begin to decide whether and how these conflicting notions are to be reconciled in the development of goals for schooling, so that the public can understand clearly what the schools are trying to accomplish and the teachers can confront their task more squarely.

Schooling in Literacy

Data from the National Assessment of Educational Progress and from NIE's Compensatory Education Study indicate that reading instruction in the elementary grades is effective and improving. Particularly promising are the indications from the National Assessment that while minority children still lag far behind, they are catching up with their peers—their achievement is improving at a rate faster than their white counterparts (National Assessment of Educational Progress, 1978). Further, NIE's Compensatory Education Study (1977) and evaluations of Follow-Through programs have concluded that structured, well-implemented programs in basic skills for disadvantaged students can be effective in elementary schools.

These conclusions suggest that prevalent methods of early reading instruction are serving their purpose. These methods are based on a 50-year tradition of educational research and curriculum development aimed at the teaching of subskills or initial skills in reading: phonics and vocabulary recognition.

Literacy achievement, as measured by the National Assessment, is less promising for older than for younger children. One explanation for this phenomenon is that reliable methods have not yet been found for developing higher order skills in reading comprehension or skills in writing coherently.

Summary

There is a fundamental lack of consensus on what we mean by literacy because of the confusing and sometimes contradictory data on the extent of illiteracy in this country. No matter what definition we use, a small group of persons, predominantly poor and members of minority groups, currently fail to do well in school and often drop out when the schools are unable to serve them. Most data on trends over time indicate that literacy is not diminishing but may actually be increasing with higher achievement by younger students and the extension of schooling throughout society. The major challenge facing schools is to serve student groups (including children, youth, and adults) that have not been helped by conventional approaches in the past.

Schools are facing this challenge at a time when they also are trying to cope with definitions of literacy, varying from

negotiating an English-language culture. Even more important is the variability *within* language cultures; Hispanic children may or may not grow up in households where Spanish-language books, newspapers, and other materials are used. Some American Indian tribes have established a written form of their language, a few are establishing one now, and many have *no* written form of their language at all. The issues of cultural tradition, cultural value, and cultural variation are crucial if we are to develop literacy appropriate for our constituent cultural groups.

Educational Goals. Another challenge confronting educators is to identify the kinds and levels of literacy that are important to people in various circumstances. Recent trends have been toward the development of functional and occupation-specific notions of the skills required to be literate (Adult Performance Project, 1975; Sticht, 1975). This trend conflicts with the traditional, academic notions of reading and writing that have been prevalent in the schools.

In elementary schools, reading generally is thought of as phonics and vocabulary skills, applied to prose passages. In high school, reading is usually the use of a history or science text, or the appreciation of English and American literature. Rarely in elementary or secondary schooling is reading per-

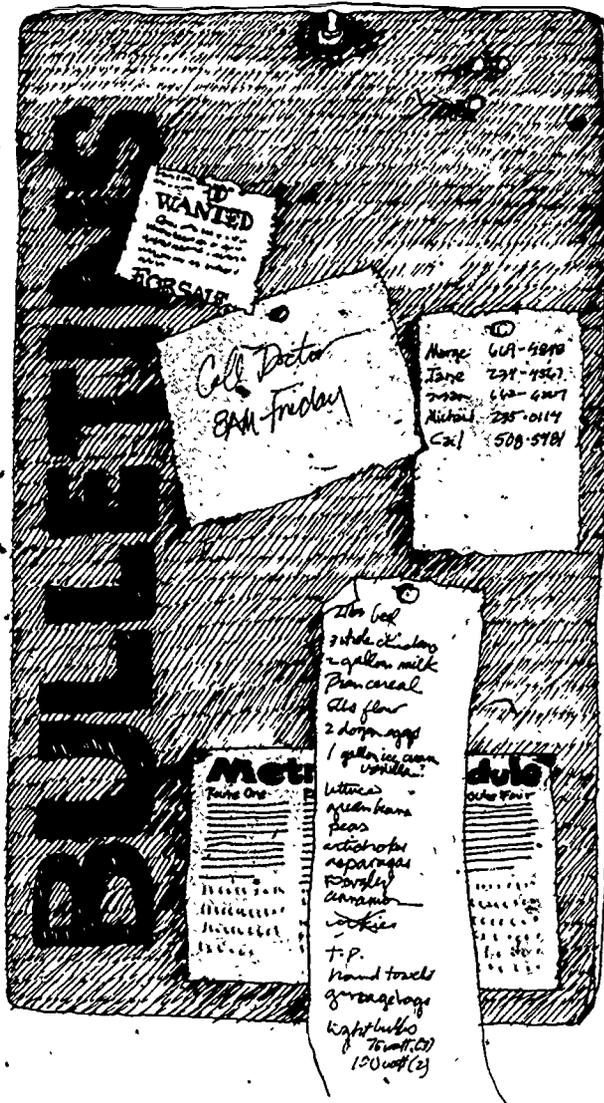
the academic or traditional reading and writing skills used in the schools to job-specific or functional competencies important outside the schools. They are confronted with changes in technology and methods of handling information that are redefining literacy, and they are trying to respond to a variety of traditions and values about literacy that have emerged as a result of the social and cultural pluralism of our student population. Finally, if schools are to continue to improve their methods of instruction, they must understand the nature of reading and writing skills and infuse this understanding into teacher training, curriculum design, and teaching practice.

Research on the Extent of the Problem

Prior to 1973, literacy was cast in terms of years of schooling or the grade-level continuum of learning to read, which told us little about whether adults or high school graduates could deal with the reading and writing demands of their daily lives. It was not until the Adult Functional Reading Study (Murphy, 1973) and the Harris surveys of functional literacy that national surveys began to focus on the reading and writing tasks of everyday life. It was a major change to measure literacy in terms of such tasks as reading newspapers, bus schedules, and instructions and writing letters of application and filling out forms.

Researchers supported by NIE are now addressing three problems that were not resolved by the shift to functional literacy assessment. First, they are trying to explain variations among different estimates of literacy. The Fisher study on functional literacy (1978) examined the various estimates of literacy among high school students and graduates to determine how well the schools were identifying and combatting functional illiteracy. NIE plans to support similar research aimed at adult literacy in order to understand how changes in definitions and scoring procedures affect the results of these different surveys. By uncovering whether survey differences are due more to shadings of definitions than error, researchers hope to define more accurately the rates of literacy among adults.

The second problem facing researchers is how best to assess the relationship of multiple variables such as age, sex, race, language background, and parental education to literacy. Although levels of literacy are highly correlated with racial background and parental education, we do not know the degree to which the other variables affect these two correlations. We know, for example, that older people are less likely to be literate, but so are people who have had less schooling. Are older people less likely to be literate because they lose their reading and writing skills over time, or is this association due simply to the fact that many older people received very little formal schooling to begin with?



We must untangle these relationships if we are to develop literacy training programs that deal with the real and special needs of the groups they serve.

To sort out the effects of age, race, parental education, and language background on literacy, NIE plans to support detailed analyses of the adult literacy data that already exist. Work planned on adult reading performance will study various age levels, education levels, income strata, cultural groups, and occupations to find out how different reading skills are distributed among these groups. This type of analysis has not been done in the past.

Researchers are also facing a third problem: how to define literacy in terms of an individual's needs and circumstances. Whether or not we are literate depends on whether we have the types or levels of literacy needed to do our work, to deal with government agencies and other organizations, to carry

out everyday chores, or to learn and entertain ourselves. Kirsch and Guthrie (1977-78) suggested measuring literacy in terms of the *gap* between the kinds of literacy a person needs or wants and the kinds of reading and writing that person is able to do. In 1980, NIE's Teaching and Learning grants program for the first time encouraged research on the relationship between an individual's literacy and his needs, skills, and self-image.

What Do We Mean by Literacy?

Research on Definitions

In shifting from levels of schooling or grade-level norms to functional literacy surveys, we open up the more fundamental questions of what literacy means in a complex and changing society. At NIE, research on this question ranges from the meaning of literacy for the individual, to the nature of literacy for social or cultural groups, to the meaning of literacy for the society at large.

Literacy and the Individual. In a ground-breaking study supported by the Ford Foundation, Scribner and Cole (1978) studied the basic thinking skills of people who are literate compared with those of people who are not. They studied the Vai tribe in Liberia, where literacy is taught informally, and where there is no pervasive, book-based education. The researchers sought to determine whether certain cognitive skills are the result of being literate or whether these skills are the result of formal schooling. Scribner and Cole did *not* find that literacy seemed to change the basic problem-solving or reasoning processes of those who are able to read and write, but that literacy did seem to make people more conscious of their ability to use language, for example, to clarify directions or analyze the things other people say. The importance of Scribner and Cole's study lies less in its findings than in the questions it has led researchers to ask about literacy as an attribute or personal function:

Our research among the Vai, a West-African people for whom schooling and the acquisition of literacy are separate activities, has led us to reconsider the nature of literacy and its intellectual effects. (p. 448)

This study provided, for the first time, an effective investigation of the basic psychological skills involved in being literate. It also suggested the importance of studying basic skills in contexts outside the schools.

Since the completion of the Scribner and Cole study, NIE has begun to support research on the knowledge that adult illiterates and young children have of the rules of language. In a project at Stanford University, Charles Ferguson (1980) is trying to find out what adult illiterates know about language—its logical structures and conventions. In other NIE-funded projects, Jerome Harste (1980-81) and

Elizabeth Sulzby (1980-82) are exploring the perceptions young children have about language as a communications system. In both cases, the research will have a profound effect on the assumptions teachers make about their students: Do preschoolers understand that letters form words and sentences, and that the words and sentences then give warnings or convey stories? Do illiterate adults understand how language is used and structured, or do we gain these insights as we learn to read? This line of research places literacy within the broader psychology of the individual.

Literacy in Occupational and Cultural Groups. Do people in different occupations need different kinds of literacy? Do cultural groups have special values and traditions about reading and writing? Should literacy instruction respond to the unique needs and values of people in these groups? Education in the past has used standard methods of schooling to teach uniform skills in reading and writing. Our society includes many groups whose needs, circumstances, values, and traditions determine kinds of literacy important to their members. This fact leads us then to question how the schools can respond to the unique needs of these groups. Research in this vein has focused on two types of groups—people in different occupations, and people who belong to different ethnic and cultural groups.

Thomas Sticht (Human Resources Research Organization) and his colleagues Norville Northcutt (University of Texas), Larry Mikulecky (Indiana University), and others are studying the reading and writing skills needed to do various tasks. Their work has the immediate goal of locating literacy skills most relevant to job performance or daily life chores so these skills can be taught as directly and efficiently as possible.

Sticht (1975) noted that organizations such as businesses or the military have made immediate improvements in job-related literacy skills because they can choose to train someone for a specific job, can select only those who are already suitable for a job, and can adapt a job to the general abilities of their applicants. For example, the armed services have begun to teach their personnel only those basic skills needed to do a specific job. An Army auto repair specialist is taught to read and write the materials needed to accomplish his particular line of work; he is not taught general writing or reading skills. This approach is now being tried, successfully, in civilian job-training programs for the unemployed.

Research planned in the NIE Home, Community, and Work unit, complementing the Youth Employability and Education Program, will locate the reading and writing skills required for employability and for job performance in a variety of civilian jobs. This work is beginning to develop teamwork between NIE and the Departments of Labor and Defense because of its direct application to training in youth labor programs, the military, and adult and secondary education.

Although this type of training has met with some success, researchers are aware that training in job-specific skills conflicts with the traditional notion of a general education and may not prepare a student more generally for active citizenship or for further education. To counter this problem, a 1980 NIE conference, "Basic Skills for Productivity and Participation," considered how basic problem-solving skills in mathematics and literacy might be taught in terms of work experience or job training. NIE's Teaching and Learning grants programs in 1980 and 1981 will continue to support consideration of this issue by educators, training specialists, and others.

NIE also has begun to study the meaning of literacy for different cultural groups. The history and values of a people determine the kinds of reading and writing skills its members need, both in English and in their native language. Knowledge of the attitudes of language groups toward literacy is crucial to designing educational programs that are effective for members of that group.

At the Northwest Regional Educational Laboratory, Steven Reder is studying the value of literacy in social and economic terms for Indians in an Alaskan fishing village. Joshua Fishman (Yeshiva University, 1979-81) is examining the role of cultural values and traditions of six different language groups in New York and the development of "biliteracy" by children in those groups. Bernard Spolsky (1979-81) and his associates at the University of New Mexico are exploring the cultural or community determinants of literacy by using both a comparative and historical study of six different language groups. This type of activity will help schools develop literacy instruction that will meet the specific needs of the groups they serve.

NIE work on cultural definitions of literacy is being expanded to include: studies of language use in communities in which bilingual education is successful; activities of the recently established National Center for Bilingual Research; priorities in the Teaching and Learning grants programs; expanded work at the Northwest Laboratory; and a new project planned for 1981 on the use of writing in and out of school by urban high school students. The work is community-based, exploring literacy in terms of specific cultural groups. This research is also descriptive, opening our eyes to views of literacy that are not limited by our preconceptions of language use and schooling.

Literacy in the Society at Large. The reading and writing skills we need to do our jobs, to pay our taxes, to get an appliance repaired, to enter into contracts, and to perform a host of other functions are becoming specialized and demanding.

The burden of paperwork is clearly one of the major social issues involving literacy. In fact, it is the "flip side" of the literacy coin: We can increase literacy by training people, but we can also enhance it by removing the unnecessary



burden of forms, warranties, and regulations that are too difficult to read. In 1978, NIE started the Document Design Project, conducted by the American Institutes for Research. It is a comprehensive program of research and technical assistance to help government agencies and other organizations simplify the materials they publish.

Studying the history of literacy is another way of understanding the role of literacy in our society. It is useful for us to understand how literacy affects the legal status, economic well-being, or cultural affairs of people who can read and write compared with those who cannot. By studying the ways literacy has functioned in the past, we can understand how it functions for people now. In 1980, NIE, the Rockefeller Foundation, and the Library of Congress co-sponsored a conference at the Library of Congress that brought historians together to apply their research on literacy to the educational issues of the present.

Through projects and conferences of this nature, NIE will continue to develop research on the changing nature of

literacy as an aspect of our society. In 1980 and 1981, NIE will convene planning conferences on the use of television and computer technology to teach reading and writing. These conferences will lay out new lines of research on the use of instructional hardware. Meanwhile, grants programs will support research by historians, legal scholars, economists, and others to explore what it means to be literate now and in the foreseeable future.

In these three areas—literacy as an individual function, literacy as a group or cultural function, and literacy as a general social function—NIE will continue to explore the definition and role of literacy. Eventually, this research will allow us to sharpen methods of measuring literacy, enabling us to define tasks and to set criteria that reflect a sense of the literacy needs the individual and society face, and to direct teaching to the skills members of our society need and value.

Status of Research on Teaching Literacy

NIE's Compensatory Education Study (1977) and the Beginning Teacher Evaluation Study (Denham and Lieberman, 1980) suggest that instruction in the basic skills is most effective when it is structured to insure a relatively high level of actual time engaged in learning activities. When instructional time and methods are subject to the variability of individual teachers, there is no assurance that the same amount of learning will take place.

How are reading and writing taught now? Do these practices reflect our best knowledge about how they *could* be taught? How can we improve literacy instruction for those whose achievement is lowest? NIE has been part of a long tradition of research in the teaching of reading and has been the major organization committed to support the much younger line of research on writing.

In reading, research on the subskills of word recognition and phonics has culminated in programs for early reading instruction that seem to be quite effective in teaching young children initial reading skills. Recently, NIE has played the primary role in moving research on reading to deeper processes of comprehension, and this work is beginning to influence the instruction of reading-to-learn.

In writing, NIE supported some of the earliest research on the psychological processes of composition. Since then, the Institute has funded comprehensive studies of the development of writing in young children and has supported research on the characteristics of coherent writing. This research is beginning to result in instructional techniques that are based on a deep understanding of how a child's writing skills are developed.

As discussed earlier, a central problem in literacy development is the student who does not learn through the customary methods. We are learning, through NIE's Center for the Study of Reading and our fundamental grants programs, that reading comprehension—the interpretation and use of a piece of text—depends on the child's background,

cultural values, experience, and accumulated knowledge. This implies that instruction in reading, especially for children from various social and cultural groups, should reflect the particular background of the student. NIE research programs are providing the information to help teachers respond to these special student populations, as well as to the knowledge and interests of students as individuals.

In adult education, teaching methods and even the materials for teaching literacy were adapted from materials and techniques used in elementary schools. Our research on adult learning and literacy has explored the special characteristics of adults as learners mainly to provide the basis for more appropriate teaching strategies for adults. In testing, NIE has had strong programs to measure cultural bias in achievement testing so as to enable the development of more useful devices for assessing the learning of minority students. Research on problem-solving, cognitive skills, and language development has concentrated especially on children from minority sociocultural groups so we can understand how the learning characteristics of these students may differ from mainstream students.

Work planned at NIE will deal directly with literacy instruction for least-served, high-need populations at two levels. For those essentially out of the elementary/secondary school system, two programs will study teaching practice and the assumptions behind curriculum design: A study of adult literacy programs will describe typical instructional practice in programs now in operation, applying research on adult learning to the design of improved practice. Research on employability skills will help identify the literacy tasks involved in becoming employed and doing a job, so youth training programs can be aimed directly at these skills.

Work in elementary and secondary schooling will explore the special learning characteristics of minority students. A series of studies in the NIE Reading and Language Studies unit will investigate the special situation of teaching reading to urban black, barrio Hispanic, and reservation Indian children. These projects will study student learning processes, motivational characteristics, family and community supports for schooling, teacher training, and other factors important to achievement.

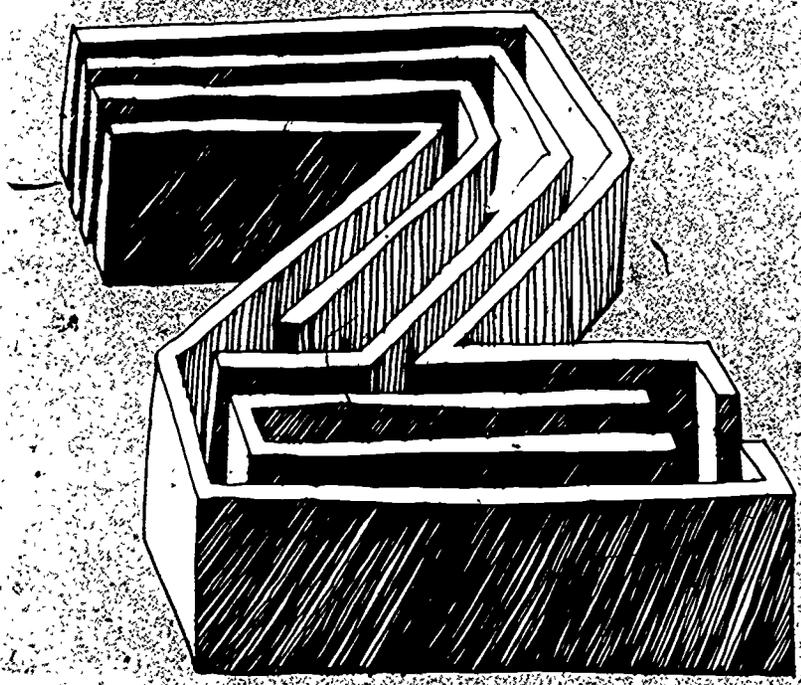
Summary

Current research on literacy is experiencing major transitions. Research on the extent of illiteracy is largely a matter of deeper analysis of existing data, recognizing that more powerful notions of literacy are needed before advances can be made in measurement or teaching. Meanwhile, new approaches to exploring the nature of literacy are quickly moving this research forward and are stimulating a good deal of interest from disciplines not previously involved. Complementing these efforts are new explorations in teaching and learning research that focus on ways to improve literacy instruction for students not served well in the past.

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7



Appendix A

In FY 1978, NIE made 444 awards totaling \$76.2 million. In FY 1979, it made 577 awards totaling \$80.2 million. The NIE awards supported program activities that focused on the Institute's two goals: to promote educational equity and to improve educational practice.

Those interested in seeking NIE funding support may do so by participating in the Institute's grants competitions, by responding to Institute requests for proposals (RFP's), or by submitting unsolicited proposals.

Grants Competitions

Grants competitions generally call for research proposals in one or more specific areas of interest (e.g., grants for research on law and government in education, or teaching and learning research grants). The areas covered by a particular competition, as well as that competition's application procedures, eligibility requirements, and deadlines, are announced in the Federal Register.

The Federal Register is sold by the Superintendent of Documents, U.S. Government Printing Office, and is available in the libraries of many universities and research institutions. Competition announcements are also widely distributed by NIE to research institutions, universities and colleges, education associations, and interested individuals.

Requests for Proposals

RFP's are formal procurement actions that announce NIE's intent to issue a contract to carry out specific tasks (e.g., evaluate an ongoing project). A contract is awarded to the bidder who submits the best technical proposal meeting the requirements of the announced scope of work within a competitive budget range. Brief synopses of all RFP's are published in the Commerce Business Daily, along with information on how to obtain a complete copy of the RFP. Subscriptions to the Commerce Business Daily are available through the Superintendent of Documents.

Unsolicited Proposals

Although most funds are awarded through the processes described above, the Institute encourages eligible individuals and groups to submit unsolicited proposals relevant to its mission. To broaden the community of researchers con-

NIE Funding Information

cerned with educational programs, NIE is particularly interested in receiving proposals from institutions primarily serving minorities and women; from teachers, school administrators, and others involved in education at the local level; and from scholars in disciplines not normally involved in educational research. Approximately \$2 million has been set aside in the current fiscal year to support new unsolicited proposals.

NIE will accept unsolicited proposals at any time.

Funding decisions are made twice a year. Application guidelines for unsolicited proposals are available from the NIE Unsolicited Proposals Coordinator, National Institute of Education, Washington, D.C. 20208, (202) 254-7920.

Who May Receive NIE Awards

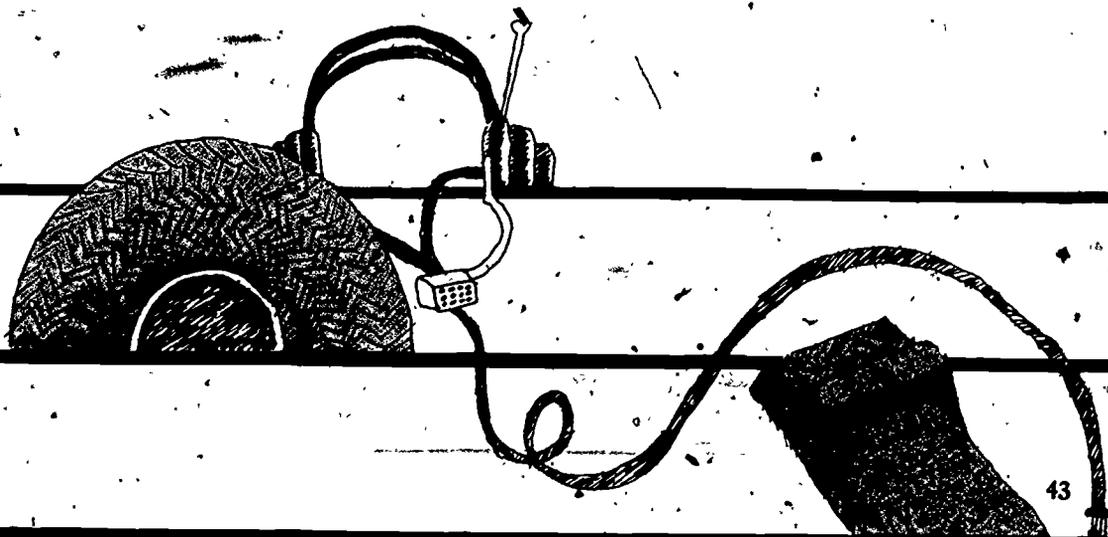
Colleges, universities, state departments of education, local education agencies, other public or private-nonprofit agencies, organizations, groups, and individuals are usually eligible for grants. Corporations, institutions, or agencies whose net earnings accrue to the benefit of private shareholders or individuals are also eligible to receive awards from

NIE, but such organizations will be awarded a contract rather than a grant. (Only contracts will be awarded in response to RFP's).

To increase opportunities for minority and women-owned firms to participate in educational research, NIE has set aside certain procurements for award under the 8(a) program of the Small Business Administration. For additional information, contact the Minority Business Program Coordinator, National Institute of Education, Washington, D.C. 20208, (202) 254-7940.

Eligible Areas of Research

NIE support is restricted to research and development projects in the field of education. The general definition includes research (basic and applied), planning studies, evaluations, investigations, experiments, and developmental activities. Projects are not generally eligible for funding if they are primarily service in nature, seek primarily operational funds, appear to duplicate existing projects, or offer standard services or routine analyses in accordance with existing practices.



Appendix B



NIE Publications

The Institute continues to publish a number of documents that report on the results of NIE-sponsored projects and activities. The following list indicates publications prepared during 1978 and 1979.*

activities and aims for the coming year, and fundamental research.

The National Institute of Education. March 1979. (Available from NIE.)

Describes the purpose and mission of the Institute and the activities of its three program areas: Teaching and Learning, Educational Policy and Organization, and Dissemination and Improvement of Practice.

Reference Materials

**Directory of ERIC Microfiche Collections*. ERIC Processing and Reference Facility. September 1978.

Lists every organization that maintains a sizable microfiche collection by cities within each state. Intended to help ERIC users find the collection closest to them that can answer particular information needs.

**Directory of ERIC Search Services*. November 1978.

Lists and briefly describes the organizations that are currently providing computerized searches of the ERIC data base. Entries are grouped by state and by city within states.

**Information Analysis Products (And Other Clearinghouse Publications)*: Dorothy A. Slawsky, ed. September 1979.

Contains an annotated bibliography of information analysis publications in the ERIC clearinghouses during the January to December 1978 period.

Reflections and Recommendations: Fourth Annual Report of the National Council on Educational Research. 1978. (Available from NIE.)

Provides an overview of NCER's observations and recommendations on education, educational research, NIE's

School Administration

***Declining Enrollments: The Challenge of the Coming Decade*. Susan Abramowitz and Stuart Rosenfeld, eds. March 1978. GPO Stock No. 017-080-01832-2 (\$6.95). (ED 150 708)

Presents papers on the financial, administrative, and legislative aspects of the declining enrollment problem.

***High School '77: A Survey of Public Secondary School Principals*. Susan Abramowitz and Ellen Tenenbaum. December 1978. (ED 170 223)

Reports on the mechanisms of high school coordination and structure; describes school curriculum; and explores the nature of school bureaucracy, school size, student composition, and problems faced by today's schools.

Higher Education Planning: A Bibliographic Handbook. D. Kent Halstead, ed. June 1979. GPO Stock No. 017-080-02016-5 (\$6.95). (ED 172 621) (Available from NIE.)

Presents selected, fully annotated bibliographic entries of significant book and journal contributions in the field of higher education planning at the state and national levels during the past decade.

In-School Alternatives to Suspension: Conference Report. Program on Educational Policy and Organization. April 1979. GPO Stock No. 017-080-02038-6 (\$5.00). (ED 173 951) (Available from NIE.)

Presents papers and proceedings of an April 1978 NIE-sponsored national conference designed to explore and

When copies of these publications are available from NIE, this has been indicated. However, some publications are currently available only through the Educational Resources Information Center (ERIC) system or the U.S. Government Printing Office (GPO). A single asterisk () preceding a publication title indicates that the publication is available through ERIC. A double asterisk (**) preceding a publication title indicates that that publication is also available through GPO. More complete information on ordering publications is included at the end of this listing.

illuminate various aspects of alternative approaches to suspension. Papers address such considerations raised by in-school alternatives as legal issues, the status of discipline in public education, parent and community involvement in the discipline process, and effective organization and implementation of alternative programs.

***Revitalizing Rural Education: A Legislator's Handbook.** Jonathan P. Sher. September 1978. (ED 168 750)

Examines trends and issues in rural education that are confronting state legislatures throughout the country. Specific topics include (1) socioeconomic characteristics of rural America and current status of education, (2) overview of rural school and district organization, (3) financing, (4) teachers, and (5) delivery of appropriate services and programs.



****School Crime and Disruption: Prevention Models.** Program on Educational Policy and Organization. June 1978. GPO Stock No. 017-080-01908-5 (\$4.00). (ED 160 710)

Presents papers on a national effort to respond to the school crime problem and practical approaches to school crime prevention and control.

***State Legal Standards for the Provision of Public Education.** Program on Educational Policy and Organization. November 1978. (ED 165 308)

Summarizes a 7,400-page compilation of constitutional provisions, laws, and regulations governing public elementary and secondary education.

****Teenage Smoking: Immediate and Long Term Patterns.** Dorothy E. Green. November 1979. GPO Stock No. 017-080-02074-2 (\$6.00).

Presents the results of two studies sponsored by NIE on the prevalence of adolescent smoking and variables in predicting later, more "habitual" smoking in young adulthood.

Violent Schools—Safe Schools: The Safe School Study Report to the Congress, Executive Summary. February 1978. (ED 149 466) (Available from NIE.)

Summarizes the findings and recommendations of NIE's 3-year congressionally mandated study of school crime and violence.

Violent Schools—Safe Schools, Volume 1: The Safe School Study Report to the Congress. January 1978. GPO Stock No. 017-080-01830-6 (\$6.00). (ED 149 464) (Available from NIE.)

Reports the results of a 3-year study undertaken by NIE at the request of the Congress to determine the number of schools affected by crime and violence, the types and seriousness of crimes, and how school crime can be prevented. (Note that companion volumes are entitled *Safe School Study*.)

Safe School Study: Volume 2, Methodology. December 1977. (ED 149 465) (Available from NIE.)

Describes the methodologies, instruments, and procedures used in the conduct of a 3-year study aimed at determining the number of schools affected by crime or violence, the types and seriousness of crimes, and how school crime can be prevented. (Note that volume 1 is entitled *Violent Schools—Safe Schools*.)

Safe School Study: Volume 3, Data Files Documentation. February 1978. (ED 153 327) (Available from NIE.)

Provides information about data files used in a 3-year study of school crime, including physical description of the data tape and its files, record layout information, special coding techniques, anomalies, and problems within the data, advice on analyzing the data, and guidelines for merging and aggregating. (Note that volume 1 is entitled *Violent Schools—Safe Schools*.)

School Finance

Higher Education Financing in the Fifty States: Interstate Comparisons, Fiscal Year 1976 (Review Edition). Marilyn McCoy and D. Kent Halstead. September 1979. GPO Stock No. 017-080-02068-8 (\$7.50). (Available from NIE.)

Presents and analyzes a number of conditions affecting state financing support of higher education. Twenty-five measures of state higher education financing are reported in student enrollments, state and local government taxation and allocation, institutional revenues, and institutional expenditures.

****Plain Talk About School Finance.** Margaret E. Goertz et al. May 1978. GPO Stock No. 017-080-01875-6 (\$2.30). (ED 157 166)

Discusses the value choices in any school finance formula, defines the basic types of financing plans, describes the factors that influence raising and distributing money, and examines the Federal role in financial decisions.

• *School Finance Reform in the States: 1978*. Allan Odden. June 1978. (ED 158 425)

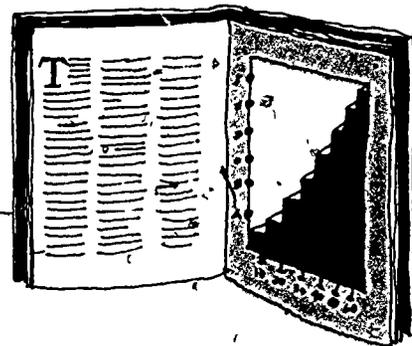
Provides an overview of state actions in 1977, current trends in litigation strategies, the status of policy research on emerging school finance issues, and prospects for 1978.

•• *Tax Wealth in Fifty States*. D. Kent Halstead. Spring 1978. GPO Stock No. 017-080-01871-3 (\$5.00). (ED 157 167)

Provides the results of a study to improve the accuracy with which the representative tax system is measured and explains the relationship between expenditure needs and revenue capacity.

Tax Wealth in Fifty States: 1977 Supplement. D. Kent Halstead and H. Kent Weldon. October 1979. GPO Stock No. 017-080-02076-9 (\$5.50). (Available from NIE.)

Supplements the earlier *Tax Wealth in Fifty States* by presenting tax capacity, effort, and collected revenue data for state and local governments in 1977.



Basic Skills. Topics include the issues surrounding the use of standardized tests, the congressional perspective on basic skills and testing, and the Federal response. Also summarizes recommendations of conference participants regarding Federal actions that should be taken with regard to testing.

Assessment Instruments for Limited English-Speaking Students: A Needs Analysis. Nancy A. Locks et al. October 1978. (Available from NIE.)

Provides information on the adequacy of testing instruments available to assess the performance of students in kindergarten through sixth grade whose first language is Chinese, French, Italian, Navajo, Portuguese, Spanish, or Tagalog.

Testing, Teaching and Learning: Chairman's Report of a Conference on Research on Testing. Ralph W. Tyler and Sheldon H. White. October 1979. GPO Stock No. 017-080-02071-8 (\$2.25). (Available from NIE.)

Gives a brief description of the deliberations and recommendations of an August 1978 conference on research on testing.

Testing, Teaching and Learning: Report of a Conference on Research on Testing. Ralph W. Tyler and Sheldon H. White. October 1979. GPO Stock No. 017-080-02071-6 (\$8.00). (Available from NIE.)

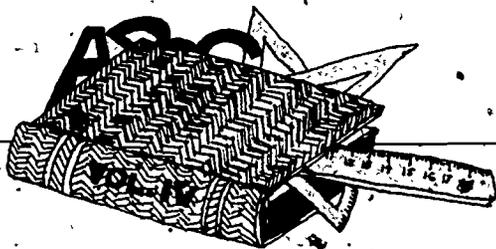
Contains the papers presented at the August 1978 NIE-sponsored conference on testing, as well as the reports of the working committees.

Career and Vocational Education

Freestyle. National Institute of Education. February 1978. (Available from NIE.)

Describes the public television series *Freestyle*, which is designed to enable young viewers to see their options in career-related interests, activities, and behaviors.

• *Inside Experience-Based Career Education: Personal Reactions to Non-Traditional Learning*. Larry McClure, ed. April 1979. (ED 174 803)



Reading, Language, and Mathematics

Functional Literacy and the Schools. Donald L. Fisher. January 1978. (ED 151 760). (Available from NIE.)

Critically examines several major surveys on functional literacy, puts forth the view that national literacy rates are higher than frequently presented in the media.

• *Research Within Reach: A Research-Guided Response to Concerns of Reading Educators*. Phyllis Weaver and Fredi Shonkoff. October 1978. (ED 162 283)

Poses 24 questions that might be asked by teachers, supervisors, and administrators regarding the nature of reading and its instruction, reading readiness, developing reading skills, and reading comprehension. Provides discussion and suggested reading list for each question.

Tests and Testing

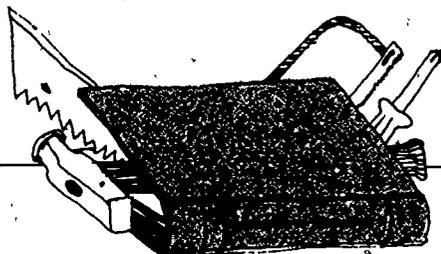
• *Achievement Testing and Basic Skills: Conference Proceedings*. February 1979. (ED 171 784)

Provides summaries of papers presented at the March 1978 National Conference on Achievement Testing and

Presents 11 perspectives on experience-based career education (EBCE) through essays prepared by an EBCE graduate, a chief state school officer, a school board member, an assistant superintendent, a union organizer, an employer, a parent, a curriculum specialist, a high school principal, a former teacher, and an EBCE learning manager.

The Planning Papers for the Vocational Education Study: Vocational Education Study Publication No. 1. April 1979. GPO Stock No. 017-080-02021-1 (\$7.00). (ED 171 959) (Available from NIE.)

Contains planning papers that discuss current issues regarding the role of Federal policy in the field of vocational education. Papers were commissioned from various policy-makers and researchers as one means of providing input in the preparation of NIE's congressionally mandated *A Plan for the Study of Vocational Education*.



The Planning Papers on Consumer and Homemaking Education Programs; Vocational Education Study Publication No. 2. April 1979. GPO Stock No. 017-080-02022-0 (\$7.00). (ED 171 960) (Available from NIE.)

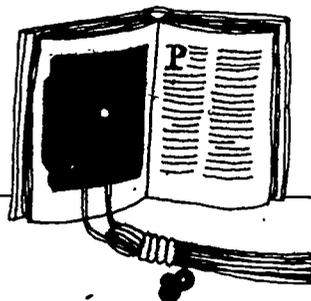
Contains planning papers that detail issues for discussion regarding the Federal role in the field of consumer and homemaking education. Papers were commissioned from various policymakers and researchers in the field of consumer and homemaking education as one means of providing input in the preparation of NIE's congressionally mandated *A Plan for the Study of Vocational Education*.

Postsecondary Education

****Adult Learning Needs and the Demand for Lifelong Learning.** Charles B. Stafford, ed. November 1978. GPO Stock No. 017-080-02015-7 (\$1.70).

Presents two papers that discuss the needs, interests, and participation of adults in learning activities, and a third paper highlighting the activities of the NIE-sponsored Conference on Lifelong Learning. Papers deal with the influences upon the possible demand for lifelong learning in the future.

****An Evaluative Look at Nontraditional Postsecondary Education.** Program on Teaching and Learning. September 1979. GPO Stock No. 017-080-02048-3 (\$5.50).



Contains three papers exploring the issues affecting non-traditional college programs and the unique population they serve—adult part-time learners. Intended to serve as a resource tool for professionals involved with either the policy or administration of nontraditional postsecondary education.

The External Degree as a Credential; Graduates' Experiences in Employment and Further Study. Carol P. Sosdian and Laure M. Sharp. April 1978. (ED 154 728) (Available from NIE.)

Examines the experiences of graduates from external degree programs as they move into new jobs or careers or as they continue their educations.

***External Degrees: Program and Student Characteristics.** Carol P. Sosdian. March 1978. (ED 152 174)

Examines the enrollment and offering of external degree programs in both traditional institutions and institutions that sponsor only external degree programs.

****Finance, Productivity, and Management in Postsecondary Education: Selected Research Topics.** D. Kent Halstead. July 1978. GPO Stock No. 017-080-01881-1 (\$2.40). (ED 158 641)

Presents research questions/hypotheses, problem situations, and expected value of research; relevant previous and current research; and research guidance for 28 topics dealing with finance, productivity, and management in postsecondary education.

****Future Directions in Open Learning: A Report Based on an Invitational Conference on Open Learning Programs.** Ronald Gross. December 1979. GPO Stock No. 017-080-02080-7 (\$4.25).

Presents a summary of the Conference on Future Directions in Open Learning, sponsored by NIE and the University of Mid-America, in which representatives of open learning projects and of organizations interested in the development or delivery of mediated instructional materials discussed key issues associated with the Open Learning Movement.

••Higher Education Prices and Price Indexes: 1978 Supplement. D. Kent Halstead. 1978. GPO Stock No. 017-080-01946-9 (\$1.90).

Presents complete descriptions of the indexes, together with index values and price data, for fiscal years 1971 through 1977.

•Improving Equity in Postsecondary Education: New Directions for Leadership. Judith M. Gappa. December 1977. (ED 154 709)

Provides a review of the current status of equity in postsecondary education and a projection of possible new directions for research and leadership in this area.

Compensatory Education

The Compensatory Education Study: Executive Summary. July 1978. (ED 160 692) (Available from NIE.)

Summarizes the findings and recommendations of NIE's congressionally mandated study on compensatory education.

Compensatory Education Study: A Final Report from the National Institute of Education. September 1978. (ED 161 996) (Available from NIE.)

Provides a series of documents, termed interim reports, presenting information from more than 35 research projects making up the congressionally mandated Compensatory Education Study.

Compensatory Education Study: Major Research Projects: A Supplemental Report from the National Institute of Education. September 1978. (ED 174 727)

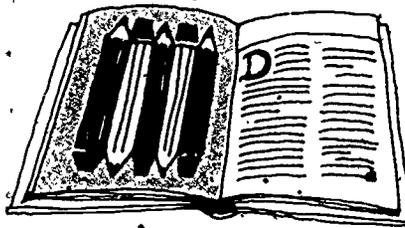
Provides an overview of the findings of the NIE Compensatory Education Study and a summary of each of the more than 35 research projects that comprise the study.

Perspectives on the Instructional Dimensions Study: A Supplemental Report from the National Institute of Education. November 1978. (ED 174 728)

Provides an overview of the 1978 NIE-sponsored Instructional Dimensions Study Conference, as well as papers discussing issues in the four areas on which the conference focused: (1) opportunity to learn; (2) instructional setting; (3) planning, organization, and management; and (4) individualization of instruction.

State Compensatory Education Programs: A Supplemental Report from the National Institute of Education. Richard Moss and Catherine Hodgman. December 1978. (ED 173 514)

Reports on the followup activities related to NIE's congressionally mandated study of compensatory education and describes the activities and administration of compensatory education programs in 17 states.



Desegregation

••The Catholic Community and the Integration of Public and Catholic Schools. Mary von Euler and Sr. Gail Lambers, C.H.S., eds. March 1979. GPO Stock No. 017-080-02012-2 (\$2.20). (ED 170 433)

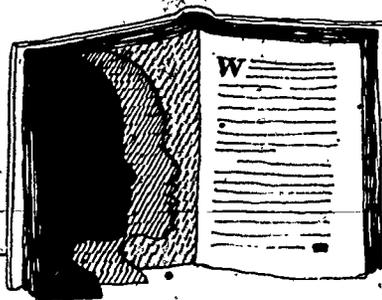
Presents seven papers explaining what is now being done and what might be done to integrate Catholic schools and to enable the Catholic community to play a creative and constructive role in the desegregation process in public schools.

•A Citizen's Guide to School Desegregation Law. Program on Educational Policy and Organization. July 1978. GPO Stock No. 017-080-01896-9 (\$2.40). (ED 160 689)

Explains recent decisions by the U.S. Supreme Court that set standards for desegregation cases in all Federal courts; summarizes noteworthy Federal cases in which the U.S. Supreme Court did not make significant rulings during the 1976-77 term; and discusses important cases that have been heard recently in the California State court system.

•Supplement to School Desegregation: A Report of State and Federal Judicial and Administrative Action. December 1978. (ED 174 710)

Provides the current status of all active or likely-to-be active desegregation enforcement actions in the Federal courts, state courts, and state and Federal administrative actions.



Women and Minorities

Conference on the Educational and Occupational Needs of Black Women, Volume I: Overview and Recommendations. National

Institute of Education. April 1978. (ED 156 768) (Available from NIE.)

Presents an overview and the key concerns/recommendations of a 1975 NIE-sponsored conference held to (1) develop a policy-oriented research agenda for NIE focused on the educational and occupational needs of black women and (2) develop a broad-scale research and policy agenda that other agencies and institutions could undertake. Also includes abstracts of nine papers presented at the conference.

Conference on the Educational and Occupational Needs of Black Women, Volume 2: Research Papers. National Institute of Education. April 1978. (ED 157 961) (Available from NIE.)

Contains the nine papers presented at a 1975 NIE-sponsored conference on the educational and occupational needs of black women.

Experimental Program for Opportunities in Advanced Study and Research in Education: Project Abstracts. Program on Dissemination and Improvement of Practice. April 1979. (ED 173 507) (Available from NIE.)

Briefly describes NIE's Experimental Program for Opportunities in Advanced Study and Research in Education and provides abstracts for projects funded under this program in FY 1977 and 1978.

Experimental Program for Opportunities in Advanced Study and Research in Education: Project Abstracts. Minorities and Women's Program. October 1979. (Available from NIE.)

Briefly describes NIE's Experimental Program for Opportunities in Advanced Study and Research in Education and provides abstracts for projects funded under this program in FY 1979.

Sex Equity in Education: NIE-Sponsored Projects and Publications. Susan S. Klein. October 1979. (Available from NIE.)

Contains 104 abstracts of sex equity projects being funded by NIE, as well as 121 abstracts for sex equity publications resulting from NIE-sponsored research.

Sex-Fair Interest Measurement: Research and Implications. Carol Kehr Tittle and Donald G. Zytowski, eds. April 1978. (ED 166 416)

Presents 16 papers aimed at redefining research needs in the area of sex bias and sex fairness in career interest measurement and at showing progress made in this area over the 1974-77 period.

Sex Role Socialization and Sex Discrimination: A Bibliography. Constantina Safilios-Rothschild. October 1979. (ED 179 459)

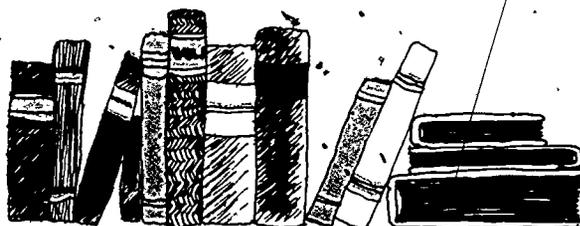
Presents an extensive bibliography on sex role socialization and sex discrimination.

Sex Role Socialization and Sex Discrimination: A Synthesis and Critique of the Literature. Constantina Safilios-Rothschild. October 1979. (ED 175 797)

Examines sex role socialization and sex discrimination in education between 1960 and 1978.

Women's Studies: Evaluation Handbook. Mary Ann Millsap et al. December 1979. GPO Stock No. 017-080-02078-5 (\$3.25). (Available from NIE.)

Provides information, principally for women's studies directors and faculty, on choosing among types of evaluations for women's studies programs, using evaluations, turning program goals into objectives, selecting appropriate research designs, deciding on instruments and items, analyzing data, and reporting results.



Ordering Information

Single copies of all NIE documents are available free of charge while the supply lasts. To request an NIE publication, write to: Publications, Mail Stop 22, National Institute of Education, Washington, D.C. 20208. When ordering documents from NIE, please enclose a self-addressed mailing label so that your request can be answered quickly.

Documents showing a six-digit accession number (ED 123 456) after the date of publication are also available in microfiche and hardcopy through the Educational Resources Information Center (ERIC) system. Some 700 libraries around the world maintain complete microfiche collections of ERIC documents. Copies of reports in the ERIC system may also be ordered from the ERIC Document Reproduction Service Customer Service, Post Office Box 190, Arlington, VA 22201.

Some publications are also available from GPO. Copies of these publications can be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. In ordering, be sure to specify the title, GPO stock number, and number of copies desired. GPO document prices as provided in the above listing are subject to change.

It should be noted that unpublished final reports and commercially available products of NIE-sponsored research and development activities are not included in this listing. However, most such documents can be located through the ERIC system.