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STATEMENT OF
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BEFORE THE
SELECT EDUCATION SUBCOMMITTEE
COMMITTEE ON EDUCATION AND LABOR
HOUSE OF REPRESENTATIVES
ON
THE CONDITION OF INFORMATION ON EDUCATION



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Mr. Chairman and Members of the Subcommittee. It is a pleasure to be here today to report on the work this subcommittee has requested the General Accounting Office to undertake--that is, an assessment of existing, federally produced information on education in the United States. In particular, you requested an evaluation of the quality, availability, and dissemination of information on selected topics in education. To guide our work, we have adopted a set of questions that include the following:

1. How has the federal investment in the collection, analysis, and dissemination of education information changed over time?
2. What are some of the consequences of these changes?
3. What are the implications of these changes for congressional oversight?

While we are not yet ready to answer these questions in any definitive sense, we do have some interim findings that are particularly germane to the topic of this hearing. First, I want to report changes in the availability of funding for producing information on the condition of education. Our assessment in this area covers three principal kinds of information--research, statistics, and evaluation--and concentrates on the three principal producers of this information within the U.S. Department of Education: the Office of Research (formerly the National Institute of Education, or NIE); the Center for Statistics (formerly the National Center for Education Statistics, or NCES)

and the Office of Planning, Budget, and Evaluation.¹ Second, I will discuss what these changes imply both for generating information and for making it available, now and in the near future.

Changes in Fiscal Resources
for Information on Education

There have been a number of legislative actions in recent years (such as the Deficit Reduction Act of 1984) intended to reduce the growth of the federal government. The recent Gramm-Rudman-Hollings legislation has given these efforts increased emphasis.² It is therefore reasonable to expect, on the one hand, that information production, like many other areas in the federal government, would be influenced by these cost-containment and deficit-reduction activities. On the other hand, it is also reasonable to expect that certain types of information--evaluations of program or policy effectiveness, for example--could play a central role in deliberations about the deficit-reduction activities themselves. In the latter case--an

¹We have omitted from our analysis the work conducted by the inspector general's office. We have also excluded special studies conducted occasionally by various program offices in the Department of Education.

²Gramm-Rudman-Hollings is now the Balanced Budget and Emergency Deficit Control Act of 1985, Public Law 99-177.

example might be the evaluation of public assistance programs recently called for by President Reagan--we might expect a continued level of support for the production of at least some information.

Given, then, that we want to assess changes in the size of the federal investment in education information at a time when the federal budget is being generally reduced, it has been necessary to index changes in resources for this information against some benchmark, so as to account for the changes occurring overall. The benchmark we have chosen is change in the federal investment in education as a whole.³ This seems a reasonable choice because the education information produced by the executive branch is likely to be that which is most useful to executive branch managers. We assume that although not every dollar of service should be matched by a penny or a dime for information, the capacity to obtain information about education should increase or decrease somewhat as overall education expenditures increase or decrease. Therefore, the question that we need to ask is not merely "How has the federal investment in education information changed over time?" but also "Has the investment been differentially affected by the overall cost-containment efforts?"

³Our analyses focus exclusively on federal expenditures channeled through the Department of Education and do not include federal support for education through agencies such as the National Science Foundation.

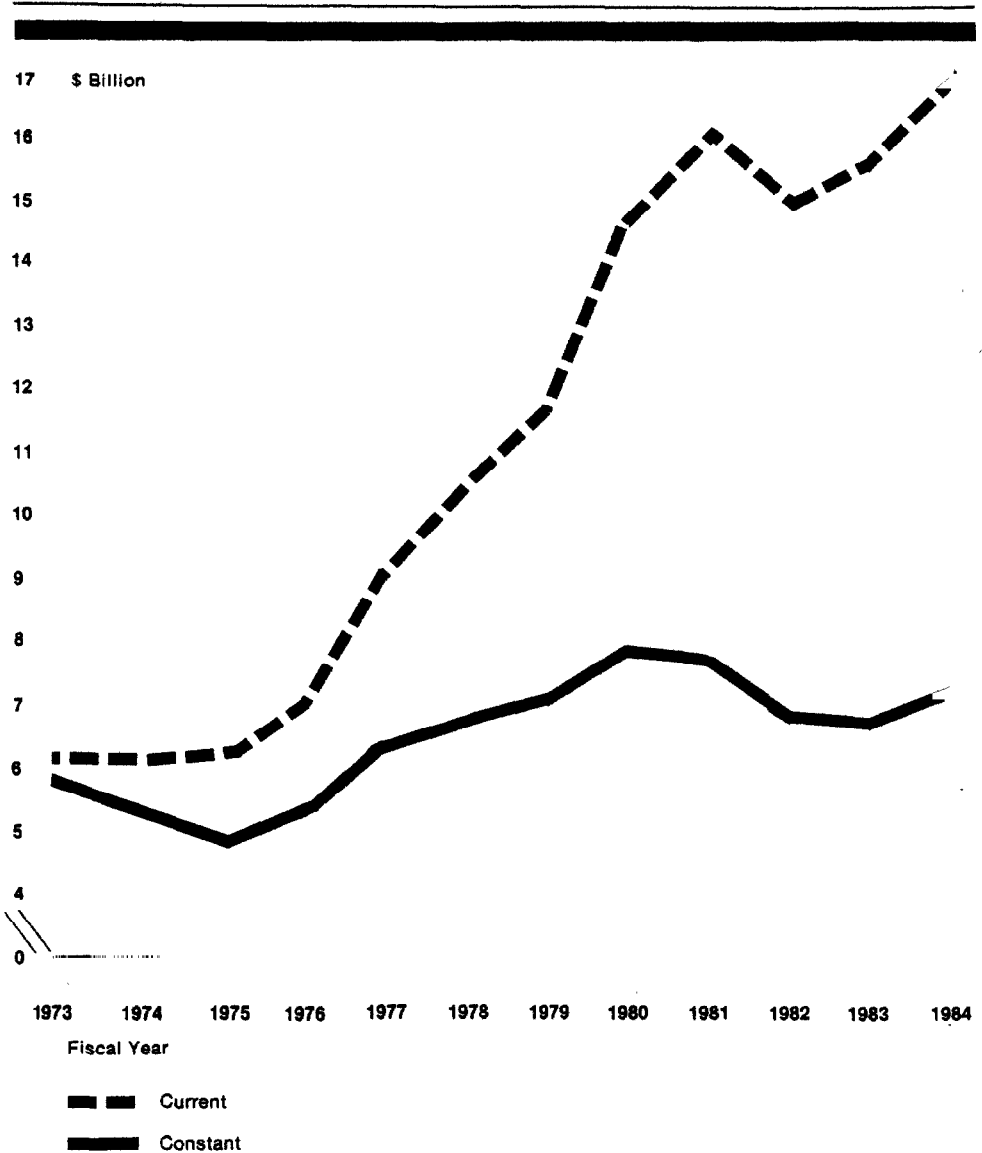
Our analysis of the trends in fiscal resources--over the period 1973 to 1984--for the National Institute of Education and the National Center for Education Statistics suggests that the answer to the second question is "yes": the reductions for education information have been substantially greater than those for education as a whole.⁴

To support this answer, let me draw your attention to figures 1, 2, and 3. Figure 1 shows the 1973-84 obligations in current and constant (1972) dollars for the Department of Education as a whole.⁵ Figure 2 shows the obligations for the National

⁴Trend analyses for the National Center for Education Statistics begin in 1974, just after NCES was created by Public Law 93-380.

⁵We chose 1972 as the base year for calculating constant dollar amounts, because it was the year NIE was created and, thus, represents a baseline for investment in research and development. The expenditures for NIE, NCES, and the Office of Planning, Budget, and Evaluation are included in the total. That is, the figures for the Department of Education do not net out trends in investment in information. This has little effect on our general conclusions, however. The total expenditure for information as a proportion of the investment in education--from 1973 through 1984--ranged from 0.5 percent (in 1984) to 1.7 percent (in 1973).

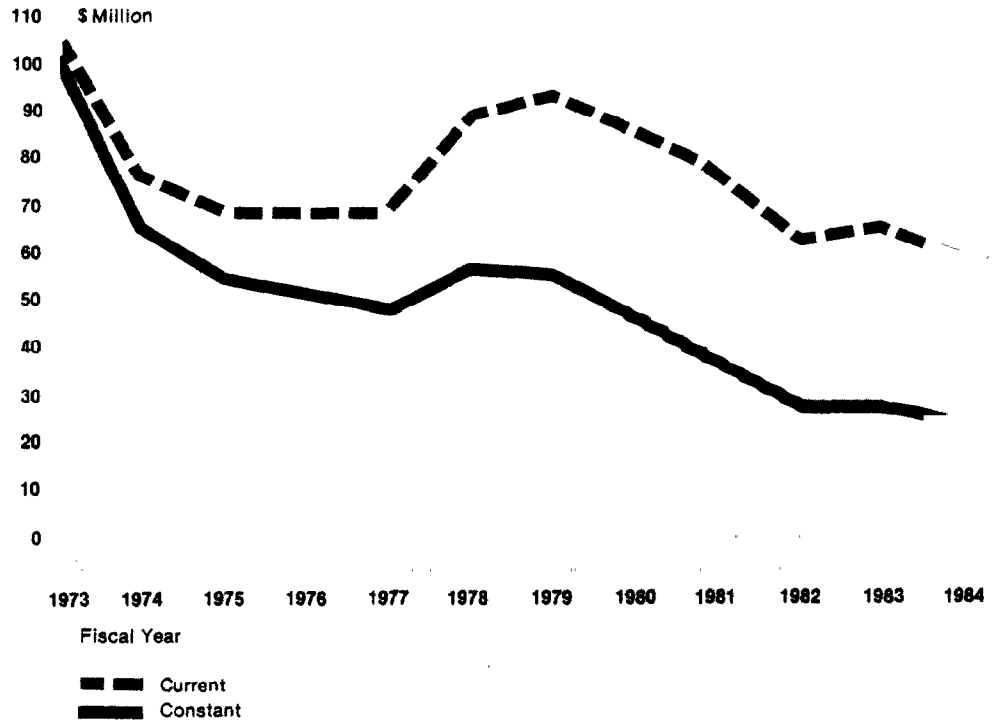
Figure 1: 1973-84 Obligations of the U.S. Department of Education in Current and Constant 1972 Dollars^a



^aData are for the U.S. Department of Education, including the Office of Planning, Budget, and Evaluation, as well as the National Center for Educational Statistics and the National Institute of Education. Constant 1972 dollars are computed by using the implicit price deflator for federal government purchases of goods and services, as reported in Survey of Current Business.

Source: Internal documents of the U.S. Department of Education and The Budget of the United States Government (Washington, D.C.: 1974-85), appendixes for fiscal years 1975-86.

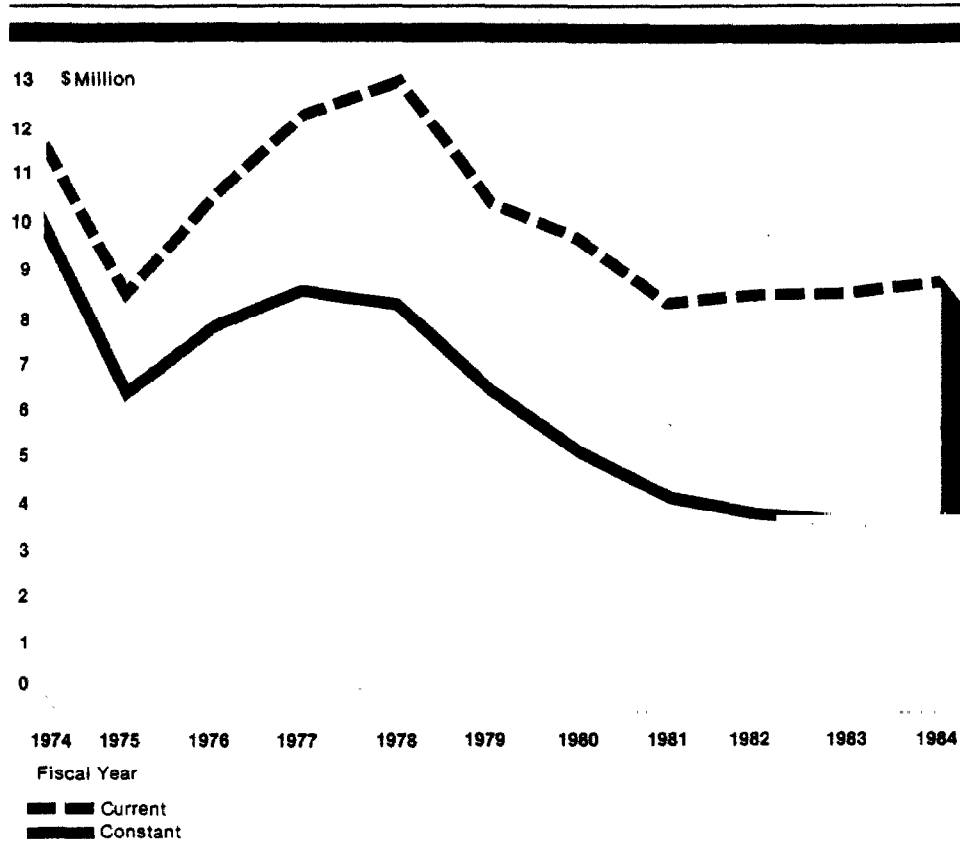
Figure 2: 1973-84 Obligations of the National Institute of Education in Current and Constant 1972 Dollars^a



^aConstant 1972 dollars are computed by using the implicit price deflator for federal government purchases of goods and services, as reported in Survey of Current Business.

Source: Internal documents of the National Institute of Education and The Budget of the United States Government (Washington, D.C.: 1975-81 and 1983-85), appendixes for fiscal years 1976-82 and 1984-86

Figure 3: 1974-84 Obligations of the National Center for Education Statistics in Current and Constant 1972 Dollars^a



^aThis graph begins with fiscal year 1974, the first year the National Center for Education Statistics was in operation. Constant 1972 dollars are computed by using the implicit price deflator for federal government purchases of goods and services, as reported in Survey of Current Business.

Source: Internal documents of the National Institute of Education and The Budget of the United States Government (Washington, D.C.: 1977-85), appendixes for fiscal years 1978-86.

Institute of Education. In figure 3, we have plotted obligations for the National Center for Education Statistics, but they are program funds only (minus salaries and expenses).⁶

The Department of Education as a Whole. Figure 1 shows that fiscal resources for the Department of Education increased, in current dollars, from approximately \$6.1 billion in 1973 to \$17.1 billion in 1984, 180 percent. In 1972 dollars, this represents a real increase of 22 percent between 1973 and 1984.

Research and Statistics. By contrast, the trends for fiscal support of the production of research and statistical information show a different picture. For the National Institute of Education, figure 2 shows that while current dollar amounts fluctuated over the 11-year period, the general trend was downward. That is, in 1973 NIE had current dollar obligations of roughly \$107 million; by 1984, these resources had fallen to \$58 million, a 45-percent decrease. When viewed in real terms, the trend depicted in figure 2 is even more dramatic: from 1973 to 1984, NIE experienced a 76-percent reduction in fiscal resources, despite the 22-percent increase in the overall federal investment in education that I noted earlier.

Figure 3 charts similar information on fiscal resources for the National Center for Education Statistics. While the trend is more erratic, the net result is roughly the same. In both current

⁶We have not yet obtained salary and expense data for NCES prior to 1980.

and constant dollars, the National Center for Education Statistics experienced a decline in fiscal resources. In real terms, resources for the Center's statistical activities declined by 64 percent between 1974 and 1984, a decline approximately equal to the 63-percent decline that the National Institute of Education experienced during the same 10-year period.

A study of federal statistical programs by the Congressional Research Service reported that fiscal year 1984 budgets for seven major federal statistical agencies (including the National Center for Education Statistics) were, in real terms, 8 percent lower overall than the fiscal year 1980 budgets.⁷ If we consider only NCES, however, we find that the inflation-adjusted budget-- including salaries and expenses as well as program funds-- decreased from \$14.9 million in 1980 to \$10.8 million in 1984. This is a 28-percent decline for NCES alone. These budget cuts were therefore disproportionately large, in comparison not only to the general decrease in real terms of 10 percent for education during the 1980-84 period but also to cuts experienced by other federal agencies primarily involved in statistical activities in 1980-84.

⁷U.S. House of Representatives, Committee on Government Operations, The Federal Statistics System, 1980 to 1985 (Washington, D.C.: November 1984).

Evaluation. The state of program evaluation is also a good indicator for understanding federal efforts to improve the condition of education information. The major unit within the Department of Education responsible for evaluating federal programs is the Office of Planning, Budget, and Evaluation. For this office, our assessment is limited to comparisons of reported funding levels in 1980 and 1984. The Office has reported a 52-percent reduction in fiscal resources since 1980; that is, in current dollars, resources dropped from \$22.7 million in 1980 to \$10.9 million in 1984.⁸ In real terms, the decline is even more dramatic--nearly 62 percent over the 4-year period.

For research, statistical, and evaluative information, then, the patterns of decline in funding are consistent and precipitous. Further, the consistency of decline across these three types of information suggests simple, uniform reductions in information rather than a substitution, say, of research for evaluative data or of statistics for either research or evaluation. Funding support for two of the three general forms of information about the condition of education has lessened to the

⁸See "A Profile of Federal Program Evaluation Activities," Special Study 1, issued by the Institute for Program Evaluation of the U.S. General Accounting Office in 1982, and a forthcoming study to be issued through GAO's Program Evaluation and Methodology Division.

tune of more than 60 percent over the past decade. For all three forms, major declines have occurred since 1980; these range from 31 percent (for the National Center for Education Statistics) to 62 percent (for the Office of Planning, Budget, and Evaluation), in real terms.

We should note that these sharp funding reductions have been experienced by agencies that can provide important information for policy decisions and for the education community at large. Furthermore, their budgets are small compared to the overall Department of Education budget. Their combined 1984 funding amounted to \$83 million, or less than half of 1 percent of the total Department of Education's budgetary obligations of \$17.1 billion.

The combined cut in funding of information for NIE, NCES, and the Office of Planning, Budget, and Evaluation during the period 1980-84 amounted to \$58.6 million in constant 1980 dollars. This is not a very large sum over 5 years, in terms of either the Department of Education's budget or the federal budget. However, as proportions of the budgets of the relevant agencies, the reductions in fiscal resources for research, statistics, and evaluation were very large indeed--likely, in fact, to weaken the production of information, which is their major function. Let us turn now to some of the implications that funding reductions have on the availability of information to the Department and to the Congress.

What Are Some of the Consequences
of the Reductions?

It goes without saying that these reductions in funding do not automatically mean that less information is now available or that all the information collected earlier is useful. Given recent advances in automated data processing, a substantial interest in synthesizing the evidence that has been amassed through prior research and evaluation, and a host of cost-saving mechanisms, it is entirely conceivable that greater efficiency has reduced the need to sustain high levels of fiscal resources, since more information of even better quality may be produced with fewer resources. However, it is also possible that less or different information is being produced now than was produced in the past. On this issue, our work is not complete. But what we do have suggests that the information being produced is both less and different.

Evaluation. The magnitude of the reduction in information being produced within the Department of Education can be illustrated by the responses to a questionnaire completed by the Office of Planning, Budget, and Evaluation in 1980 and again in 1984.⁹ The number of studies in progress that the Office reported declined by 90 percent--from a reported 114 studies in

⁹The questionnaire was part of the larger GAO study of federal evaluation activities referred to above in the section on evaluation.

1980 to 11 in 1984. This clearly means that less information will be available on education programs funded by the federal government. The substantial decline in the number of evaluations issuing from the Department's evaluation unit can be plausibly attributed to the conversion of 38 education grants from categorical to block, under chapter 2 of the Education Consolidation and Improvement Act. What has happened to the information produced about those programs? Evidence available to us on information generated by state agencies on programs consolidated by the education block grant suggests that some relevant data are being collected and analyzed, but that the cross-state comparability of these data is uncertain and the information available for evaluating program effectiveness is sparse.¹⁰

In addition to the reduction in the number of studies conducted by the Office of Planning, Budget, and Evaluation, we have evidence of a shift in form, since 1980, away from relatively large-scale evaluative studies and toward smaller, less ambitious projects. Ongoing studies costing a million dollars or more, for example, numbered 26 in 1980 and 6 in 1984. Staff in that office have reported that compared to 1980, relatively more of their time

¹⁰U.S. General Accounting Office, Education Block Grant Alters State Role and Provides Greater Local Discretion, HRD-85-18 (Washington, D.C.: 1984).

in recent years has been devoted to brief issue analyses, position papers, and dissemination projects.

Statistics. Reductions have also been reported in the statistical information systems sponsored by the National Center for Education Statistics. The Congressional Research Service and GAO both recently looked at the Center in reviews of the larger federal statistical system in the period since 1980.¹¹ Both reported that NCES, while maintaining what it considered its core program, either scaled back or eliminated its collection activities. We believe that this may have serious consequences for the availability and quality of education information. For example, NCES delayed the noncollegiate Postsecondary School Survey, which led to gaps in education data on students in occupational programs. In addition, it decreased sample sizes and the frequency of data collection in some of its statistical programs, calling into question the precision of the data. Validity checks that had previously been made on some surveys were also eliminated. These and other reductions in the monitoring of data quality have taken place, in spite of the recognition by NCES and other agencies that the poor quality of its data (which consist largely of administrative records from school systems using diverse types of recordkeeping) is a major problem. (A

¹¹U.S. General Accounting Office, Status of the Statistical Community After Sustaining Budget Reductions, IMTEC-84-17 (Washington, D.C.: 1984). See footnote 7 for CRS study.

listing of activities in 1982 and 1983 that were affected by budget reductions appears as appendix I.)

Weaknesses in some data systems have been recognized, and actions are being taken to improve them. An example is the recent development of the integrated postsecondary data system, which will provide a data base covering both traditional and nontraditional postsecondary institutions. A major rationale for the development of an integrated system is its improvement over some currently used surveys of postsecondary education that are recognized as having statistical deficiencies.

The Center for Statistics is redesigning its statistical system for elementary and secondary education. We have not yet fully reviewed the system or alternatives under discussion. We note, however, that staff of the redesign project have, in a recent draft report, identified four weaknesses in the current data system: poor integration and coordination of data collection, insufficient or missing data, poor quality of data, and untimeliness in reporting. Several initiatives are planned, including the development of a new elementary and secondary data set, in response to these problems. At this relatively early stage in what has become known as the "redesign process," we cannot offer an opinion on the adequacy or appropriateness of such plans. The issue of available funding should be raised again, however. Some aspects of the proposed redesign hinge upon the resolution of technical problems (such as the determination of sampling weights), which, as the Center's draft report notes, will

require considerable research effort. It will, of course, cost money to do this research well. Current and forthcoming budgetary deliberations for the Center in both the Department of Education and the Congress should consider the possible long-term costs of making cuts in the development of major new education data systems. These costs could include poorer quality in data and the complete absence of data in some education areas.

Research. As we have reported, the National Institute of Education has undergone substantial reductions in funding in the past decade. The decline since 1974 has been most dramatic within the past 4 to 5 years. In examining the consequences of these reductions, we have also examined obligations for major program areas and the labs and centers.¹² These are reported in appendix II.

In our examination of the changes that took place between 1980 and 1984, we considered the awards for labs and centers separately from the awards made in three program areas--teaching

¹²By labs and centers, we mean the institutions that were originated through the Cooperative Research Act of 1963 and the Elementary and Secondary Education Act of 1965. Their primary mandate was to conduct basic and applied research and to promote dissemination of findings to the education community. We are not including other centers, such as the Institute for Research on Teaching, the Center for Research on Bilingualism, and the Center for Studies of Reading, which were funded later.

and learning, education policy and organization, and dissemination and improvement of practice. We realize that the work of the labs and centers often falls within these areas, but we were interested in documenting the change in research activities external to the labs and centers. Considering them in this way, we found substantial reductions in the program areas: teaching and learning experienced a decrease of 57 percent; education policy and organization decreased 83 percent; and dissemination and improvement of practice decreased 63 percent. Labs and centers, while experiencing cuts in overall funding levels, lost relatively less (28 percent).

The pattern of reductions can also be examined in terms of relative proportions of total expenditures. Specifically, whereas labs and centers assumed roughly two fifths of all obligations in 1980, by 1984 their share of the total had risen to three fifths. Also, the Educational Resources Information Centers (ERIC) assumed about two fifths of the funds for dissemination and improvement of practice in 1980; in 1984, ERIC required nearly three quarters of these funds. Similarly, the National Assessment of Educational Progress (NAEP) gained a substantially higher share of available funds in 1984 (two fifths of the teaching and learning program) than in 1980 (roughly one fifth). The unsolicited proposal program received only 4 percent of all obligations in 1980 (\$3.2 million), but it had been eliminated entirely by 1984.

Our work on how the priorities of NIE were set and the many influences on this process is incomplete, but we can now note that the areas that have been affected the least by funding cuts--NAEP, ERIC, and the labs and centers--are those that have been protected by congressional requirements. The other side of this, of course, is that research activities outside these specific programs have been substantially reduced. Specifically, the overall number of awards outside these programs dropped from 422 in 1980 to 72 in 1984.¹³ Within the teaching and learning program area, for example, 34 awards were given for testing, assessment and evaluation in 1980, compared with 1 award in 1984. For education in the home, community and work--education research with a broader context--20 awards were given in 1980 and none were given in 1984. Teaching and instruction awards, aimed at the identification of the characteristics of effective teachers, classroom interactions and the social and organizational context for teaching and learning, dropped from 30 in 1980 to 7 in 1984. These examples, indicative of the reductions in the awards in all program areas, suggest that sparse and less diverse information will be available on which to base future decisions about education. In our future efforts, we will be examining the nature, scope, and quality of the work that NIE has produced or initiated.

¹³NAEP, ERIC, and miscellaneous awards were not included in this total. Supplemental awards to labs and centers were included.

Summary and Implications

The nation is currently in a period of serious fiscal duress. Pressures to reduce the federal deficit are likely to overshadow--and possibly overrule--considerations of expanding budgetary allocations beyond current levels. Within the community of federal research, statistics, and evaluation in education, the level of funding available for information production is already low. More importantly, information output on the condition of education has been lowered to the point at which program management, departmental policymaking, and congressional oversight may have become extremely difficult. We have not finished our in-depth investigation of changes in the information that is being produced, its quality, and how it is disseminated. Our current findings, however, reveal the possibility that education information is inadequate for some of the decisions that face the Congress.

One area that illustrates this problem is information on American teachers. For example,

- ° one emerging issue for education policy is the possible decline in the number of minority teachers in primary and secondary schools. Relevant information for addressing this topic has not been collected by NCES's Common Core of Data since 1968.¹⁴

¹⁴Telephone interview with NCES staff and review of NCES documents.

- ° despite the fact that the estimated turnover rate among U.S. teachers in the next 10 years is between 50 and 70 percent, national data on turnover and attrition were last collected in 1969;¹⁵
- ° we recently found that gaps in the information available on mathematics and science teachers prevent us from assessing either the number of math and science teachers or the quality of teaching.¹⁶

In general, the chief response to reductions in fiscal resources seems to have been the elimination of discretionary activities in order to maintain congressionally mandated requirements. This, of course, has its costs. In the research domain, the number of awards or the size of awards will necessarily be reduced. These reductions are likely to narrow the

¹⁵Statement of Lee Shulman, professor of education at Stanford University, in U.S. House of Representatives, Subcommittee on Select Education, Hearings on Reauthorization of the National Institute of Education (Washington, D.C.: March 1985); and oral remarks by Chester E. Finn, Jr., Assistant Secretary for Educational Research and Improvement, at a session of the Education Policy Forum, Washington, D.C., January 13, 1986.

¹⁶U.S. General Accounting Office, New Directions for Federal Programs to Aid Mathematics and Science Teaching, PEMD-84-5 (Washington, D.C.: 1984).

number of research and policy perspectives brought to bear on particular topics. Some topics may be neglected altogether. For statistics, the extent to which congressional questions can be answered depends on the adequacy of the information base reported by core data-gathering activities. For evaluation, whether or not issues can be addressed depends on whether or not questions have been posed in sufficient time to obtain valid answers.

Of course, prior research, extant data, and completed evaluations can be pressed into service when new data collection has not been undertaken or is not feasible. The danger here is that existing data may be short on "shelf-life" or too low in quality to sustain continued reapplication to new questions. A continuous production system must be in process to meet departmental and congressional information requirements with respect to both short-term and long-term educational issues. Research, statistical, and evaluative functions make up crucial components of the ability to meet these requirements. Since cuts in these functions can deprive both the quantity and quality of information while providing relatively little in dollar savings, reductions should be made only with careful consideration. Their long-term costs can mean both information forgone and policies based on something less than the most complete, relevant, and timely data.

This concludes my remarks. I will be happy to answer any questions that you or members of the subcommittee may have.

APPENDIX I
CHANGES IN DEPARTMENT OF EDUCATION STATISTICAL
ACTIVITIES IN FISCAL YEARS 1981-84^a

<u>Change</u>	<u>\$ change</u>	<u>Effect</u>	<u>Additional comments</u>
Sample size of first follow-up of National Longitudinal Study of High School and Beyond reduced from 58,000 to 52,000	Not available	Reduced precision in data estimates	
Noncollegiate Postsecondary School Survey delayed	\$225,000	Data gap	Survey reestablished in 1983 to provide characteristics of students in occupational programs; plans were to add supplementary questions to Current Population Survey
Fifth follow-up of Survey of the High School Class of 1972 cancelled			Private and public institutions contributed money to continue the program
State Technical Assistance Grants were eliminated	\$350,000	No direct state assistance to develop statistical capability	
Private School Survey data compilation delayed	\$200,000	Data gap	
Survey of Recent College Graduates eliminated	\$224,000	Data gap	OMB believed a biennial survey was too frequent
Teacher Demand and Shortage Survey eliminated	\$175,000	Data gap	

APPENDIX I (continued)

<u>Change</u>	<u>\$ change</u>	<u>Effect</u>	<u>Additional comments</u>
Components of Higher Education General Information Surveys reduced, including students enrolled for advanced degrees and 1982 institutional characteristics	Not available	Reduced data	Components rescheduled with a 50% reduction for 1983
Statistics collected in October 1982 included in Current Population Survey Supplement as Survey of Postsecondary Education, replacing Survey of Students in Noncollegiate Postsecondary Schools, which was discontinued after fiscal year 1981			
Common Core of Data eliminated some state aggregate data from annual collection	Not available	Data gap	
Frequency of Library General Information Survey decreased	Not available	Data gap	
Student Residence and Migration Survey changed from biennial to triennial	Not available	Data gap	Expected to provide time to improve the quality of data from various state tracking methods

^aAll funding changes in this table went into effect in fiscal year 1982. The data were reported in U.S. General Accounting Office, Status of the Statistical Community After Sustaining Budget Reductions, GAO/IMTEC-84-17 (Washington, D.C.: July 18, 1984), pp. 52-54.

APPENDIX II
1980 and 1984 NATIONAL INSTITUTE OF EDUCATION
OBLIGATIONS BY PROGRAM AREA

<u>Program area^a</u>	<u>Fiscal year</u>		<u>% change</u>
	<u>1980</u>	<u>1984^b</u>	
Teaching and learning			
Contracts and grants	\$12,191,358	\$ 2,443,594	
NAEP	4,161,990 22 ^c	3,194,842 40 ^c	
Other	573,586	24,545	
Awards to labs and centers	<u>2,074,016</u>	<u>2,456,786</u>	
Total	\$19,000,950 26 ^d	\$ 8,119,768 22 ^d	-57
Education policy and organization			
Contracts and grants	\$ 5,501,691	\$ 990,374	
Other	447,382	54,322	
Awards to labs and centers	<u>281,718</u>	<u>---</u>	
Total	\$ 6,230,791 8 ^d	\$ 1,044,695 3 ^d	-83
Dissemination and improvement of practice			
Contracts and grants	\$ 8,299,371	\$ 1,149,115	
ERIC	5,553,785 39 ^c	3,826,784 74 ^c	
Other	253,487	189,708	
Total	\$14,106,643 19 ^d	\$ 5,165,607 14 ^d	-63
Office of the Director			
Contracts and grants	\$ 225,062	\$ 467,264	
Other	194,485	34,599	
Awards to labs and centers	<u>45,509</u>	<u>18,822</u>	
Total	465,056 1 ^d	520,684 1 ^d	+12
Labs and centers	\$30,607,913 42 ^d	\$21,944,342 60 ^d	-28
Unsolicited proposal program	\$ <u>3,213,861</u> 4 ^d	<u>---</u>	-100
Total	\$73,625,214	\$36,795,096	-50

^a"Contracts and grants" are awards to individuals and public and private agencies. "Other" is a miscellaneous category primarily used to report the number of small awards to various recipients listed in the NCER report. "Awards to labs and centers" indicates supplemental awards in addition to the main lab and center grants. NAEP is National Assessment of Educational Progress; ERIC is Educational Resources Information Centers.

^bFiscal year 1984 dollars have been converted to fiscal year 1980 constant dollars. Subtotals do not correspond exactly to the sum of individual accounts due to rounding.

^cPercent of program area obligations.

^dPercent of total NIE obligations.

Source: National Council on Educational Research, annual reports for fiscal years 1980 and 1984.

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