


Contact: Human Resources and Development Div.


Organization Concerned: Department of Health, Education, and Welfare; Office of Education; National Inst. of Education; Alcohol, Drug Abuse, and Mental Health Administration; National Inst. of Mental Health; National Science Foundation; National Endowment for the Humanities.


Major Federal programs were identified which fund the development of both curriculum materials and behavior modification techniques for use in local schools. Officials involved in these programs were interviewed, and program regulations, reports, and other materials were reviewed. Selected organizations that had expressed concerns about the programs were also contacted. Findings/Conclusions: The amount of Federal funding could not be determined, but projects for developing and disseminating curriculum materials and behavior modification techniques were federally supported in varying degrees. Federal control over projects varied from little control in projects funded by grants to a leading role in at least one program. Dissemination of information about federally
funded projects, as required by legislation, varied from simply identifying projects to developing packaged products and providing training to personnel. Concerns about Federal encroachment on local decisions were not resolved in spite of existing limitations. The lack of coordinated policies has contributed to piecemeal efforts in curriculum development and dissemination. An assessment should be made of former and current efforts as a step in developing policy. (HTW)
Questions Persist About Federal Support For Development Of Curriculum Materials And Behavior Modification Techniques Used In Local Schools

Concerns about curriculum materials and behavior modification techniques being used in local schools continue to be expressed by individuals, groups, and organizations. One concern is the belief that Federal funding for development and dissemination of materials and techniques is an encroachment on local curriculum decisions. Although existing laws, regulations, and procedures limit Federal influence, questions persist about the proper Federal role in such activities.

This report identifies the major Federal programs which fund the development of curriculum materials and behavior modification techniques for use in local schools. Total Federal funding of such activities could not be determined; however, indications of the extent and nature of Federal activities are included.
The Honorable Daniel J. Flood
Chairman, Subcommittee on Labor,
    Health, Education, and Welfare
Committee on Appropriations
House of Representatives

The Honorable Albert H. Quie
House of Representatives

This report identifies the major Federal programs and activities which fund the development and dissemination of curriculum materials or behavior modification techniques for use in local schools. These programs and activities are within three Department of Health, Education, and Welfare components--the Office of Education, the National Institute of Education, and the National Institute of Mental Health--and also within the National Science Foundation and the National Endowment for the Humanities.

We did our work in response to your separate requests. The information on curriculum materials responds to Chairman Flood's request. The information on behavior modification responds to Congressman Quie's request. Because both requests originated from concerns about the Federal involvement in materials and techniques being used in schools, your offices agreed that our report would combine the two requests.

As requested, we did not obtain written agency comments on this report; however, we discussed its contents with officials of the above-named agencies. Also, as agreed with your offices, we are making the report available to the appropriate congressional committees, agency officials, and other interested parties.

ACTING Comptroller General
of the United States
D I G E S T

Much concern has been expressed about

-- curriculum materials, such as textbooks, teacher guides, or films teachers and students use in a classroom, and

-- behavior modification, a professional term that refers to a family of techniques that teachers can use to bring about changes in students' academic and social skills.

GAO reviewed the Federal role in the development and dissemination of curriculum materials and behavior modification techniques used in local schools.

SCOPE OF REVIEW

GAO's work included interviewing officials of programs with substantial involvement in these activities and reviewing program regulations, policies, and selected reports and project abstracts.

In addition, GAO contacted selected organizations and groups which had expressed concerns about materials and techniques. The expressed concerns related to a wide range of materials, activities, and techniques. The basis for most concerns, however, appears to fall within three categories

-- disagreement about the purpose of public education,

-- disapproval of method used to meet educational objectives, and

-- perceived loss of local control. (See p. 3.)
FEDERAL ROLE VARIES

Several Federal programs support and control, in varying degrees, projects for developing and disseminating curriculum materials and behavior modification techniques for use in local schools. However, GAO could not determine the amount of Federal funds supporting such activities. (See p. 7.)

Most projects in many Office of Education programs could involve the development of curriculum materials. The use of behavior modification techniques within these programs appears restricted to a small percentage of projects. (See pp. 9 and 10.)

In addition, projects funding development of materials and techniques are supported by the National Institute of Education, the National Science Foundation, the National Institute of Mental Health, and the National Endowment for the Humanities. (See p. 11.)

The Federal Government's control over individual projects which may develop materials and techniques varies:

-- In local projects funded through formula grants to States, the Federal Government has little, if any, control over the design or operation of the projects.

-- In projects funded under discretionary grants or contracts, the Federal role is more active and includes selecting from proposals the projects to be funded.

-- In at least one program, the Federal Government has assumed the prime responsibility for making sure that adequate curriculum materials exist. In bilingual education the Office of Education, through a network of projects, is assuming a leading role in coordinating all material development efforts.

INFORMATION DISSEMINATION VARIES

Dissemination of information about federally funded educational projects includes activities ranging from simply identifying the projects'
existence to packaging products and providing funds to developers for orientating, training, and consulting with school personnel.

The legislative provisions or regulations governing federally funded projects generally specify that information about projects will be disseminated. A National Institute of Education-funded study of dissemination activities, however, noted that the legislation and regulations contain no definition of dissemination.

The study also noted dissemination responsibilities are highly fragmented and include conflicting assignments. (See p. 20.)

A study by the Office of the Assistant Secretary for Education of dissemination activities within the Department of Health, Education, and Welfare's (HEW's) Education Division (includes the Assistant Secretary's Office, the Office of Education, and the National Institute of Education) noted that

--information about the capabilities and activities of participants engaged in educational dissemination is inadequate,

--a comprehensive planning and policy setting capacity for dissemination does not exist within the Division, and

--the Division lacks a mechanism for directing and coordinating dissemination activities. (See p. 23.)

Most of the federally funded dissemination activities would not be classified as Federal promotional efforts. The activities of the National Diffusion Network are a notable exception. The network consists of a panel of officials from HEW's Education Division, local developer/demonstrators, and State facilitators. The panel selects particularly effective projects warranting wide dissemination. Developer/demonstrators develop and disseminate project information packages, refine and reproduce training and instructional materials, and provide training and technical assistance to school personnel.
Through mass mailing, visits, and presentations, facilitators link the projects to the interested schools. (See p. 24.)

**QUESTION OF FEDERAL ENCROACHMENT**

Concerns about the Federal Government's encroachment on local curriculum decisions have accompanied concerns about the materials and techniques. According to Federal officials, the Federal Government funds the development and dissemination of materials and techniques, but local educational agencies decide whether these are used in their schools.

The purpose of Federal funding is to provide a wide variety of quality products. Provisions in a number of Federal educational programs decrease Federal influence and increase the role of State and local officials and parents. (See p. 27.)

Limitations on Federal influence do not resolve all concerns about Federal involvement. A National Institute of Education task force developed a series of questions to show the related issues, problems, and concerns related to Federal involvement in curriculum materials. (See p. 29.) These were grouped under four general questions:

What, if any, are the Federal Government's rights and responsibilities in curriculum development?

What are the dangers of Federal involvement in curriculum development?

In which aspects, activities, or phases of curriculum development should the Federal Government play a role?

What has the Federal Government done in the past and what can be learned from this experience?

The task force is continuing its work in order that the Director of the Institute can submit to the National Council on Educational Research a report including alternative policy stances.
and recommendations for Institute funding of curriculum development activities.

CONCLUSIONS

A coordinated and more comprehensive policy on the Federal Government's involvement in curriculum development and dissemination might be desirable. The lack of such a policy has contributed to the current piecemeal and diffused efforts in curriculum development and dissemination and may also be contributing to public confusion and concern about Federal involvement.

In addition, the process of formulating policies could bring about a national forum on curriculum materials. Because of the controversies which exist, such a forum would give participants from all levels a chance to have a voice in determining the various roles they should play.

The first step in formulating more detailed policies is an assessment of prior and current Federal efforts in curriculum development and dissemination. Such an assessment has not been made; furthermore, the data required for such an assessment is not available.

MATTER FOR CONSIDERATION BY THE CONGRESS

If the Congress desires to formulate a policy defining the Federal role in developing, disseminating, and implementing curriculum materials, it should direct the Secretary of HEW to make a detailed assessment of past and current Federal efforts and of various participants' capabilities in developing and disseminating curriculum materials. Such an assessment is a prerequisite to an informed decision on the future Federal role.
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CHAPTER 1
INTRODUCTION

Congressman Daniel J. Flood, Chairman, Subcommittee on Labor, Health, Education, and Welfare, House Committee on Appropriations, and Congressman Albert H. Quie requested, respectively, that we review the Federal role in developing and promoting textbooks and other curriculum materials and behavior modification techniques for local schools. Their requests were made because of

-- increasing complaints about curriculum material, classroom activities, and methods of instruction in local schools which could bring about unwanted changes in students and

-- concerns about the Federal Government's possible involvement in these areas through funding of materials and techniques.

The Subcommittee Chairman asked us to examine (1) the extent to which Federal funds are used in the development of textbooks and other curriculum material, (2) the Federal role in the promotion or use of such material in local schools, and (3) Federal support of teacher training directed toward promoting new curriculum materials sponsored by the Federal Government.

Congressman Albert H. Quie asked that we determine the extent of Federal funding for behavior modification programs which reach the public schools.

CURRICULUM MATERIALS AND BEHAVIOR MODIFICATION DESCRIBED

An initial difficulty in identifying the extent of Federal funding for developing curriculum materials and behavior modification techniques is the lack of precise definitions. For example, in some connotations curriculum materials could be limited primarily to textbooks; in others, it could include almost all educational materials used in a program.

A similar situation exists with behavior modification. To some, all education is behavior modification. To others, it is a specialized type of therapy involving shock treatment or drug therapy. To still others, behavior modification is the systematic application of selected psychological and social principles and techniques. The problem is further complicated
because complaints often refer to behavior modification even though behavior modification, as such, has not actually been used. The complaint is more often a concern about a child's behavior (such as beliefs, attitudes, or actions) possibly being modified or changed. Many materials, activities, or techniques could modify a child's behavior without technically being behavior modification.

The following definitions and descriptions of curriculum materials and behavior modification were used as a basis for our work. We believe these reflect a general consensus of existing definitions and descriptions.

**Curriculum materials**

Curriculum materials can be defined as anything of a written or audiovisual nature developed to meet the objectives of an educational program. Although textbooks are major curriculum materials, such other materials as films, other visual aids, records, games, and simulations are widely used. In addition, teacher guides and manuals which include goals and objectives, learning experiences, activities, and instructional aids are normally considered curriculum materials.

The process of developing curriculum materials includes a wide range of activities. The process might be a 3- or 4-year effort by a team of specialists to research, develop, and test an entire curriculum for a subject area. Curriculum development might also be no more than an individual teacher's decision to develop and introduce supplementary material into the classroom.

**Behavior modification**

While curriculum materials are the physical resources used in an educational course, behavior modification deals with classroom techniques which the teacher can use. Behavior modification can be defined as the systematic application of learning theory principles to bring about desired changes in or prevent certain behavior or responses. It involves using psychological principles to enhance human functioning. Laboratory experiments have developed principles of learning upon which behavior modification techniques are based. A major principle is that we are influenced by the environment and the consequences of our behavior.

A primary technique used in behavior modification is positive reinforcement, which includes using such items as gold stars, points, or candy. When these are given to children who have demonstrated desired behavior, the rewards
(reinforcers) have the effect of maintaining or increasing the chance that the behavior will reoccur. Positive reward occurs in one form or another in everyday life. What makes it behavior modification in the classroom is the systematic planning, analyzing, and recording of changes in student behavior.

A system of positive reinforcement used in classrooms is the token economy. In a token economy, children earn tokens or points for appropriate behaviors, such as work completed, quiet times, or reading at their seats. The tokens can be exchanged for some reward of interest to the children. Candy, trinkets, free time activities, or special privileges all have been used as rewards. Contingency contracting, in which the teacher and student agree on acceptable goals and rewards, is frequently used in token economies.

NATURE OF CONCERNS ABOUT MATERIALS AND TECHNIQUES

The requests for our review resulted primarily from citizens' complaints and concerns about materials and techniques being used in local schools. To better understand the issues involved, we contacted selected organizations and groups which had expressed concerns. The information provided by these groups showed that citizens' concerns relate to a wide range of materials, techniques, and activities. The underlying basis for most concerns, however, appears to fall within three categories—disagreements about the purpose of public education, disapproval of methods used to meet educational objectives, and perceived loss of local control.

Disagreements about purpose

The major cause for concern about materials and techniques appears to be disagreements as to the purpose of public education. One view is that public education is to teach children basic cognitive skills—reading, writing, and arithmetic—without attempting to alter personalities, standards, and values. Another view holds that mastery of only cognitive skills does not fully equip children to deal with various life situations and that the public school system has the obligation to produce mature adults by going beyond instruction in cognitive skills. This additional instruction could include exposing children to and having them examine different value systems. These opposing views of what constitutes desirable educational goals, particularly with regard to values, are an underlying reason for complaints.

Exposure to different value systems as an explicit educational goal has been formally adopted in some States and
localities. In one of the Nation's largest school districts, the local board of education has resolved that the schools should help students understand their own values and the values of others. In addition to basic cognitive skills; scientific understanding; aesthetic expression; and intellectual, physical, and career development, the district's educational goals include each student gaining

--knowledge of oneself and the characteristics, needs, and desires one shares with others;

--sensitivity to others and their ideas, and the ability to act responsibly in various situations;

--the ability to function productively as a member of a group;
--familiarity with the legal, moral, ethical, and cultural heritage of this and other societies; and
--knowledge of the various political systems and philosophies of the world.

Many citizens believe that traditional beliefs are threatened by curriculum materials chosen to meet value-oriented educational goals. During the widely publicized and occasionally violent controversy in Kanawha County, West Virginia, in 1974, textbooks and supplementary materials adopted under the State's selection criteria were criticized by parents and others for using profanity, ridiculing the law, mocking religion, and asking children whether stealing is ever justifiable. Critics of such materials see them as symbols of the drift of public education away from basic education toward personality development, life adjustment, and excessive emphasis on what children think and feel.

Also, concerns have been expressed because a philosophy called secular humanism has been incorporated into programs dealing with values. According to critics, this philosophy, which espouses a person as a determiner of his or her own fate and the relativity of moral values, threatens the role of the family unit and opposes traditional precepts such as belief in God. Materials and techniques used for clarifying values and modifying behavior are viewed by critics as tools of secular humanism for altering children's attitudes, standards, and values. The critics maintain that development of children's values, character, and personality should be done in the home and that school time spent on clarifying values, observing behavior, and learning other affective skills should be devoted to teaching essential cognitive skills.
Disapproval of methods

In addition, concerns have focused on consequences of exposures to specialized curriculum methods rather than educational objectives. For example, use of life-death games, diary keeping, classroom observation, and other methods for revealing the child's attitudes, opinions, and home-life conditions is seen as threatening the right to privacy. A related concern is that by participating in a specialized curriculum using behavior modification techniques, a child will be identified as different or special. Critics believe that with increasing use of computerized data files, this labeling effect subjects the child's participation to unwarranted disclosure and possible misinterpretation.

Another concern is that the behavior modification technique of giving reinforcement, such as candy or money, to reward academic achievement or appropriate classroom behavior will cause children to adopt materialistic values.

Perceived loss of local control

Citizens who disagree with the educational goals or methods of a curriculum also believe they have little influence in procedures and processes used to evaluate and select materials. Many believe that the school system neither wants nor values their opinion before selection occurs and that pressing a complaint about materials or techniques involves a time-consuming and expensive review process.

The issue underlying dissatisfaction with procedures and processes is the perceived loss of local control over public education. Critics contend that control over public education has passed from local citizens to professional educators, with teachers no longer recognizing that parents and other community members are their employers. A recent study by the National Institute of Education of the Department of Health, Education, and Welfare (HEW) states that the question of who shall select the curriculum appears to be of greater concern to involved parties than what shall be taught.

SCOPE OF REVIEW

We made our review to determine the Federal role in the development and dissemination of textbooks and other curriculum materials and behavior modification techniques for use in local schools and to determine what controls exist over this role.
To meet these objectives we:

--Interviewed officials of the Office of Education (OE), the National Institute of Education (NIE), the National Institute of Mental Health (NIMH) of HEW, the National Science Foundation, and other selected agencies to obtain an overview of the programs which can fund curriculum materials and behavior modification techniques.

--Reviewed the legislative authority, regulations, policies, and procedures for programs identified as funding the development or dissemination of curriculum materials and behavior modification techniques for use in local schools.

--Examined selected program records, reports, and project abstracts to determine the extent of Federal funding.

--Interviewed a few State and local officials and educational program developers.

--Read related transcripts, studies, articles, and other publications on curriculum development and behavior modification.

As previously stated, an initial difficulty in identifying Federal funding in this area was the lack of precise definitions. In discussions with HEW officials another complication became apparent. The purpose for funding projects in most Federal educational programs is to bring about improved educational programs. As part of improving an educational program, projects may develop materials and techniques. Because such projects were not specifically established to develop materials and techniques, however, information on these activities at the Federal level is usually limited or nonexistent. Because of this limitation and the number of programs and projects involved, our efforts were primarily directed to obtaining an overview of Federal involvement from discussions with officials and from available reports, project abstracts, and other documents.
CHAPTER 2

FEDERAL ROLE IN DEVELOPING AND
DISSEMINATING CURRICULUM MATERIALS AND
BEHAVIOR MODIFICATION TECHNIQUES

The Federal role in funding the development of materials and techniques for use in local schools has increased notably in the past decade. A number of Federal programs support and control, in varying degrees, projects for developing curriculum materials and behavior modification techniques. Within many Office of Education programs, most projects could involve the development of curriculum materials. The use of behavior modification techniques appears to be restricted to a small percentage of projects. In addition, projects funding these activities are supported by the National Institute of Education, the National Institute of Mental Health, the National Science Foundation, and the National Endowment for the Humanities.

Activities to disseminate and implement federally supported curriculum materials have accompanied this growth. Two recent studies within the Education Division of the Department of Health, Education, and Welfare have pointed out the diffused and complex nature of Federal involvement in dissemination activities. These activities range from simply identifying projects' existence to packaging products and providing funds for orientation, training, and consultation of adopters. Most of the federally funded dissemination activities would not be classified as Federal promotional efforts. The activities of the National Diffusion Network are a notable exception.

Available data shows that large amounts of Federal funds go for curriculum development and dissemination and for other educational techniques, such as behavior modification. Overall data needed to determine the total amount of Federal funding for these activities and the impact of such funding does not exist.

MATERIALS AND TECHNIQUES FUNDED BY NUMEROUS PROGRAMS

Determining the amount of Federal funds provided for developing and disseminating curriculum materials and behavior modification techniques would require extensive work at State and local educational agencies. We did not do such work. Our examination of program documents and related
project abstracts, however, shows that the Federal Government is extensively funding these activities. The table on the following pages shows the major Federal programs and activities identified as funding the development and dissemination of curriculum materials or behavior modification techniques for use in local schools. Appendix I contains more detailed information on each program and its operation, including available information on the extent of Federal funding and examples of funded projects.
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<th>Indication of extent of curriculum development or behavior modification</th>
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<td>Education of Disadvantaged Children</td>
<td>Title I, ESEA 1/4, as amended (20 U.S.C. 241a, et seq. (Supp. V, 1975))</td>
<td>Abstracts of 33 exemplary projects approved for national dissemination showed that most projects involved development of curriculum material and 5 had behavior modification components.</td>
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<td>Supplementary Centers and Services</td>
<td>Title III, ESEA 2/ (20 U.S.C. 861, et seq. (Supp. V, 1975))</td>
<td>Of 144 active projects funded under programs in 5 States during fiscal year 1975, abstracts indicated 83 involved materials development and 8 related to behavior modification. About half of the projects selected by the Commissioner were for dissemination activities and about half were for innovative projects. Abstracts for those innovative projects showed that some involved materials development and behavior modification.</td>
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<tr>
<td>Bilingual Education Program</td>
<td>Title VII, ESEA, as amended (20 U.S.C. 880b, et seq. (Supp. V, 1975))</td>
<td>Most projects appear to use limited funds on adapting or developing curriculum materials. In addition, in fiscal year 1975-76, funds were provided to nine centers to develop a variety of instructional materials. Dissemination centers were also funded.</td>
</tr>
<tr>
<td>Program Authorized by Title VIII of ESEA</td>
<td>Title VIII, ESEA (20 U.S.C. 887 (Supp. V, 1975))</td>
<td>Based on review of selected project files, most projects appear to involve curriculum materials development. Only one file contained evidence of behavior modification techniques being used.</td>
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<td>Ethnic Heritage Studies</td>
<td>Title IX, ESEA, as amended (20 U.S.C. 900a, et seq. (Supp. V, 1975))</td>
<td>First priority of program is for projects to develop curriculum materials. Program officials estimate that 50 percent of grant funds was for development of curriculum materials, 35 percent for training, and 15 percent for dissemination.</td>
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<tr>
<td>Indian Education</td>
<td>Indian Education Act, as amended (20 U.S.C. 241a-2/1ff, 887c-887c-2 (Supp. V, 1175))</td>
<td>Development of Indian studies curricula and general academic curriculum material appears to be a major objective of formula grant program projects. In addition, most discretionary projects also involve curriculum development.</td>
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*Title VI of ESEA refers to the Elementary and Secondary Education Act of 1965.*

*Title VII of ESEA refers to the Elementary and Secondary Education Act of 1965.*

*Title VIII of ESEA refers to the Elementary and Secondary Education Act of 1965.*
Office of Education (continued)

Follow Through Program

The program is to develop educational approaches for young children from low-income families. Funds are provided to sponsors of the approaches and to selected local agencies for implementing and testing the approaches. (See p. 50.)

Environmental Education

The program consists of grants and contracts to support research, demonstration, and pilot projects designed to educate the public on problems of environmental quality and ecological balance. (See p. 52.)

Right to Read Program

The program has sponsored 19 demonstration programs operated in public schools and funds State educational agencies to support services designed to bring about reading improvement. (See p. 55.)

Special Projects

A number of special educational programs are authorized. The largest program is for career education. Other programs include the Women’s Educational Equity Program and Metric Education Program. (See p. 57.)

Emergency School Aid

The basic purposes of the programs are to provide desegregation assistance to elementary and secondary schools and to aid in overcoming the educational disadvantages of minority group isolation. In fiscal year 1975 about 64 percent of funds was for basic grants and 15 percent was for the pilot grant program. (See p. 61.)

Education of the Handicapped

State formula and discretionary grant programs are included to provide assistance for educational services and equality of educational opportunity to handicapped children. The act funds projects providing direct instruction, related services (such as diagnosis, educational evaluation, physical therapy, etc.), curriculum material and instructional package development, research, consulting services to States and localities, and teacher training and retraining. (See p. 62.)

Vocational Education

Formula grants, discretionary grants, and contracts are available to expand and improve vocational education programs. Programs include basic grants to States, research and training, exemplary programs, and curriculum development. The program of basic grants to States accounted for over 70 percent of the funds in fiscal year 1976. (See p. 66.)

Agency, program name, and description

Authorizing legislation


Right to Read Program

Program officials estimate that about 10 percent of funds for demonstration projects are used to develop materials. Dissemination is one of the major activities of State educational agencies.


Follow Through Program

All approaches have included the development of curriculum materials. Two of the 20 approaches in operation during school year 1975-76 include behavior modification as specific elements.

Special Projects

Program officials estimate that about 10 percent of funds for demonstration projects are used to develop materials. Dissemination is one of the major activities of State educational agencies.

Revised version

Many of the discretionary grant projects involve curriculum and instructional material development projects. The State formula grant projects also involve curriculum development as the projects contain individualized education programs for those children participating. Behavior modification techniques appear in projects under both the formula and discretionary grant programs. A catalog of 563 projects lists 170 curriculum development projects and 28 behavior modification projects.

Curriculum development is specifically authorized for most programs under the act. Estimates on the portion of funds expended on curriculum development were not available. However, program officials said that under the basic grants program all States would be engaged to some extent in developing curriculum materials.

Middle of the 20 approaches in operation during school year 1975-76 include behavior modification as specific elements.
Agency and program description

National Institute of Education

NIE administers research and development contracts and grants intended to attack critical programs in American education. It is organized into six problem areas--Basic Skills, Education and Work, Educational Equity, Finance and Productivity, School Capacity for Problem Solving, and Dissemination and Resources. (See p. 69.)

National Science Foundation

The Foundation initiates and supports, through contracts and grants, basic scientific research and programs to strengthen scientific potential and science education. The Foundation's science education activities include supporting the development of science education materials for use by school systems at the precollege level. (See p. 72.)

National Institute of Mental Health

The basic mission of NIMH is to develop knowledge, staff resources, and services to treat and rehabilitate the mentally ill. Because of this mission, most NIMH projects involve activities other than the public schools, such as clinical research and mental health centers. (See p. 74.)

National Endowment for the Humanities

The Endowment was created to provide increased federal support to the humanities. Within the Endowment, the Division of Education Programs seeks to help educational institutions improve instruction and make more effective use of resources in the humanities. (See p. 76.)

Authorizing legislation


Title IV 5455 of Public Health Services Act (42 U.S.C. 289k-1, (Supp. V, 1975))


Indication of extent of curriculum development or behavior modification

NIE officials estimate that from $20 million to $30 million was allocated to elementary and secondary curriculum related projects in fiscal year 1975. In addition, some basic research projects, although not having a curriculum development component, would have a definite impact on future curriculum materials.

National Science Foundation officials estimate that during fiscal years 1956-75 the Foundation provided about $196 million to support 53 major curriculum development projects. In addition, about $7.9 million was awarded for implementation activities related to materials developed in these projects and selected other materials. Implementation activities were not funded in fiscal year 1976. Officials said that curriculum development projects will not be funded in fiscal year 1977.

From a computer search of NIMH active project files, we identified 14 projects which involve the use of behavior modification techniques in public schools. Three of these also involved development of curriculum materials.

In fiscal years 1975 and 1976, $4.5 million was obligated for elementary and secondary education projects. A primary emphasis is on projects which improve teaching and develop curriculum materials.
ROLES IN DEVELOPMENT VARY

Although all the programs listed on the preceding table involve the funding of curriculum materials development, the role of the Federal Government varies significantly among the various programs. The following discussion of the Federal role in funding materials development provides an overview of the range of Federal involvement.

Minimal Federal control over projects

In programs such as title I and title III of ESEA (especially the 85 percent controlled by States), the Federal Government has almost no role in determining the need for project activities or in controlling project development. Under these programs, the Federal role is essentially one of providing funds to local educational agencies (LEAs) through State educational agencies (SEAs). The LEAs, with the advice and approval of the SEAs, determine what needs exist and develop projects to meet the needs. If curriculum materials or behavior modification techniques are developed, the LEA has determined the need and controls the development.

The following is a discussion of a title III funded project which exemplifies this role.

The program is a yearlong social studies course. Its objectives are to increase high school students' political and legal knowledge and to develop positive attitudes toward participation in the political and governmental process. The program prescribes a specific curriculum, use of professionals in the classroom, community interning, and workshops and seminars throughout the year. In addition, optional materials and activities, such as simulated elections, can supplement the basic program.

The program, which was developed in New Jersey, is used or pending use in about 200 schools in 27 States. Users have implemented the program as an alternative to required work or as an elective.

The curriculum is divided into three principal components. A unit on voter education includes issue analysis, canvassing and registration, media publicity, propaganda techniques, and election strategies. Voting reform, rights and procedures, party structure, and the electoral college are examined intensively. Other activities include political campaigning, telephone canvassing, and conducting survey polls. In the unit
on State government, students are taught skills regarding community research techniques, lobbying, and the functioning of their State legislature. This unit culminates with an annual model Congress in which students utilize the parliamentary skills, debating techniques, and legislative writing abilities developed in the classroom. The unit on individual rights uses case studies and simulated trials to present basic foundations of law, the concept of freedom of expression, and the dilemma of a fair trial within the structure of a free press.

The program arose initially as a result of the riots at the 1968 Democratic National Convention. At that time, a teacher conducting class projects in political issues was asked by concerned parents to develop a program showing students how to work within the political system. The program was given further impetus by ratification in 1971 of the 26th Amendment to the Constitution which lowered the voting age to 18 and by a statewide survey of New Jersey high school students that indicated students were apathetic, frustrated, and disillusioned with the political system.

After the riots, the teacher began writing a curriculum program and recruiting an advisory committee comprised of local civic, government, education, political, and media representatives, to lend expertise and support to his efforts. Aided by the advisory committee, the program received school board approval for initial application in academic year 1969-70. Funds were provided by the city council and the local Democratic and Republican Parties. In addition, development was fostered through contacts with external organizations, including the American Bar Association, League of Women Voters, and Chamber of Commerce.

Federal funding of the program began in July 1971 through a 3-year development grant under title III of ESEA. Under this grant $238,000 was used to develop the project. Most of the effort spent in developing the curriculum and in training instructors took place during this period. Various materials and techniques were field-tested and evaluated in workshops where teachers exchanged ideas and experiences.

In New Jersey, all title III proposals must be sponsored by an LEA, and program funding is handled through the State Department of Education. The funding and approval process began with preparation of a preliminary proposal, which the State Department of Education uses to select
the more promising ideas. In its preliminary proposal, the LEA addressed four basic questions:

-- What is the educational need?
-- How do you know the need exists?
-- What is your idea for fulfilling the need?
-- Why do you think your idea will work?

The State Department of Education reviews the proposal and provides advisory input. Normally the department does not challenge the legitimacy of the educational need but, based on its experience, may suggest that the need be stated more clearly or supported by additional evidence. The proposal then goes to outside reviewers and to various offices within the department for further evaluation. If the preliminary proposal is approved, the LEA is requested to submit a detailed development proposal. In most cases, funding is assured once the preliminary proposal has been approved.

A State official told us that the State Department of Education annually reports its title III funding plans to OE. OE, however, had no direct influence over development of the program and had no direct contact with the program developer.

Increased Federal control over projects

In other programs, such as those of NIE, NIMH, the National Science Foundation and discretionary grant programs in OE, the Federal Government has a more direct involvement. In these programs the agencies generally issue program announcements or requests for proposals identifying educational areas in which improvements are needed. The agencies evaluate the proposals submitted, select the proposal or proposals to be funded, and monitor the grantee's or contractor's progress.

The following NIMH-funded program involving curriculum development and behavior modification techniques demonstrates this type of role.

The program's basic purpose is to teach adolescents having behavioral problems, as manifested by scholastic underachievement, withdrawal, and disruptive activity, the academic and social skills needed to compete effectively
in their school programs. Major premises underlying the program are that (1) many academic and interpersonal problems are essentially learning problems and (2) learning behaviors are related to their consequences. Thus, by establishing specific learning procedures, environmental controls, and appropriate consequences, learning behaviors can be developed, maintained, and extended.

The program has four learning components: academic, social skills, family liaison, and personnel training. The academic component includes separate classes in English, mathematics, and reading. The social skills component focuses on helping students learn skills appropriate to inschool performances. Emphasis is given to verbal and nonverbal communication, giving and receiving information, solving and avoiding problems, and dealing with group pressures and rules. The foremost activity of the family liaison component is systematic contact with students' parents. The form and extent of parent contact has varied among users. The personnel training component encompasses teachers' workshops, reviews of teachers' classroom performances, and daily classroom training as needed and requested by teachers.

The academic and social skills components use a contingency contracting system in which students receive reinforcement for behavioral points earned and work completed. Each student is given a simple and concise statement of performance objectives which are incorporated into a contract. In a seventh grade math class we observed, the performance objective was completion of five assignments per week. The contract enables the student to determine daily the work accomplished and the remaining work which must be completed to earn reinforcement.

Points are earned if the student

--is in the assigned seat with necessary work tools when the bell rings;

--follows directions and works on appropriate assignments;

--uses proper tone of voice and responds to teachers' suggestions; and

--behaves properly with classmates and ignores inappropriate behavior of other students.
Upon completing the contract requirements and acquiring sufficient points, the student may exchange work completed and points earned for reinforcement. A variety of reinforcement instruments, including ice cream, field trips, and leisure-time activities have been used. More typically, rewards include visits to a leisure-time area where students may read, play educational games, or listen to music. In one class we observed, the teacher used a system of social-oriented reinforcement. Students who responded correctly to questions received immediate and systematic verbal praise. Students who engaged in inappropriate behavior were not reprimanded verbally but had their names listed on the blackboard under the heading, warning. Three warnings precipitate a negative note to the offender's parents.

Once the student demonstrates consistently appropriate behavior in the classroom, the behavioral point system is phased out. Completion of academic work prescribed in the contract then becomes the sole measurement for reinforcement. In some cases, the contract period may be lengthened or entirely eliminated. The hope is that behavior developed through this shaping procedure will carry over to the regular classroom.

The program has been developed by a private, nonprofit research and educational organization. It began operating in 1968 as a remedial training laboratory to investigate the variables that affect academic and interpersonal development and to develop learning programs in those two areas. Potential participants were referred to the program from four selected area schools. The candidates were students who experienced difficulties in all three categories: school academic studies, in-school behavior, and family and societal relationships. Those students selected as participants were viewed by their schools and communities as predelinquent or disturbed.

The program's initial application in the school environment was in 1971 in a junior high school. It has been applied in three different school districts, two of which are current users. In all cases, participation in the program is voluntary with parents providing consent for student participation.

The program has been developed and applied in laboratory and school settings under grants from the Center for Studies of Crime and Delinquency, NIMH. From fiscal years 1968 through 1976 grants totaling over $1.5 million have been awarded. Program officials estimate that about 50 percent of Federal funds is used to support program
research, training, and administration; 25 percent to conduct classroom activities; and 25 percent to develop and test learning materials and procedures.

Before receiving funding approval, the developer was visited by a team of NIMH staff and consultants which included psychologists, psychiatrists, and social workers. According to the developer, the site visit was mostly concerned with the justification for NIMH funding an academic program and the technical qualifications of the developer's staff. In addition, a full day was spent exploring the theoretical and practical implications of behavior modification and the relevancy of behavior modification techniques to program objectives. The site visit also addressed protection of human subjects, including review of anticipated risks, procedures for obtaining informed consent, and measures for safeguarding student data.

Since receiving initial approval, the developer has secured additional funds through competitive renewal grants and annual continuation grants. Continuation proposals include information on projected costs, program goals for the upcoming year, changes in program direction, program progress during the current year, and research on human subjects. Before approval of the continuation grant, the developer is visited by an NIMH team. Typically, these site visits address technical questions regarding program design. Final approval of the continuation grant lies with an NIMH committee.

In addition to site visits, the developer maintains direct contact with NIMH through two liaisons on technical and policy matters. Also all research papers and documents generated from the project are routinely forwarded to NIMH.

The National Science Foundation has also been involved in projects which illustrate the more direct involvement of the Federal Government in curriculum materials for local schools. Details on the Foundation's procedures in funding the development of an elementary social studies course appear in a GAO report, 1/ which discusses the Foundation's involvement from the project's conception to the administration of royalty income produced from materials development.

1/"Administration of the Science Education Project Man: A Course of Study (MACOS)," Oct. 14, 1975 (MWD-75-26).
Federal Government assumes prime responsibility

In another program area—bilingual education—the Federal Government has assumed the prime responsibility for making sure that adequate curriculum materials exist. This major involvement in materials for bilingual education is under title VII of ESEA. OE's assumption of responsibility in this area was the result of the following conditions: (1) domestic publishers' lack of response to the need for such materials, (2) the difficulties inherent in using translations of foreign language materials, and (3) the fact that there are 42 languages involved in the program. Initially, developing materials under title VII involved local efforts meeting local needs. An OE assessment of these efforts, however, surfaced many problems. Among them were:

--duplication of efforts by local projects;
--lack of sequential development in curriculum areas;
--lack of structured development in grade levels;
--lack of materials in some academic areas of the curriculum;
--lack of teacher training materials;
--overabundance of language acquisition materials;
--lack of materials for use by institutions of higher education;
--lack of information as to what materials are available and how to use them;
--lack of materials for some already identified target linguistic groups; and
--lack of materials appropriate for vocational education, adult education, and other areas previously addressed.

As a result of these problems and other analyses of the bilingual education situation, OE adopted a materials development plan. Under this plan, OE assumes a leading role in coordinating all material development efforts in bilingual education. To carry out this role, a network of centers is being funded to coordinate materials development and teacher training efforts. The three types of centers are discussed below.
Resource Training Centers

These centers are primarily responsible for providing direct services to classroom teachers within Title VII-funded LEAs and institutions of higher education as well as coordinating services with SEAs. Resource training center services include technical assistance in program planning and operation, evaluation of programs, materials utilization and staff development, and information on effective program practices and procedures. In addition, the centers conduct needs assessments for the materials development centers and coordinate the field testing of materials within a given region.

Materials Development Centers

These centers are responsible for developing bilingual-multicultural student materials and specific materials for teaching skills in the languages of the target groups being served. The materials developed at these centers are field tested by the resource training centers, which provide direct services to LEAs. The materials will then be distributed by the dissemination and assessment centers.

Dissemination and Assessment Centers

These centers function both in supportive and technical leadership roles in providing services to the network of centers. Their primary role is to evaluate, publish, and distribute instructional materials and to disseminate professional information on curriculum, training, human resources, evaluation, and assessment. Their function includes assessing the appropriateness of materials designed for publication and the effectiveness of materials used in programs, as well as overall program assessment with possible identification of successful models.

In 1975, 12 material development centers were awarded a total of $6,270,102. Seven resource training centers were awarded $3,560,583, and $1,525,000 was awarded to dissemination/assessment centers.

Long-range goals of the combined centers include

-- the complete development of appropriate classroom and training materials,

-- the effective dissemination of materials,

-- the effective coordination of activities with SEAs, and
--the effective evaluation of programs and materials.

**DISSEMINATION ACTIVITIES RANGE FROM PROVIDING BASIC INFORMATION TO PROMOTION**

Although the Federal role in funding the development of materials and techniques varies greatly, its role in disseminating information about these materials and techniques is even more diversified. As a general rule the Federal Government funds an educational project not only because it will benefit the schools in which it is being developed, but also because the project could produce improved educational practices which can be applied in other schools across the country. Accordingly, the legislative provisions or regulations governing federally funded projects generally specify that information about the projects will be disseminated. The organizations involved in dissemination activities include LEAs, SEAs, universities, private organizations, and Federal agencies. The activities range from simply identifying a project's existence to packaging products and providing funds to developers for school personnel orientation, training, and consultation.

**Studies to define responsibilities**

Federal involvement in dissemination is so complex and diffused that both NIE and the Office of the Assistant Secretary for Education have been involved in studies to define responsibilities and relationships.

In 1974 NIE funded the Interstate Project on Dissemination, a consortium of seven State educational agencies. This effort addressed

--appropriate roles and relationships that should exist between Federal, State, and local agencies with regard to dissemination functions;

--possible conflicts in Federal legislation and regulations related to dissemination and the key agents responsible for dissemination at the various levels; and

--development of a standard against which a State education agency might examine its dissemination operation to achieve a more integrated and effective operation.
In January 1976 the Project reported to NIE on its examination of Federal legislation and regulations. The dissemination activities addressed in the report include such items as public information activities, reports to the Congress, and dissemination activities related to higher education. Accordingly, the activities discussed are beyond the narrow scope of dissemination activities considered in our review. The following excerpts from the report, however, illustrate the confusion and complexities of Federal dissemination activities.

"A total of 208 dissemination requirements were identified in the legislation and program regulations with 54 agents or agencies assigned responsibility for these activities."

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"One of the discoveries resulting from review of legislation and program regulations was that no definition of dissemination could be found. An examination of the type of dissemination requirements indicated, in addition, that the term was not being employed with any consistency of meaning."

* * * * *

"If a program development or research and development authorization is placed into legislation, it would appear that Congress anticipates the use of information gained through those programs to promote educational improvement. * * * there are 67 instances in which program development is mandated; but no requirements, statutory or regulatory, for dissemination of program products or results exist. There are also 124 instances in which statutes require both development and dissemination, but there are no accompanying program regulations on dissemination included."

* * * * *

"The analysis of the 208 dissemination requirements indicates that responsibility for educational dissemination is highly fragmented. Not surprisingly, there are also conflicting assignments of responsibility for dissemination functions. Instances of particular significance are found in the General Education Provisions Act (P.L. 90-247) and in the Special Projects Act (P.L. 93-380)."
"In the General Education Provisions Act under Section 405, the National Institute of Education is given primary responsibility for dissemination of the products of research and development. In Section 403 of the same act, however, the U.S. Office of Education is given responsibility for dissemination of information to improve educational programs.

"In the Special Projects Act, a series of clearinghouses, one in each of the priority areas, is established to collect and disseminate information. The ERIC [Educational Resources Information Center] system, an ongoing activity first of USOE [Office of Education] and currently of NIE, includes a series of clearinghouses for collecting and disseminating information in relation to a specific program area. No relationship between the two is established in the legislation. Similar conflicts can be identified in statutes involving placement of dissemination responsibilities on several groups, i.e., institutions of higher education, state education agencies, local education agencies, and other grant recipients, without clear delineation of the articulation expected between the levels. Overlaps such as these invariably lead to duplication, confusion, and quite probably to information overload on the part of clients bombarded by information from all sides."

"If an educational requirement is to be implemented in a meaningful way, resources, both financial and human, must be provided both for program expenses and for incentives. In not one instance did the researcher locate an authorizing statute specifically setting aside funds to carry out a dissemination requirement. While there are a number of references relative to funding for dissemination activities, these are phrased in permissive language such as 'funds may be used for * * *.'"

The Assistant Secretary's study has focused on identifying the types and cost of dissemination activities currently supported within the Education Division and on developing a plan for future dissemination activities.

Information furnished by program offices shows that in fiscal year 1976 about $52 million was being expended on dissemination activities in elementary and secondary education. About $12 million of this was for implementation activities, which would include onsite assistance, teacher centers,
training programs, and consultation. The rest was primarily for spreading information about products and ideas and establishing informational exchange activities. An Education Division official told us that this was the first attempt to identify the cost of dissemination activities; therefore, the data might not be accurate and complete.

In addition, a draft report on the study discusses

--the inadequacy of information about the capabilities and activities of the participants engaged in educational dissemination;

--the lack of a comprehensive planning and policy-setting capacity for dissemination within the Education Division brought about primarily from piecemeal legislation mandates which have assigned authority and responsibility to many different people and organizational levels; and

--the lack of mechanism for providing direction and coordination of dissemination activities within the Education Division.

A final report including recommendations to the Assistant Secretary was issued in January 1977.

Most dissemination activities not Federal promotional efforts

As previously stated, the dissemination effort surrounding federally funded materials and techniques involves many activities and strategies. Most, however, would not be considered Federal promotional efforts. Such activities include:

--Dissemination activities that would normally be carried out by a project developer. These activities would normally be a part of any educational research and development project (e.g., publications in professional journals). The extent of dissemination activities would be determined for the most part by the developer. Separate funds for dissemination would not normally be provided under the grant or contract.

--Support for State dissemination activities. Both OE and NIE provide such support. In fiscal year 1975, NIE awarded 15 grants totaling over $1 million—10 grants were for capacity building and the remaining 5 were for special purposes. Capacity-building grants are awarded to States to develop or extend a compre-
hensive dissemination program. Federal support to a State is expected to be provided for up to 5 years.

--Creation and support of clearinghouses and information centers. Although OE funds a number of clearinghouses and centers, such as the Bilingual Dissemination Center and Regional Resource Centers for the Handicapped, NIE funds the largest and most sophisticated--the Educational Resources Information Center. The Educational Resources Information Center, known as ERIC, is a computerized network of clearinghouses for educational research reports, articles, and related materials.

Federal support for promotion of selected projects

The activities which appear to be of a more direct promotional nature are those of the National Diffusion Network. The network was established to make certain that all schools have knowledge of federally funded educational projects that are judged effective. It was started in 1974 with ESEA funds from the Federal discretionary portion of title III, ESEA. About $9 million was awarded to cover the activities for fiscal year 1976. The key elements of the network are

--the Joint Dissemination Review Panel, which selects the projects to be disseminated;

--developer/demonstrators, who provide materials, training, and technical assistance to adopters; and

--State facilitators, who serve as links between demonstrators and potential adopters.

Joint Dissemination Review Panel

The panel, comprised of representatives from NIE and OE, is intended to be a quality control unit for projects, products, or practices which the program offices of the Education Division have funded and want to disseminate broadly. The panel reviews the evidence of effectiveness and decides whether the evidence is sufficient to meet the panel's approval. It also reviews the adequacy of information on educational processes involved, probable costs of replication, and availability of the necessary materials and information for possible replication.

According to an OE official, 142 of the 300 projects submitted for the panel's review had been approved as of
June 1976. Although most projects were funded under title III of ESEA, nine other OE programs and NIE have funded approved projects. A September 1975 catalog of programs approved by the panel states,

"Every product/process offered by the network to schools has been previously approved by an expert review panel ***. Hence, adopting schools are assured, in advance, that the alternatives being offered by the network actually work effectively with children in learning situations."

**Developer/demonstrator**

All approved projects may be disseminated through the network. In addition, 65 are being funded as developer/demonstrator projects. In these projects the developers are supported to carry out a number of activities, including developing and disseminating information packages about their projects; refining and reproducing training and instructional materials related to the programs; and providing demonstration and training programs and technical assistance to personnel of schools implementing the project.

A profile as of March 1975 of the developer/demonstrators, based on the median response to a questionnaire, shows that they allocated 38 percent of their budgets to dissemination activities. Personal presentations were considered to be the most effective means of making LEAs aware of the program. Twenty percent of the budget was used for demonstrations. Demonstrations were provided for the 65 projects to an average of six State facilitators and 52 LEAs and non-public schools.

Twenty-five percent of the total budget covered training expenses. The typical developer/demonstrator conducted nine training sessions (range: 0-35) of approximately 3-1/2 days each. Personnel from an average of 20 LEAs and nonpublic schools received training.

**State facilitators**

State facilitators are funded to promote adoption of approved programs across State lines. In fiscal year 1976, 79 facilitators were to serve as the link between approved programs and schools considering implementing the project. Activities may include

---conducting mass and targeted mailings, educational fairs, personal visits, and telephone consultations;
--arranging for educators to visit developer/demonstrator programs of their choice, regardless of their States; and

--using their funds to bring developer/demonstrators together at one site, where they explain and demonstrate their programs before gatherings of interested educators.

On the average, State facilitators spent 35 percent of their budget on dissemination and 41 percent on facilitating the provision of demonstration and training projects.

As of March 31, 1975, developer/demonstrators or State facilitators had contacted by mailings at least one official in over 16,000 LEAs and 5,000 nonpublic schools and had provided training to personnel in 786 LEAs and 129 nonpublic schools. Of the 8,402 individuals trained, 76 percent were teachers and 15 percent were administrators.

CONCLUSIONS

Available data shows that Federal funding for curriculum development and dissemination and for other educational techniques, such as behavior modification, is significant. Federal funding is provided through a relatively large number of programs and activities with varying degrees of Federal involvement and control. In most cases, however, the Federal Government's control over the project is minimal. Furthermore, for many programs, complete and accurate data on what is being funded would only be available at the local project level. Accordingly, data needed to accurately assess the impact of Federal funding on materials and techniques used in local schools does not exist.
Concerns about curriculum materials and behavior modification techniques used in local schools are often accompanied by concerns about the Federal role in funding the development, dissemination, and promotion of educational materials. These concerns generally arise from the belief that Federal funding of these activities encroaches on local curriculum decisions.

Although certain controls over Federal influence do exist, these controls do not resolve all concerns about Federal involvement. The issues, problems, and concerns related to Federal involvement were summarized in a series of questions developed by a National Institute of Education task force. Answers to these questions could provide a more comprehensive and coordinated policy governing Federal funding for development and dissemination of curriculum materials.

**CONTROLS OVER FEDERAL INFLUENCE**

According to officials of several agencies, although the Federal Government does fund the development and dissemination of materials and techniques, decisions on whether these materials are used in local schools are made by local educational agencies. In support, officials cite section 432 of the General Education Provisions Act, which specifies that no department, agency, officer, or employee of the United States is authorized to exercise any direction, supervision, or control over the selection of textbooks or other printed or published instructional materials by any educational institute or school system. Officials said that federally funded projects are those which educators have determined are needed. Essentially, the purpose of Federal funding, according to these officials, is to provide a wide variety of quality products.

In addition, other provisions of federally funded programs can serve to decrease the Federal influence and increase the role of State and local officials and parents. Examples of such provisions are:

---Requirements in many of the programs that project proposals must be submitted by an LEA.

---Requirements that applications for Federal assistance under title III (innovative projects) and title VII (bilingual education), among others, must be available
for public input. At least 7 days before submission, parents and other community members may testify or otherwise comment on the application.

--Legislative requirements that parent and community involvement is required. Local advisory panels must be composed of parents whose children will be served by title I Elementary and Secondary Education Act projects. Similarly, an advisory council composed of members of the ethnic groups to be served is required under provisions in title IX ESEA (Ethnic Heritage Studies).

When asked if mechanisms exist at the Federal level for protecting students from unwanted value changes or undesirable materials, Office of Education officials stated that they were not formally involved in these matters. They felt that placing restrictions on the content of federally sponsored materials would involve the Federal Government in a role of determining what local schools can use. They added that because selection of materials was a local decision, the Federal Government avoids becoming involved in local controversies about materials even if they were developed with Federal funds.

The Department of Health, Education, and Welfare's regulations concerning the protection of human subjects in research, development, and related activities have occasionally been identified by individuals and Federal officials as applicable to the protection of students. These regulations, which apply to activities supported by HEW grants and contracts, are designed to protect research subjects who may be exposed to injury—including physical, psychological, or social injury. Generally the responsibility for protection of subjects at risk lies with grantees or contractors. They must assure HEW that the regulations will be complied with and establish a board to review the activity. They also have the prime responsibility for determining whether individuals are at risk.

Although the regulations relate to all HEW grants and contracts, OE officials believe that the regulations have limited impact on most educational projects in classrooms. One reason is that an individual is at risk, according to HEW regulations, only in activities which depart from established and accepted methods necessary to meet the individual's needs or which increase the ordinary risks of daily life. Accordingly, these regulations in their present form would not appear to offer much protection to citizens concerned about the materials and techniques being used in federally funded educational projects.
ISSUES RELATED TO FEDERAL ROLE

Although the Federal Government's direct control and influence over specific materials and techniques used in classrooms appears to be limited by the previously discussed procedures, they do not adequately resolve all concerns. Expressed concerns include:

-- Federal funding decreases community control of schools because the schools' responsiveness and accountability to local desires is lessened when funds are available from outside sources.

-- The decline in academic achievement scores and shift in emphasis from cognitive to affective skills can be traced to Federal involvement.

-- Federal support for implementation of materials constitutes unfair competition.

In August 1975 a group of outside consultants presented a report to the NIE Director suggesting more public discussion on the Federal role in curriculum development. In response, the National Council on Educational Research requested the NIE Director to prepare for public discussion of this issue and for making recommendations to the Federal Government on future funding policy in this area.

The NIE Curriculum Development Task Force, which was given responsibility for the activities required to respond to this request, began studying related documents and interviewing representatives of organizations having an interest in curriculum development. It found that issues related to Federal involvement in curriculum development were major concerns to most interviewees. The January 1976 task force report presented the following questions about Federal involvement. The questions are intended to show the relationships among the issues, problems, and concerns that emerged from their interviews and readings. The task force found that positions on the issues varied widely. For example, the positions on Federal involvement ranged from the belief that Federal support has benefited the Nation and should be increased to the belief that Federal interference has harmed education and should be terminated immediately.

"a. What, if any, are the federal government's rights and responsibilities in curriculum development?

"b. Does the federal government have any unique resources that must or should be used in curriculum development? (For example, should
federal agencies sponsor activities that require the involvement of the nation's pre-eminent scholars because the states, local agencies, and the private sector cannot be expected to draw together such persons?"

"* Is the federal government responsible for providing leadership in curriculum development or is it responsible for responding to public demands or does it have no rightful responsibility or authority for curriculum development (i.e., should it get out of curriculum development altogether)?

"* Is the federal government responsible for determining the 'national interest' and national priorities in curriculum development and for ensuring that such interests and priorities are reflected in the curricula that are developed?

- If so, how should the 'national interest' and national priorities be determined?

- How should considerations of the 'national interest' and the need for some national unity be balanced with the demands of local diversity and pluralism?"

"* How should different sources of needs analysis (e.g., the views of the nation's 'best minds' and the demands of local schools and communities) be balanced?

"* Is the federal government responsible for assessing the nation's long-term needs and for sponsoring long-term projects to anticipate and meet such needs?"

"* Does the federal government have (or share) responsibility for ensuring that the curricula that are developed and used in schools are 'good'? Who should decide what constitutes a 'good' curriculum?

"* Is the federal government responsible for providing evaluations ('validations') of the curricula it sponsors or should it just make such curricula available for others to judge and adopt or reject?

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"b. What are the dangers of federal involvement in curriculum development?

- Does federal support necessarily lead to federal control?
- Does federal involvement introduce a threat, or inevitability, of a 'national curriculum'?
- Does federal support of the implementation of curricula it has sponsored constitute the imposition of federal values or views? Does such support constitute 'unfair competition' for the private sector?
- At what point does federal involvement become infringement upon local rights?"

c. In which aspects, activities, or phases of curriculum development should the federal government play a part?

- Should the federal government coordinate curriculum development activities around the country in order to reduce duplication of effort?
- In which phases or aspects of curriculum development should the federal government participate? in the analysis of curriculum needs? in funding? in the conceptualization of new programs? in research designed to provide a basis for development? in the actual development of learning activities, guides, texts, plans, and other materials? in evaluation? in dissemination? in implementation? in marketing? in other phases or aspects?
- Should the federal government leave all curriculum development to the local sector or should it fund the development of only 'thin market' materials or should it fund the development of only 'exemplary' programs or modules (to be adapted for local use or used as models for development by others) or should it fund only the development of
curricular alternatives in order to allow more local choice or should it fund the development of a variety of programs in all subject areas or should it fund programs only in areas considered to be top 'national priorities'?

Should the federal government sponsor the dissemination and implementation of curricula it sponsors, should it sponsor the dissemination and implementation of other curricula, or should it leave all dissemination and implementation to the private and local sectors?

Should the federal government support teacher training and other staff development activities that are deemed important concomitants to curriculum adoption and implementation or should it leave such activities to the private and local sectors?

If the federal government should continue to fund curriculum development, how should it decide who to fund?

Should the federal government enforce protection of human subjects' regulations when new ('experimental') curricula are being tried out with students?

How and to what extent should the federal government monitor the curriculum development projects it funds?

Can and should federal agencies assist in strengthening local capabilities for curriculum development? Should the federal government find ways of making local people more capable of developing their own curricula instead of continuing to provide 'packaged' curricula for local people to choose from and/or adapt?

d. What has the federal government done in curriculum development in the past and what can be learned from this experience?

Are the curricula that the federal government has sponsored biased? (i.e., Has the government sponsored too many of some types of programs, philosophies, and approaches and too few of others?)
Are government-sponsored curricula contributing to declining test scores?

Are there weaknesses in the approaches federal agencies have used in determining the needs for new curricula?

Are there weaknesses in the approaches federal agencies have used in deciding who to fund in curriculum development? Is the government creating and funding 'career curriculum innovators'?

Since publication of the January 1976 report, the task force has continued its activities. One step it took was the development of public discussion guides which were given to members of various professional associations and other organizations for their opinions. Some questions in the first guide were structured to obtain a definition of curriculum. Other issues discussed in the guides are how NIE should divide its efforts among conducting research, developing new products, and supporting implementation; how much influence NIE should exert in curriculum improvement; and who should be involved in such planning.

In addition, the task force commissioned a panel of scholars to prepare papers on curriculum development and a national panel of policy analysts to debate the merits of alternative curriculum policies for NIE.

The task force's work is to provide sufficient material for a report to the National Council on Educational Research explaining:

--the nature of the important current issues in curriculum development and Federal curriculum policy;

--the various positions and arguments on each issue;

--the position of specific groups (e.g., students, teachers, parents, and administrators) on each issue;

--the alternative policy stances for NIE and the assets and liabilities of each; and

--policy recommendations.

CONCLUSIONS

A coordinated and more comprehensive policy on the Federal Government's involvement in curriculum might be
desirable. The lack of such a policy has contributed to the current piecemeal and diffused efforts in curriculum development and dissemination and may also be contributing to public confusion and concern about Federal involvement in this area.

In addition, the process of formulating policies could bring about a national forum on curriculum materials. Because of the controversies which exist, such a forum would give participants from all levels a chance to have a voice in determining the various roles they should play.

The questions developed by the NIE Curriculum Development Task Force relating to what the Federal Government has done in curriculum development and what unique resources it has could be answered by a detailed assessment of current and past Federal involvement. Such an assessment would be difficult because of the number of programs involved and the various Federal roles. The difficulties would be compounded further by the unavailability of data on what the Federal Government has supported.

This lack of data was apparent throughout our review. In addition, the Education Division has encountered similar difficulties in developing adequate data. The difficulties in dissemination were discussed earlier. Difficulties also have been encountered in identifying assisted projects. In this regard section 424 of the General Education Provisions Act, enacted in August 1974, requires the Assistant Secretary to publish annually a compilation of all innovative projects assisted under programs administered by the Education Division. The compilation is required to be indexed according to subject, descriptive terms, and locations. According to Education Division officials, the initial compilation was to be available in January 1976. However, because of unavailability of data about assisted innovative programs, the compilation has not been prepared, nor has a target date been established.

The answers to other questions listed by the NIE Curriculum Development Task Force would seem to provide a suitable basis for formulating policies on the Federal Government's involvement in curriculum materials. These questions include those addressing the Federal Government's rights and responsibilities and those related to the role of the Federal Government in the various activities or phases of curriculum development. Other listed questions, such as "Does Federal support necessarily lead to Federal control?" are philosophical and cannot be answered through an objective evaluation. Such questions, however, must be fully considered in the formulation of a policy.
MATTER FOR CONSIDERATION
BY THE CONGRESS

If the Congress desires to formulate a policy defining the Federal role in developing, disseminating, and implementing curriculum materials, it should direct the Secretary of HEW to make a detailed assessment of past and current Federal efforts and of various participants' capabilities in developing and disseminating curriculum materials. Such an assessment is a prerequisite to an informed decision on the future Federal role.
INFORMATION ON MAJOR FEDERAL PROGRAMS

FUNDING DEVELOPMENT OF CURRICULUM MATERIALS

AND BEHAVIOR MODIFICATION TECHNIQUES

OE - Education of Disadvantaged Children

Title I of ESEA, as amended (20 U.S.C. 241a, et seq. (Supp. V, 1975)), provides Federal grants on a formula basis to SEAs, State agencies, and LEAs for compensatory programs for educationally deprived children. State educational agencies suballocate funds to LEAs serving areas with concentrations of children from low-income families. LEAs are to expand and improve their programs by various means which contribute to meeting special educational needs of educationally deprived children. The intent of the law is to let SEAs and LEAs--the agencies that are most aware of the needs of educationally deprived children--design and implement projects that will match available resources to local needs.

Priority attention in operating title I programs is to be given to improvements in the basic skills of reading and mathematics and to related support activities to eliminate physical, emotional, or social problems that impede the ability to acquire such skills.

In addition, title I provides funds to State and local educational agencies to

--support projects involving children with various handicaps;

--provide educational and support services to accommodate the unique and specific needs of migrant students who miss the systematically sequenced and sustained educational programs because of relocation; and

--provide services for neglected and delinquent children in State institutions as well as funding local programs for such children in local institutions or schools.

Although title I funds reach only 12 percent of U.S. students, 52 percent of the elementary and secondary schools (about 86 percent of all public school districts) have received funds. From its beginning in 1965 through fiscal year 1976, approximately $16 billion has been appropriated for local and
State programs for educationally deprived children. In fiscal year 1975, almost $1.9 billion was appropriated for title I programs. Of this amount about $88 million was used for the program for handicapped, $92 million for the migrant program, and $27 million for neglected and delinquent programs. The remaining $1.6 billion was spent for program administration and local projects for educationally deprived children.

Under title I, programs in about 14,000 school districts are financed. Because LEAs have the prime responsibility for these projects, adequate data to identify the extent to which curriculum materials and behavior modification techniques are developed was not available to OE. Obtaining such data would probably require contacting LEAs. Because most projects focus on direct educational services, many could be involved in developing curriculum materials and using behavior modification techniques.

Abstracts were available at OE headquarters on 33 local projects developed with title I funds and identified by the Education Division as exemplary projects for national dissemination. One of the bases for selection of these projects was that they involved a definitive program—materials or techniques—that would allow successful implementation by other schools. Information in the abstracts indicated that almost all of these projects include some development of curriculum materials. In addition, five had components of behavior modification. Examples of such projects as described by project abstracts follow:

---One project included an approach to classroom management through systematic behavioral reinforcement for academic and nonacademic behavioral accomplishments.

---Another project was directed at raising the level of achievement in both word recognition and reading comprehension. It involved a highly structured approach using individual task sheets. Candies were given as rewards for each job completed. In addition, a case study description of 10 migrant education projects indicated these projects include development of curriculum materials and behavior modification techniques. One project used token economies to augment the student's incentive for learning a specially constructed bilingual curriculum. Another project included the development of a series of transportable tapes and lesson plans to provide continuity of educational experiences.
OE - Supplementary Centers and Services

Under title III of ESEA (20 U.S.C. 841, et seq. (Supp. V, 1975)), funds are allocated to States to support innovative educational projects. Each State receives a basic equal allotment. One-half of the remaining funds is allotted on the basis of the State elementary and secondary school population and the other half on the basis of the total State population. An innovative project is one which offers a new educational approach to the geographical area and is designed to demonstrate a solution to a specific need. These projects are designed to

"** (1) stimulate and assist in the provision of vitally needed educational services not available in sufficient quantity or quality; (2) develop exemplary educational programs to serve as models for regular school programs; and (3) assist the States in establishing and maintaining programs of guidance, counseling, and testing.

From its beginning in 1965 through fiscal year 1975, about $1.4 billion has been appropriated for title III projects.

Title III was originally authorized as a program in which OE selected the projects and provided funds directly to LEAs. In 1968, 3 years after title III was enacted, the law was revised to give States primary responsibility for selecting and funding projects. The basic intent of the law was not changed, but Federal influence over the priorities and management of title III was diminished. From 1968 through 1971 (except for a period of about 2 years when States administered all funds), 25 percent of title III funds were administered directly by OE and 75 percent by States. From 1971 to fiscal year 1976, 15 percent of title III funds were administered by OE and 85 percent by the States. 1/

** Federally administered funds

OE has emphasized projects which focus on the dissemination and diffusion of successful educational programs and

1/For fiscal year 1976, title III is consolidated under title IV part C by Public Law 93-380. Under this authority $63,781,500 has been appropriated, 50 percent of which is available to States. (According to an OE official, the functions presently within the 15 percent of title III funds administered by OE would likely continue in some form within individual States during fiscal year 1976.)
practices in areas of national concern. These projects are part of the National Diffusion Network. (See p. 24). In fiscal year 1975 these dissemination activities accounted for about half of the 260 projects funded under the OE-administered portion of title III.

The remaining fiscal year 1975 funds were used to support innovative projects in (1) management techniques for school administration, (2) early childhood education, (3) education of handicapped children, (4) educational services concerning child abuse, and (5) special instruction for children with deficiencies in mathematics.

We reviewed project files on the 13 innovative projects for handicapped children. Six files contained terminology relevant to the use of behavior modification techniques. One project, for example, used classroom management techniques, such as written agreements between students and teachers, and employed principles of reinforcement. Another project used a behavior modification system as well as activities in value clarification and self-awareness to give students experiences in socialization skills. Development of curriculum materials was apparent in 2 of the 13 project files. One project developed instructional sequences in 14 skill areas for handicapped children, and the other planned to develop 10 instructional packages for handicapped children.

Two of the three files for child abuse projects show that instructional materials were developed. One of these projects involved the development of four separate instructional packages of slides; tapes; an instructional manual; and supplementary materials for administrators, teachers, citizens, and students. The other involved the development of a curriculum to be used in teaching students to understand child maltreatment.

The four active mathematics projects involved special instructional services to disadvantaged elementary students. The preparation of curriculum guides for mathematics teachers appeared to be the main form of curriculum development.

**State-administered funds**

Under the State-administered portion of title III (85 percent of the funds), each State prepares an annual plan which informs OE of the State's policies in administering its share of title III funds. In general, local school districts submit project proposals for title III grants to the SEA. A State Advisory Council, representing the cultural
and educational resources within the State, advises the SEA on the merits of the proposals. Using this advice and the criteria listed in the State plan, the SEA approves selected projects.

OE statistics show that under the State-administered portion over 1,600 demonstration projects involving 7 million students were funded in fiscal year 1973. The number of projects for fiscal years 1974 and 1975 was not readily available from OE because State annual reports have not been synthesized for those years. However, about $133 million in fiscal year 1974 and about $92 million in fiscal year 1975 was administered by the States.

Title III officials told us that curriculum development or the use of behavior modification techniques may take place within local projects, but there is no centralized source of such information.

To determine the extent to which local projects include curriculum development or behavior modification, we reviewed project abstracts within five State annual reports for fiscal year 1975. Of 144 active projects, 83 abstracts contained terminology relevant to development of curriculum materials and about 8 abstracts referred to the use of behavior modification techniques.

Career education materials were developed in projects in all five States. Materials also were created for instruction in other subjects, such as reading, mathematics, environmental education, speech correction, metric education, and space science. Students and teachers were served through handbooks, slides, instructional programs, library resources, and community activities.

Eight project abstracts contained terminology relevant to the use of behavior modification techniques. One project used individualized remediation, diagnostic materials, and behavior modification activities with students having classroom behavioral problems. Another project trained teachers in behavior modification techniques for use within multilevel (grades 4-12) language arts and mathematics classes. In addition to the projects involving behavior modification techniques, 11 other projects involved such areas as value clarification, enhancement of self-esteem, and social skills.
OE - Bilingual Education Program

Under title VII of ESEA, as amended (20 U.S.C. 880b, et seq. (Supp. V, 1975)), funds are provided for the bilingual education program, established to meet the special educational needs of limited English-speaking children. Among other things, funds are provided to LEAs to design, develop, and implement approaches for bilingual education.

The Congress, intending the program to be a research and demonstration program, authorized grants to

--test the effectiveness of bilingual education approaches through research or pilot projects,
--train teachers in bilingual education programs,
--develop and disseminate instructional materials, and
--establish and operate bilingual education programs.

Because title VII was established as a demonstration program, OE originally intended that LEAs would absorb project costs after 5 years. However, beginning in school year 1974-75, funding of projects could extend beyond 5 years where exceptional potential for achieving program goals was demonstrated, but could not be funded indefinitely.

Federal funds totaling $374.9 million were appropriated for the program from its inception through fiscal year 1976. What portion of these funds has been used for developing instructional material is unknown. However, most projects apparently are engaged to some extent in developing instructional materials.

Initial program guidelines suggested that LEAs acquire, adopt, and develop material. Our review of bilingual education projects in school year 1973-74 included work at 16 selected projects. These projects spent $240,000 on these activities in school year 1973-74, giving materials development a relatively low priority. For example, 11 allocated 10 percent or less of their title VII budgets to materials development, with 8 allocating less than 5 percent.

These 16 projects used various methods to provide students with materials. Some materials were adapted from commercial sources, and others were developed by teachers and aides. Seven projects employed curriculum specialists to assist in this effort. Although most materials adapted or developed were supplementary, there were a few notable exceptions. For instance, one project completed 14 texts covering subjects such as social studies and language arts.

In addition to curriculum materials which might be developed in individual projects, OE has funded national projects specifically to provide LEAs with the material necessary to implement bilingual education programs. Before fiscal year 1975 three such projects were funded. The Education Amendments of 1974 underscored the importance of appropriate instructional materials. The law directs OE and NIE to "* * * develop and disseminate instructional materials and equipment suitable for use in bilingual education programs."

For school year 1975-76 OE provided about $4.7 million for nine materials development centers to work on the development of a variety of needed instructional materials. Spanish, French, Portuguese, Greek, Italian, native American, and several Asian languages are included. Additionally, OE provided about $1.5 million for three assessment-dissemination centers to evaluate the products of the materials development centers.

Information on the three projects funded before fiscal year 1975 follows.

Spanish Curricula Development Center

This project, which was started in 1970, is to develop curriculums to support primary level grades (1-3) in Spanish-English bilingual education programs. To determine LEA needs, the center made a survey and found curriculums were desired in five subjects: language arts, social science, fine arts, math/science, and Spanish-as-a-second-language. The material for each subject, including texts, teachers' guides, and test instruments, is developed by center personnel and sent to selected LEAs for field testing and comment. The center then revises the material to correspond to the dialects and cultural characteristics of the three target populations (Mexican, Puerto Rican, and Cuban) and sends it to the Dissemination Center for Bilingual-Bicultural Education.
As of December 1975, the material for grades one and two had been field tested, revised, and sent to the dissemination center. The material for grade three had been field tested and revised, and the material for grade four was being field tested. According to dissemination center records, 52 of 137 title VII Spanish-English projects, which include first grade, had purchased some material as of August 1974.

Materials acquisition project

This project locates and disseminates Spanish and Portuguese instructional materials published in foreign countries for elementary and secondary grades. As of June 1975, project personnel had accumulated an inventory of over 36,000 items of instructional material. The project uses various activities to place material in bilingual classrooms. For example, teachers from participating LEAs select material from the inventory and evaluate it, determining whether the material is appropriate for title VII participants and, if not, indicating necessary revisions.

During fiscal years 1972-74, bilingual education projects receiving material increased from 26 to 106 to 129, respectively. In school year 1973-74 the projects filled purchase orders valued at more than $300,000. Numerous workshops and meetings have been held to help teachers use and evaluate the material, and from 1972 to 1975 over 2,000 teachers participated.

Dissemination Center

The Dissemination Center evaluates instructional material submitted by title VII projects to determine whether it is worthy of dissemination to LEAs. As of December 1975, the Center had on hand manuscripts of over 1,000 unpublished materials. The Dissemination Center Director estimates that only 10 to 15 percent of the material received is suitable for dissemination. Materials are rejected primarily because they (1) duplicate existing material, (2) are not universally applicable, or (3) are not developed according to generally accepted text development procedures. With few exceptions, material is not formally field tested before dissemination.

LEAs purchase at cost a wide variety of material, most of which is supplemental. According to a Center official, in school year 1974-75 over 191,000 items were disseminated.
OE - Programs Authorized by Title VIII of ESEA

Title VIII of ESEA authorizes support for diverse educational activities. A brief discussion of those involving development of curriculum materials and behavior modification techniques follows.

Dropout Prevention


Funds are granted to LEAs to carry out innovative demonstration projects aimed at reducing the dropout rate in schools with high dropout rates and with high percentages of students from low-income families.

Nineteen projects and two 1-year special projects have been funded at a total of $44 million from 1969 to 1975; $2 million was available for projects in fiscal year 1976.

According to the Commissioner of Education's Annual Report for 1975, curriculum revision was an activity common to all projects. We reviewed abstracts of 12 projects in a handbook of practices found useful in reducing the dropout rate. Eight of 12 projects included curriculum development. Examples included the preparation of special materials for meeting the identified needs of students; the development of an innovative industrial arts curriculum; and the establishment of a humanistic curriculum aimed at personal, social, and educational rehabilitation. Of the 12 projects, one appeared to use behavior modification techniques.

Health and Nutrition Education


The purpose of this program is to demonstrate ways in which the gap between needs and delivery of nutrition/health services for low-income children can be narrowed by coordinating, existing health, health related, and educational resources at the local level.

About $9.3 million has been appropriated since the program's inception in fiscal year 1971 through fiscal year 1975. This section was consolidated under title IV by the Education Amendments of 1974 with grants totaling $950,000 in fiscal year 1976.
Twenty projects had been funded through fiscal year 1975. We reviewed 18 available project files for indications of the development of curriculum materials or the use of behavior modification techniques. The use of behavior modification techniques was not evident, but evidence of curriculum development appeared in 15 files. Developed materials often took the form of lesson plans and teacher guides in nutrition education rather than full-scale instructional materials for students. For example, one project was to prepare and publish two curriculum guides for classroom teachers of 5- to 13-year-olds, including teaching suggestions for use in health, nutrition, mental health, and learning problems. Another project conducted inservice workshops to "select and prepare instructional materials." A third project planned to develop 21 units for grades 1-6 for topics such as grooming, sleep, and skin care.

According to the program Director, some projects informally disseminate materials. He estimated that two curriculum guidebooks developed in the first project discussed above had been reviewed widely and are being used in about 150 school districts throughout the State in which it was developed.

Consumer Education

The purposes of the consumer education program are:

--To encourage and support the development of new, improved curriculums to prepare consumers for participation in the marketplace, to demonstrate the use of such curriculums in model educational programs, and to evaluate their effectiveness.

--To provide support for the initiation and maintenance of programs in consumer education at the elementary, secondary, and higher education levels.

--To disseminate and circulate materials and other information for use in educational programs throughout the Nation.

--To provide training programs for teachers and other educational personnel; public service personnel; community and labor leaders and employees; and government employees at State, Federal, and local levels.

--To provide for community consumer education programs.
--To provide for preparation and distribution of materials by mass media in dealing with consumer education.

In fiscal year 1976, appropriations totaled about $3.1 million. Of the 66 proposals pending final approval in fiscal year 1976, reviewers categorized 18 proposals as curriculum development activities and 35 as materials development.

We reviewed 10 project files for indications of curriculum development or the use of behavior modification techniques. There was no evidence that behavior modification techniques were being used. Nine of the 10 projects involved the development of consumer education materials. For example, one project was to develop four training modules aimed at building competencies to plan and develop a consumer's education program. Another project was preparing student manuals and a trainer's guidebook containing curriculum. A third project was to develop multidisciplinary materials for grades 1-6 on energy consumption and conservation.

OE - Ethnic Heritage Studies

The Ethnic Heritage Studies Program is administered under the provisions of title IX of ESEA, as amended (20 U.S.C. 900a, et seq. (Supp. V, 1975)). The program is conducted with the assistance of a 15-member National Advisory Council that provides guidance concerning general policies and priorities for ethnic heritage studies.

The program seeks to help students learn more about the nature and role of ethnicity in their lives and the lives of others and to promote effective interactions among members of the various ethnic groups. The program authorizes grants with public and private nonprofit educational organizations and institutions and SEAs and LEAs to assist in planning, developing, and operating the programs.

From program inception in fiscal year 1974 through fiscal year 1976, the first priority of the program was the development of curriculum material. 1/ Materials developed are to

1/According to program officials, in fiscal year 1977, training projects would be the first priority with the development of curriculum materials becoming second priority.
be field tested before use and adoption by local schools. Other program concerns were training in ethnic studies and dissemination to encourage extensive and effective use of materials. Projects that focus on training could include preparation of teachers' manuals and guides, revision of teacher education programs and workshops, and classroom demonstrations of methods and material. Dissemination projects could include developing national or regional dissemination centers.

Every project must include plans for cooperative activities with persons and organizations that have similar interests in ethnic studies. Each proposal must give strong evidence of community-based cooperation, including creation of an advisory council. These controls have been instituted to make sure that projects are responsive to local needs.

Following the determination of need and focus, applicants are to prepare a solid rationale for the approach to be taken, clear objectives, and appropriate strategies for achieving and evaluating them. After initial screening by OE, consultant panels evaluate the proposals. The panelists have expertise and experience in ethnicity, curriculum development, training, dissemination, and community activities. Their task is to evaluate each application, using about 20 different criteria, and to recommend projects for funding. Each panel recommends a slate of projects for support. This slate, as well as suggestions by the panels for alterations in project plan or scope, is used by OE in selecting proposals for funding.

Funds awarded may be used to cover all or part of the cost of establishing and carrying out the programs, including the cost of research materials and resources, academic consultants, staff training, and project evaluation. Funds may also be used to provide stipends (in amounts determined in accordance with regulations of the Commissioner) to individuals receiving training as part of such programs, including allowances for dependents.

Since inception of the program in fiscal year 1974 through fiscal year 1976, $5,975,000 has been appropriated. During fiscal year 1975, 49 grants averaging $37,000 were made in support of programs in 32 States and the District of Columbia. Program officials estimate that about 50 percent of the grants were awarded for development of curriculum materials, 35 percent for training, and 15 percent for dissemination.
Examples of projects funded in fiscal year 1975 follow.

--One project will develop (1) teacher resource packets compiled from existing ethnic heritage curriculum materials and (2) a staff development guide that can be adapted by local school units to meet their own particular needs. Materials will focus primarily on a humanities-based approach to a study of the cultural backgrounds of black, Spanish, Greek, oriental, and Jewish Americans.

--Another project consists of (1) collecting materials developed by title IX projects, national and community ethnic associations, and schools and community work groups, (2) critiquing existing curriculums materials, (3) editing materials into four packets, and (4) disseminating the packets.

--At a third project the public schools will compile the beginning of the city's ethnic history using representatives from the ethnic groups in the area--not outside experts. These histories will form the basis for developing classroom instructional materials. As materials are developed they will be field tested in various school settings.

OE - Indian Education

The Indian Education Act, as amended (20 U.S.C. 241aa-241ff, 887c-887c-2 (Supp. V, 1975)), authorizes two programs which provide funds for developing curriculum materials for public schools. One program is authorized by part A, the other program by part B. The Office of Indian Education in OE administers these programs.

Part A - formula grants

Part A provides for grants on a formula basis to LEAs. Ten percent of part A funds may be allotted to Indian-controlled schools on or near reservations. Activities authorized include:

1. Planning the development of programs to meet the special educational needs of Indian children, including pilot projects to test program effectiveness.

2. Establishing and operating programs, including minor classroom remodeling and acquisition of necessary equipment.
Funds from these grants are also intended to provide training of teachers and teacher aides in the basic skill areas of reading and mathematics; new supportive services, including home liaison and guidance and counseling services; and bilingual/bicultural activities.

Since part A's inception in fiscal year 1973, $96.5 million has been appropriated through fiscal year 1976. In fiscal year 1975, 845 public elementary and secondary school districts received $22.7 million and 25 Indian-controlled schools received $2.2 million.

An OE progress report of Indian education activities noted that the development of Indian studies curriculums, as well as general academic curriculums or materials, was among the most often proposed objectives by part A applicants in fiscal year 1974.

**Part B - discretionary grants**

The purpose of part B is to provide discretionary grants to Indian tribes and Indian organizations, as well as to SEAs and LEAs. Activities supported include:

1. Demonstration projects for improving educational opportunities, such as bilingual/bicultural programs.

2. Activities to stimulate provision of educational services not adequately available to Indian children, such as guidance or remedial programs.

3. Teacher training programs to improve qualifications of persons serving Indian children.

4. Activities to encourage the dissemination of information on educational resources available to Indian children and the evaluation of the effectiveness of educational programs which may offer opportunities to Indian children.

Applicants for part B funds must demonstrate that parents and persons from the Indian community are involved in the development, operation, and evaluation of projects. Grants are made upon receipt and approval of proposals. Since its inception in 1973 through fiscal year 1976, $45 million has been appropriated under part B. In 1975, 148 projects in 28 States received nearly $12 million.
OE officials stated that most projects would involve the development of curriculum materials to some degree. Our review of selected project files showed that curriculum development was a major element in some projects. One project was developing educational materials for grades 9-12 on Indian tribes' heritage, while another project involved developing materials based on both Indian folklore and contemporary Indian studies. A third project planned a bilingual/bicultural curriculum guide for kindergarten through the eighth grade in a certain Indian tribe, and a fourth project was developing a course on Indian tribal government for Indian students. We found no evidence that behavior modification techniques were being used in any of the projects.

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An immediate goal of the Office of Indian Education related to dissemination is to develop a public school impact network to insure the transfer of successful educational practices from the model and demonstration stages to schools. One project has prepared a data base to make available to the Indian community information concerning materials that the project has received and reviewed. Materials are coded by title, tribe of author/artist, and intended audience.

**OE - Follow Through Program**

Follow Through is a program for children in kindergarten through the third grade designed primarily to build upon gains made by children from low-income families previously enrolled in Head Start or similar preschool programs. Follow Through was authorized in 1967 under title II of the Economic Opportunity Act of 1964, as amended (current version at 42 U.S.C. 2921, et seq. (Supp. V, 1975)), as a service program. It uses school, community, and family resources in meeting the educational, physical, psychological, and social needs of children.

The first appropriation for Follow Through was $15 million and was to cover 2 years of operation. Because this amount would serve only a fraction of eligible preschool children, the program was changed during school year 1967-68 from a service program to an experimental program. A major emphasis, therefore, has been on assessing the effectiveness of different approaches for educating young children from low-income families.
The Follow Through experimental program is one of planned variation, i.e., different approaches for educating young children from low-income families have been developed and implemented in this program. OE initially identified 14 educational approaches for use by LEAs and in school year 1968-69, OE required LEAs entering the program to select and implement one of these approaches. LEAs that had entered the program in 1967-68 were encouraged, but not required, to select one of the approaches. Since that time, additional approaches have been added.

During school year 1975-76, 20 approaches were being implemented in Follow Through projects throughout the Nation. They generally conformed to one of the following groups: (1) highly structured approaches emphasizing academic skills in reading and arithmetic, (2) approaches emphasizing emotional-social development and encouraging exploration and discovery in academic areas, (3) approaches stressing cognitive thinking through question asking and answering, problem solving, and creative writing, and (4) approaches focusing on preparing parents to improve the education and development of their children.

The approaches were developed primarily by colleges, universities, and private educational research organizations. These institutions, referred to as sponsors, contracted with OE and LEAs to provide curriculum materials, teacher training, and other assistance needed to implement the approaches in the classrooms. OE provides support to Follow Through sponsors primarily through grants.

In selecting local project sites to implement the approaches, OE asked State educational agencies and State economic opportunity offices to nominate communities to participate in Follow Through. OE then invited a number of nominated communities to submit project applications for funds and, on the basis of these applications, selected communities to participate. The grants were made primarily to LEAs. The LEAs began their projects in the entry grade of school (either kindergarten or first grade) and added a new grade each year thereafter through third grade.

Over $474 million has been appropriated for the program since its inception in 1967 through fiscal year 1976. During school year 1975-76, the sponsors were provided about $6.9 million for approach development and implementation.
Support provided to the 165 LEAs implementing the approaches was over $43 million. 1/

OE officials said all approaches have included the development of curriculum materials. Although sponsor and LEA revisions of curriculum materials have probably been a continuing process, most of the materials were developed during the early phases of the program. Recent funding has been primarily for guaranteeing successful implementation and operation of the approaches in selected LEAs.

One additional effort supported by Follow Through is an evaluation by a private firm designed to identify which approaches are producing educationally significant gains. An OE official stated that based on these results and a review by an OE panel, several of the more successful approaches would be selected for dissemination to LEAs across the country.

According to an OE official, behavior modification techniques would be in use in several of the approaches. In brief descriptions of the approaches, behavior modification techniques are specifically mentioned in two approaches. One approach, which has been implemented in 13 school districts, is based on experimental analysis of behavior and uses a token reward system to provide precise, positive reinforcement of desired behavior. Initial emphasis of this approach is in developing social and classroom skills followed by increased emphasis on core subjects.

OE - Environmental Education

The Congress found there was a poor understanding of this Nation's environment and ecological balance and that adequate resources for educating people in these areas did not exist. Thus, the Environmental Education Act (20 U.S.C. 1531, et seq. (Supp. V, 1975)), authorized OE to administer

"** a program of making grants to, and contracts with, institutions of higher education, State and local educational agencies, regional educational research organizations, and other public and private agencies, organizations, and institutions (including libraries and museums)

1/A few projects which preceded the selection of the approaches have continued to operate as self-sponsored without adopting an approach.
to support research, demonstration, and pilot projects designed to educate the public on the problems of environmental quality and ecological balance."

Projects funded under the program can encompass such activities as:

--- Development of curriculum materials.
--- Support of environmental education at the elementary and secondary school levels.
--- Dissemination of curriculum materials and other information for use in educational programs.
--- Support of training programs for teachers; educational personnel; public service personnel; community industrial, labor, and business leaders and employees; and all levels of government employees.
--- Support of community education programs and outdoor study centers in environmental preservation and ecology.
--- Preparation and distribution of environmental and ecological materials by mass media.
--- Demonstration, testing, and evaluation of any of the above environmental and ecological education activities, whether or not supported by the act.

Grants are awarded on a competitive basis; an announcement in the Federal Register calls for project proposals to be submitted for the approval of the Commissioner of Education. Project applications are initially screened by OE, then evaluated by nongovernment field readers, and finally selected by OE.

From fiscal year 1971 to 1976, $15,594,000 was appropriated and grants awarded to 560 projects in such categories as resource material development, personnel development, elementary and secondary education, and community education. Of these projects, 242 could be identified as developing or influencing curriculum materials used for environmental education in public schools. About $6.6 million was awarded to these projects, which included developing text and resource books, instructional guidelines, teacher instruction methodology and techniques, films and manuals, instructional modules, etc. An example of a project follows.
This resource materials development project involved the design, development, testing, and use of six instructional modules revolving around the Lake Superior-Arrowhead Region in Minnesota.

In the development of the modules, activities encompassed:

-- recruiting, training, organizing, and coordinating educational personnel (chiefly secondary social studies, environmental science, and biology-natural science instructors);

-- design and development of instructional modules using materials development teams stressing problems, needs, opportunities, and policy-related considerations about the region's environment; and

-- evaluation through performance criteria to determine the extent and form of learning gained through involvement in the modules.

Instructional material contained in the modules involved such concepts as ecosystem, biosystem, geosystem, and econosystems.

Although the above model is keyed to secondary students, it could be used with slight modification in elementary or nonformal/community environmental education. Conversely, it would appear from project descriptions that many nonformal and community education projects could be similarly changed to be used in public schools.

Many other projects, such as personnel development, do not generate curriculum or resource materials but have an impact on the public school curriculum. One such example is discussed below.

This population education project is designed to strengthen and expand instruction in population dynamics in five to seven model States. The instruction is to be a component of social and natural science studies in elementary and secondary schools.

---This project has been used as an exemplary environmental education project to familiarize field readers with the necessary concepts needed in a proposed project under the act.
The project's working plan for each model State entailed
--identifying existing State environmental and population education resources (personnel and organizations);

--seeking and gaining the participation of two State educational administrators in the design and support of a State population education plan;

--holding workshops for these State administrators, key regional county and city education administrators, and interested local elementary and secondary teachers; and

--obtaining involvement of college and university staff and other environmental community organizations in the State.

The workshops are to solicit support for instruction in population dynamics and provide elementary and secondary teachers with the tools and skills for population education. The workshops will use existing resource materials packaged by the grantee which will be made available to the participants as a teacher's packet after the workshops.

As part of the project evaluation, teachers are asked how they plan to integrate population dynamics into planned course work and their perception of their supervisors' interest in population education. However, the primary evaluation factor will be the extent to which population education has been included in the model States' environmental education plan submitted by the State administrators and the success attained in implementing the plan.

Dissemination activities are currently being handled by OE directing the requestor to the various project developers or by the project developers themselves. However, after evaluating the results of all projects, OE plans to formally disseminate the most promising projects through an established dissemination system, such as the National Diffusion Network.

OE - Right to Read Program

The Right to Read Program began operating in 1971 with discretionary funds from various legislative sources. From fiscal years 1972 through 1975, the program was funded through
APPENDIX I

the Cooperative Research Act. The Right to Read Program has since been implemented under the National Reading Improvement Program, created by the Education Amendments of 1974. According to OE records, the enactment of the National Reading Improvement Program did not change the Right to Read Program's strategies and instructional philosophy, but in essence expanded previous efforts and added some new ones.

Since its inception in fiscal year 1971, the program has received about $67 million. In pursuing its goal to help all reading programs to become effective, the Right to Read Program has encouraged other OE programs to put special emphasis on reading instruction regardless of the program's major focus. Consequently, additional funds have been channeled into improving reading programs.

Four major categories of program strategies employed by the Right to Read Program are national impact programs, State education agency programs, demonstration projects, and pre-service teacher preparation programs. According to an OE official, the programs which could use significant funds for development and dissemination of materials and techniques for local schools are the demonstration projects and SEA programs.

The demonstration projects' primary objective is to demonstrate by systematic planning procedures how to develop an effective total school or agency reading program. Such projects are documented and packaged for dissemination to interested schools or community agencies wanting to incorporate a successful reading program.

In its first 4 years, the Right to Read Program has funded 191 school-based programs in public school systems. These were innovative demonstration reading projects designed to respond to the particular reading deficiencies of children in these systems. Over 21 first-time and 8 continued school-based projects for elementary and secondary school students with serious reading deficiencies were funded in fiscal year 1975 at a total of $1.3 million. According to program officials, the school-based programs involved development of existing school staff--teachers, administrators, and para-professionals. In addition, they stated that development of curriculum materials usually accounts for about 10 percent of the budget and behavior modification activities are minimal.
The National Reading Improvement Program provides for increased involvement of SEAs in the Right to Read Program effort. State programs have been established in 31 States, and approximately $5.2 million was allocated to participating States in fiscal year 1975. Under the SEA programs, specific services are provided to bring about reading improvement for students of all ages. Among the various activities undertaken by SEAs are (1) developing State Right to Read Program dissemination vehicles, (2) identifying, validating, and disseminating promising programs developed within the State, (3) sponsoring State conferences and workshops, and (4) providing staff development and inservice program models for use by LEAs.

OE - Special Projects


"(1) to experiment with new educational and administrative methods, techniques, and practices; (2) to meet special or unique educational needs or problems; and (3) to place special emphasis on national education priorities."

The Commissioner of Education can contract with public and private agencies, organizations, associations, institutions, and individuals to carry out the purposes of this act.

A brief description and the amount appropriated to specific programs authorized under the act follows. 1/

1/The Consumers' Education Program was authorized under the act as an amendment to title VIII of ESEA. See page 45 for a discussion of this program.
<table>
<thead>
<tr>
<th>Program title</th>
<th>Fiscal year 1976 appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education for the Use of the Metric System of Measurement</strong></td>
<td>$ 2,090,000</td>
</tr>
<tr>
<td>A program to encourage educational agencies and institutions to prepare students to use the metric system of measurement.</td>
<td></td>
</tr>
<tr>
<td><strong>Gifted and Talented Children</strong></td>
<td>2,560,000</td>
</tr>
<tr>
<td>A grant program for the education of gifted and talented children at the preschool, elementary, and secondary school levels.</td>
<td></td>
</tr>
<tr>
<td><strong>Community Schools</strong></td>
<td>3,553,000</td>
</tr>
<tr>
<td>A program of grants to State and local educational agencies to assist them in planning, establishing, expanding, and operating community education programs and to institutions of higher education to provide training for program personnel.</td>
<td></td>
</tr>
<tr>
<td><strong>Career Education</strong></td>
<td>10,135,000</td>
</tr>
<tr>
<td>A program to assess and encourage establishment and operation of career education programs.</td>
<td></td>
</tr>
<tr>
<td><strong>Women's Educational Equity</strong></td>
<td>6,270,000</td>
</tr>
<tr>
<td>A program of grants and contracts designed to provide educational equity for women in the United States.</td>
<td></td>
</tr>
<tr>
<td><strong>Arts Education</strong></td>
<td>750,000</td>
</tr>
<tr>
<td>A program of grants and contracts designed to assist and encourage the use of the arts in elementary and secondary school programs.</td>
<td></td>
</tr>
</tbody>
</table>

Initially in fiscal year 1975, the Career Education Program received $10,000,000, the Arts Education Program $500,000, and the Gifted and Talented Children Program $50,000. The other three programs under the Special Projects Act were in their first year of operation during fiscal year 1976. Regulations for the separate programs appeared in the Federal Register during fiscal years 1975 and 1976. Relevant funding criteria and a listing of the types of eligible applicants were provided. Under each program, applicants submit proposals to compete for funds.
We interviewed OE program officials and reviewed selected program files to determine the extent of curriculum development or the use of behavior modification techniques. We did not find any evidence of behavior modification techniques.

According to directors of three programs—the Gifted and Talented Children, the Arts Education, and the Community Schools—curriculum development has not been the focus of their projects. Officials of the Gifted and Talented Program recognize, however, that some curriculum development activities could be occurring in many projects.

A discussion of funding of curriculum materials in the other three programs follows.

**Women's Educational Equity**

The Director of the Women's Educational Equity Program said that development of training modules for educational personnel was a program priority. According to the regulations, the modules "must be designed to create an awareness of the extent and consequences of * * * sex role stereotyping" as it limits options for men and women. Supplementary instructional materials designed to promote educational equity for women may be developed, but awards will not be made "solely for curriculum development." A program budget document for fiscal year 1976 estimated that 10-15 projects creating modules on sexism in education would be funded at an average of $125,000.

**Metric Education**

The goals of the Metric Education Program involve (1) identifying, assessing, and disseminating information on existing metric education curriculums in elementary and secondary schools, institutions of higher education, and State education agencies, (2) preparing teachers to teach the use of the metric system on an interdisciplinary basis, and (3) developing and disseminating curriculum materials and practices for special population groups.

This program solicits proposals for grants or contracts for the following activities: inservice or preservice training of teachers, Statewide planning, mobile metric education, development and dissemination of materials, mass media development, and school-based interdisciplinary projects. According to the program Director, approximately 55 percent of the 71 projects awarded for fiscal year 1976 involve the initial development of materials. The remaining projects involve adaptation, validation, or expansion of existing materials.
We reviewed a total of 30 project files; all involved some aspect of metric curriculum development. One project, for example, was to develop metric education curriculum guides. Another project involved designing instructional kits which included cassettes and supplementary exercise for grades 1-12. A third project involved conducting summer workshops for teachers using training modules developed by the project.

Career Education

The legislation establishing the Career Education Program provides that SEAs and LEAs offer programs designed to prepare each child for maximum employment and full participation in society according to his or her ability. Career education, as defined by OE, is an education process designed primarily to increase the relationship between schools and society and relate the subject matter of school curriculums to the needs of persons to function fully in society.

A National Advisory Council for Career Education, composed of Federal officials and members from such fields as education and business, reviews the program operation. The council is responsible for conducting a survey on the status of career education projects, curriculums, and materials.

In fiscal year 1975, grants were awarded to 80 career education projects--45 projects to produce improvements in existing programs in kindergarten through high school; 12 projects to assist special population groups, such as handicapped, gifted, or minority children; 12 projects to communicate a career education philosophy, methods, activities, and evaluation results; 7 projects to develop career education projects in special settings, such as senior high schools or community colleges; and 4 projects to demonstrate training or retraining of persons to conduct career education programs. Further, the Office of Career Education has established a library of approximately 3,000 pieces of noncommercial material on career education, such as curriculums, workbooks, and teacher training outlines.

The program Director estimated that 10-15 percent of each project's funds are used to select or compile career education materials. He stated that generally projects were combining and adopting parts of existing materials and that OE did not encourage original development.

We reviewed 16 project files for evidence of curriculum development activities. Most of these projects involved activities such as materials preparation or the development of
career education models. One project involved a collaborative effort among an SEA, a college, and 4 local school districts to develop "an infused curriculum by the teachers of at least one core subject at each school." Another project was to implement career education instructional units, parent involvement materials, and project-developed curriculum materials in nine schools from kindergarten through the 12th grade.

OE - Emergency School Aid

Under the Emergency School Aid Act, as amended (20 U.S.C. 1601 et seq. (Supp. V, 1975)), funds are provided to

--meet the special needs incident to the elimination of minority group isolation in elementary and secondary schools;

--encourage the voluntary elimination, reduction, or prevention of minority group isolation in elementary and secondary schools with substantial proportions of minority group students; and

--aid school children in overcoming the educational disadvantages of minority group isolation.

The act provides for funds to be apportioned to States and for discretionary grants to be awarded by the Commissioner of Education. State apportioned funds account for 87 percent of the annual appropriation and are used for three categories of projects--basic, pilot program, and nonprofit organization grants. Basic and pilot program grants are awarded to LEAs to overcome the adverse effects of minority group isolation. Projects must be based upon the act's 12 authorized activities which include special remedial services, staff training, and the development of new curriculums and instructional materials. Nonprofit organization grants and contracts fund other types of organizations to assist an LEA with developing or implementing its desegregation activities.

Discretionary grants and contracts are made under programs for bilingual education, educational television, special projects, and evaluation. The bilingual education program provides for LEA projects to equalize educational opportunity for children whose dominant language is not English. Educational television contracts and grants are made to public and private nonprofit groups to develop children's television programs of educational value. Special project grants and contracts are awarded to LEAs, SEAs, or other public groups for special activities consistent with the purposes of the act.
Evaluation contracts and grants are awarded to SEAs, institutions of higher education, and private organizations to evaluate the programs.

A summary of awards by subprogram for fiscal year 1975 is shown below:

<table>
<thead>
<tr>
<th>Subprogram</th>
<th>Amount obligated</th>
<th>Percentage of total obligations</th>
<th>Number of awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>$135,386,285</td>
<td>64</td>
<td>381</td>
</tr>
<tr>
<td>Pilot</td>
<td>33,948,000</td>
<td>15</td>
<td>165</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>18,103,000</td>
<td>8</td>
<td>205</td>
</tr>
<tr>
<td>Bilingual</td>
<td>9,052,000</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>ETV</td>
<td>7,799,999</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Special Project</td>
<td>8,459,716</td>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>Evaluation</td>
<td>2,257,000</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$215,000,000</strong></td>
<td><strong>100</strong></td>
<td><strong>829</strong></td>
</tr>
</tbody>
</table>

An OE report on program activities showed that in fiscal year 1975 about 38 percent of the basic grant projects and about 7 percent of the pilot projects included activities which were categorized as curriculum development. These percentages are projections based on an analysis of 50 projects selected by regional offices. The highest level of activity for both types of projects occurred in the special remedial service category. The categories did not include any information on behavior modification.

Our reviews of 18 of 34 files for special project grants showed that 8 of these projects involved curriculum development. For example, five grants were awarded to American territories generally for the purpose of developing cultural and native language materials. In one project, plans were to research, develop, and produce relevant cultural materials as instructional and supplementary instructional tools. In another project, the plan was to design individualized native language materials.

OE - Education of the Handicapped

The Education of the Handicapped Act, as amended (20 U.S.C. 1401, et seq. (Supp. V, 1975)), provides for grants and contracts to assist educational programing for the handicapped. The act's purpose is to make sure that handicapped children have available a free public education, emphasizing special education and related services to meet their unique needs.
States, SEAs, LEAs, institutions of higher education, and other public and private nonprofit organizations can participate in the programs. Under the act, these entities operate projects and centers providing special education or other services to handicapped children, parents, and organizations. Activities supported include:

- providing special education instruction;
- providing related services such as diagnosis, evaluation, and physical therapy;
- developing educational programs;
- developing, distributing, and disseminating instructional media and materials;
- conducting research, innovative, and demonstration projects;
- disseminating the results of projects;
- providing educational consulting services to State and local agencies, parents, etc.; and
- training and retraining teachers of the handicapped.

The programs authorized under the act and administered by the Bureau of Education for the Handicapped are as follows:
### APPENDIX I

<table>
<thead>
<tr>
<th>Program</th>
<th>First FY</th>
<th>Appropriate FY 1976</th>
<th>FY 1976 appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Grant Program</td>
<td>1967</td>
<td>$532,440,000</td>
<td>$200,000,000</td>
</tr>
<tr>
<td>Regional Resource Centers</td>
<td>1968</td>
<td>46,673,000</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>1969</td>
<td>79,445,000</td>
<td>22,000,000</td>
</tr>
<tr>
<td>Deaf Blind Centers</td>
<td>1968</td>
<td>72,850,000</td>
<td>16,000,000</td>
</tr>
<tr>
<td>Severely Handicapped Projects</td>
<td>1974</td>
<td>8,323,000</td>
<td>3,250,000</td>
</tr>
<tr>
<td>Special Education Manpower Development</td>
<td>1966</td>
<td>355,695,000</td>
<td>40,375,000</td>
</tr>
<tr>
<td>Recruitment and Information</td>
<td>1968</td>
<td>3,725,000</td>
<td>500,000</td>
</tr>
<tr>
<td>Innovation and Development</td>
<td>1965</td>
<td>126,278,000</td>
<td>11,000,000</td>
</tr>
<tr>
<td>Media Service and Captioned Films</td>
<td>1967</td>
<td>87,150,000</td>
<td>16,250,000</td>
</tr>
<tr>
<td>Specific Learning Disabilities</td>
<td>1970</td>
<td>18,500,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Regional, Vocational, Adult, and Post-Secondary Programs</td>
<td>1975</td>
<td>2,575,000</td>
<td>2,000,000</td>
</tr>
</tbody>
</table>

The State Grant Program received over 61 percent of the fiscal year 1976 appropriation. Under this program, State formula grants are provided to help initiate, expand, and improve education for handicapped children at the preschool, elementary, and secondary school levels. State grants are based on the number of handicapped children, ages 3 to 21, within the State and approval of a State plan encompassing the educational programs to be provided by agencies directly responsible for educating these children. Upon receipt of the grants, the States reallocate them to fund projects in the States' LEAs.

The LEA-project objectives are to be child centered, and each participating child is to have an individualized educational program. According to OE officials, many of the LEA projects develop curriculum or employ behavior modification techniques, but sufficient data to determine the number of projects involved can only be obtained at the State level.

Several programs other than the State Grant Program are authorized by the legislation to develop curriculum, instructional, and media materials and educational programs through research, demonstration, and innovative projects. The programs are Regional Resource Centers, Early Childhood Education,
Innovation and Development, Media Services and Captioned Films, and Specific Learning Disabilities. The legislation also specifies the distribution or dissemination of the products developed in these programs.

Regional Resource Centers and Media Services and Captioned Films also form the basis for nationwide networks of centers to assist the States in the education of handicapped children. The Regional Resource Centers' activities include educational prescriptive services, technical assistance, and educational program development.

Area Learning Resource Centers, the National Center on Media and Materials for the Handicapped, and specialized offices are operated under the Media Services and Captioned Films program. These centers and offices produce and distribute educational media and materials for the handicapped, carry on research, and train persons in the use of educational media. The Learning Resource Centers provide demonstration and technical assistance for State development of media centers; act as the contact between SEAs, LEAs, training institutions, and the National Center for identifying needed educational materials and media and sharing resources; disseminate instructional materials information; and act as a training resource.

Three of the specialized offices provide educational media and materials to meet identified needs. These offices locate or adapt existing media and materials, develop and field test new materials, and finally reproduce the media and materials. The current thrust of these offices is the development of an information base from existing materials for the National Instructional Materials Information System. The remaining specialized office operates the media and materials depository, the loan service, and media training library.

The National Center coordinates its activities with those of Learning Resource Centers and the specialized offices for the network. It is also the coordination contact point between the networks of the Regional Resource Centers and the Area Learning Resources Centers. Other National Center activities include

--assisting developers distribute new media and materials;

--acting as a national clearinghouse for handicapped instructional media, materials, and technology;
--providing technical assistance to Learning Resource Centers; and

--carrying on limited educational research.

A 1976 catalog, "Twelve Years of Research on Education of the Handicapped," which contains information on 563 projects funded under the act, lists 170 as curriculum development projects and 28 behavior modification projects. The following are examples from these projects.

--The project is based upon the hypothesis that if you select suitable tasks for each child, provide desired rewards, and maintain a supportive structure, the child will function successfully. The project begins with an assessment of each child according to the educational levels of attention, response, order, exploration, social mastery, and achievement. After observation, the teacher rates the child in terms of needs at each level. This assessment becomes the basis for the child's educational program.

--Over an 8-year period, the project developers designed, implemented, and evaluated a social learning curriculum for mentally retarded children. Curricular tests and instructional materials developed under this project are currently available for use by teachers and other educators. Curriculum areas included communication, community issues, language and speech, cognitive development, reading, mathematics, social studies, and social and emotional growth.

--The project's curriculum is diagnostically based and child oriented. The primary modes of instruction are role playing and social rewards for positive responses. The teaching strategies developed in the project have been used extensively since their conception and formed one of the approaches in the Follow Through Program. (See p. 50.)

OE - Vocational Education

The Vocational Education Act of 1963, as amended (20 U.S.C. 1241, et seq. (Supp. V, 1975)), was enacted to strengthen and improve the quality of vocational education and to expand the vocational educational opportunities in the Nation. Under the act, funds are made available to the States through formula grants. Funds are available to LEAs, post-secondary institutions, and other public and nonprofit private
institutions through discretionary grants and contracts awarded by the Commissioner of Education.

Existing legislation authorizes Federal funds to:

--Assist States in maintaining, extending, and improving existing programs of vocational education; develop new programs of vocational education; and provide part-time employment for youths (Part B--State Vocational Education Programs).

--Conduct research and training programs to familiarize personnel with research results and products; implement developmental, experimental, or pilot programs designed to meet the special vocational needs of youth; and develop new curriculums (Part C--Research and Training).

--Reduce the continuing high level of youth unemployment and create a bridge between school and employment for young people (Part D--Exemplary Programs).

--Assist States in programs which encourage consumer and home economics education and ancillary services which assure quality in all homemaking education programs, such as teacher training, curriculum development research, instructional materials development (Part F--Consumer and Homemaking).

--Assist States in expanding cooperative work-study programs and provide instruction related to the work experience (Part G--Cooperative Vocational Education Programs).

--Assist LEAs in work-study programs and make them reasonably available to all youth in the area served by such agencies (Part H--Work Study).

--Make contracts and grants with colleges and universities, State boards, and other public and nonprofit private agencies and institutions for curriculum development, testing, and dissemination of vocational education curriculum materials (Part I--Curriculum Development).

--Contract for bilingual vocational training programs for persons who are available for training by a post-secondary educational institution, who have already
entered the labor market, and who need or desire training to achieve year-round employment (Part J--Bilingual Vocational Training).

The following chart summarizes funding under the previously discussed parts of the act.

<table>
<thead>
<tr>
<th>Program</th>
<th>First FY</th>
<th>Appropriations through FY 1976</th>
<th>FY 1976 appropriations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A</td>
<td>1970</td>
<td>$140,000,000</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>Part B</td>
<td>1965</td>
<td>3,722,975,100</td>
<td>415,529,100</td>
</tr>
<tr>
<td>Part C</td>
<td>1965</td>
<td>191,550,000</td>
<td>18,000,000</td>
</tr>
<tr>
<td>Part D</td>
<td>1970</td>
<td>109,000,000</td>
<td>16,000,000</td>
</tr>
<tr>
<td>Part F</td>
<td>1970</td>
<td>195,482,000</td>
<td>40,994,000</td>
</tr>
<tr>
<td>Part G</td>
<td>1970</td>
<td>130,000,000</td>
<td>19,500,000</td>
</tr>
<tr>
<td>Part H</td>
<td>1965</td>
<td>99,297,000</td>
<td>9,849,000</td>
</tr>
<tr>
<td>Part I</td>
<td>1970</td>
<td>20,800,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Part J</td>
<td>1975</td>
<td>5,600,000</td>
<td>2,800,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$4,614,604,100</strong></td>
<td><strong>$543,672,100</strong></td>
</tr>
</tbody>
</table>

Within most of the programs, curriculum development is a specified activity. Examples of language in the act relating to curriculum materials are

--- Part B provides for development of instructional materials,

--- Part C provides for new vocational education curriculums,

--- Part D provides for programs or projects designed to broaden or improve educational curriculums, and

--- Part F authorizes curriculum development research and development of instructional materials.

Curriculum materials developed for vocational education range from specific technical course materials to general career awareness materials. Materials are developed for use in kindergarten through postsecondary and adult education.

Part B received over 76 percent of fiscal year 1976 funds. According to program officials, all States would be engaged in curriculum development activities; however, the total amount of Part B funds expended on these activities was not available. In our review of five State plans, we noted that curriculum development activities were specifically
included in each plan. Activities mentioned included providing staff, equipment, and materials in support of career development programs; developing and expanding curriculums in new high-growth occupational areas; developing and revising curriculum guides in six program areas of vocational education; and developing and/or revising curriculums and instructional materials for new, emerging, and established occupational programs.

Within Part I, which was specifically established for curriculum development, 20 projects were funded during fiscal year 1975. Of the $1 million appropriated for Part I, $750,000 was spent for the dissemination and/or reproduction of curriculum materials. A total of $447,434 of this $750,000 was for teacher packages which included resource materials for the students. In addition, grants totaling $250,000 were awarded to six curriculum coordination centers located in New Jersey, Illinois, Oklahoma, Mississippi, California, and Washington. The six centers comprise a national network for interstate curriculum planning; dissemination of information on instructional materials available and being developed; and improvement of all States' capabilities in developing and managing vocational and technical curriculum resources.

National Institute of Education

NIE is a research and development agency in the Education Division of HEW. NIE was established by the Education Amendments of 1972. Its purpose includes

--helping to solve or alleviate the problems of, and achieve the objective of American education;

--advancing the practice of education, as an art, science, and profession;

--strengthening the scientific and technological foundations of education; and

--building an effective educational research and development system.

A National Council on Educational Research, made up of distinguished citizens appointed by the President, provides NIE with general policy guidance and reviews its operations. NIE is organized into six groups--Basic Skills, Education and Work, Educational Equity, Finance and Productivity, School Capacity for Problem Solving, and Dissemination and Resources. Each NIE group develops guidelines for contracts and grant proposals and selection criteria.
NIE's records do not indicate the specific amount of funds for projects which involve development of curriculum materials or use of behavior modification techniques. One reason is that much of NIE's curriculum work may be included as only one aspect of a more comprehensive development project. According to NIE officials, however, in fiscal year 1975 an estimated $20 to $30 million was allocated to elementary and secondary projects which could involve curriculum development. Similar estimates on project use of behavior modification techniques were not available.

Some of NIE's activity could be categorized as basic research. Studies are designed to add knowledge to the field of education rather than to develop specific materials or techniques. These studies, however, can and do have a definite influence on future curriculum development. For example, one study is testing the relationship between moral development and life outcomes. The study is intended to

"* * * provide theoretical and empirical support for development of elementary and secondary school curriculum which enhances moral judgment and thus, subsequent life outcomes."

In addition, a number of NIE projects specifically include the development of curriculum materials and use of behavior modification techniques. Our review of project abstracts for about 550 active projects as of October 1975 indicated that at least 45 projects involved curriculum development and 4 projects involved behavior modification techniques. 1/ Four of the six NIE organizational components administered most of these projects. A brief discussion of such activities in each of these four areas follows.

Basic Skills

Activities in this area focus primarily on the improvement of reading and mathematics instruction in the elementary grades. Projects have involved research of factors which affect the learning process. One project has included the design of a program which enables schools to offer individualized instruction with special materials. The total Federal funding for this project is over $3.6 million. Within other projects, curriculum materials for mathematics, aesthetic appreciation, and verbal communication are being developed.

1/The abstracts were brief. Accordingly, a project could involve development of materials or the use of behavior modification without any indication appearing in the abstract.
In addition, four studies involving behavior modification are monitored by the Basic Skills group. These include projects on the teacher's use of reinforcement to reduce disruptive behaviors which interfere with learning and the analysis and modification of handicapped children's behavior.

**Education and Work**

Activities in this area focus on the relationship between education and careers. Research on the career decisionmaking process and demonstration projects in work-study are being conducted. These projects, in some cases, have included materials development. In addition, one major curriculum development project has been ongoing within this area. This project has involved the design, development, field testing, and evaluation of 140 career education units for different grade levels and occupations.

**Educational Equity**

Activities in this area focus on the special problems of educationally disadvantaged students. Research has been conducted on school desegregation problems and other related areas. Also, curriculum products for multicultural/bilingual topics are being developed. One project, for example, has produced curriculum, parent, and staff materials to enhance the development of language and problem solving abilities among culturally and linguistically different children.

**Finance and Productivity**

Activities in this area address the problem of limited resources for education. Projects have involved school finance, graduation requirements, and alternative education at the university level. Fifteen experimental projects operating in local school systems were involved in developing various alternatives to traditional instruction. In addition, this area provides funds to deliver educational programs by satellite to 17 States including isolated communities in Alaska, Appalachia, and the Rocky Mountains.

Within NIE information on the results of education, research, and development is disseminated mainly by the Dissemination and Resources group. Activities in this area have included building the States' capacities for interstate dissemination and use of knowledge, developing a catalog of NIE-sponsored products, preparing a series of publications for
practicing educators, and funding 16 specialized clearing-houses for research reports and other materials.

**National Science Foundation**

The National Science Foundation is authorized under the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861, et seq. (Supp. V, 1975)), to initiate and support—through contracts and other forms of assistance such as grants—basic scientific research and programs to strengthen scientific research potential and science education.

The Foundation's science education activities, administered by its directorate for science education, consist primarily of grant and fellowship programs intended to improve education for professional careers in science and technology based fields, improve scientific literacy, and increase the efficiency and effectiveness of educational processes. Activities for improving science education include supporting the development of science education materials for use by school systems at the precollege level (kindergarten through the 12th grade) and higher education levels.

Foundation officials identify broad educational needs through informal means, such as conferences, ideas from experts in the field, and internal expertise; proposals received; and projects focused on assessment of problems and needs.

The Foundation issues program and other special announcements which identify for the education and scientific communities the broad education areas where improvements are needed. The announcements for the development of educational materials define the organizations from which the Foundation will accept proposals and the academic grade levels and fields that the planned improvements should cover. Academic and non-profit institutions are eligible to submit proposals. The proposals received are considered unsolicited and are usually sent outside the Foundation to peer reviewers who are requested to review them and comment on their merits. Proposals are usually funded through grants. In the past, grants have generally been made to colleges, universities, or educational associations or societies.

Foundation officials estimated that during fiscal years 1956-75 the Foundation provided about $196 million to support 53 major curriculum development projects at the precollege level. For the most part, curriculum materials developed in
these projects are for mathematics, science, or social science. In addition to the major curriculum projects, the Foundation has supported other projects which have developed materials useful for elementary and secondary education.

Prior to fiscal year 1976, the Foundation awarded grant funds totaling over $87.9 million through a competitive process for implementing major curriculum and course developments at the precollege level to strengthen school science and mathematics programs. No similar Foundation program existed for implementing higher education supported projects. Both Foundation-supported and non-Foundation-supported curriculums were eligible for precollege implementation support. For fiscal year 1976, funding for the precollege level implementation activities was curtailed at the direction of the Congress. The Foundation reassessed the need for the implementation activities as part of an overall evaluation of its precollege science education activities. Currently, the Foundation plans no further implementation activities.

For fiscal year 1977, the Foundation did not request funding for any curriculum implementation activity, as in prior years, that would assist teachers and administrators in adopting or using Foundation-funded or non-Foundation-funded curriculums. However, $69.4 million is authorized for fiscal year 1977 for science education programs, of which $800,000 is for instructional improvement implementation. The Foundation intends to use the allotment for information and dissemination activities concerning new materials, practices, and teaching technologies.

The Foundation's policy for distributing educational materials developed with its support provides for open competition among qualified and interested organizations. The distributor of the Foundation-supported educational materials, as well as the distribution arrangements, either commercial or noncommercial, are selected by the grantee, subject to Foundation approval.

Additional information on the Foundation support of curriculum projects is contained in two GAO reports. One report, 1/ discusses the Foundation's policies, procedures, and practices for developing, evaluating, and implementing

1/"Administration of the Science Education Project 'Man: A Course of Study' (MACOS)," Oct. 14, 1975 (MWD-76-26).
precollge education projects and their specific application to MACOS. The second report, 1/ based upon a review of 10 projects funded to develop educational materials and approaches, discusses the adequacy of

--evaluations of materials effectiveness in improving science education,

--distribution efforts for making materials available to school systems, and

--Foundation techniques for monitoring project grants.

National Institute of Mental Health

NIMH administers Federal mental health programs. Its functions fall within HEW's Alcohol, Drug Abuse, and Mental Health Administraton, organized in 1974. The basic mission of NIMH is to develop knowledge, staff resources, and services to treat and rehabilitate the mentally ill. The agency provides leadership, policies, and goals for the Federal effort in the promotion of mental health and supports the training of personnel for the prevention of mental illness.

Proposals for research work are received in response to brochures which describe the work of the divisions. According to an NIMH official, about 95 percent of the proposals they receive are self-generated by mental health professionals.

Advisory committees consisting of technical consultants meet during the year to review proposals. Among criteria used by the advisory committees to evaluate research applications are (1) research design of the project, including the adequacy of the proposed methods and techniques, (2) training, experience, and competence of the principal investigators, (3) availability of auxiliary staff, (4) adequacy of the facilities, and (5) availability of cooperation from other agencies or facilities, if required for the project.

Proposals also must be reviewed by a National Advisory Mental Health Council composed of leaders in psychiatry, psychology, education, etc. Adequate protection of human subjects against the risks of research must be guaranteed before funding is granted.

Abstracts identified by a computer search of NIMH’s current project file showed that for fiscal years 1974, 1975, and 1976 NIMH funded about 200 projects involving behavior modification or having curriculum components. In general, NIMH's projects in behavior modification do not involve elementary and secondary schools. These projects concern training of personnel for community mental health centers, clinical research, or diagnostic and consulting services.

Fourteen projects, however, appeared to involve the use of behavior modification techniques in public schools. Among these, three also had curriculum development components. One of the 14 projects involved remedial procedures for adolescents having academic, interpersonal, or social deficiencies. Another project used rewards to help shy children become more socially active.

Seven additional projects appeared to involve curriculum development for the public school. Examples include

-- a sequential social skills curriculum for inner-city children from kindergarten through the fourth grade;

-- a human behavior curriculum for elementary age children and their parents; and

-- a self-paced curriculum for adolescents in mathematics, language arts, and social studies to improve their self-esteem.

According to an NIMH official, the agency disseminates research results mainly through articles in professional journals. Different divisions also produced occasional bulletins and bibliographies. Components of NIMH projects may be duplicated by persons receiving general guidance from brochures and final reports according to an information officer.

One project abstract we reviewed had as an objective the active dissemination of information at State and national levels to potential users. Accordingly, dissemination activities funded by NIMH, but carried out by developers, might be occurring on some projects. NIMH, however, has no formal network for disseminating information on elementary and secondary school projects.
National Endowment for the Humanities

The National Endowment for the Humanities is an independent Federal agency whose purpose is to serve all areas and levels of humanistic study and to promote knowledge and understanding in the authorized areas including language (both modern and classical); linguistics; literature; history; philosophy; jurisprudence; archeology; comparative religion; ethics; the history, criticism, theory, and practice of the arts; and the study and application of the humanities to the human environment. The Endowment was established in 1965 by Public Law 89-109 in response to an increased awareness of educators, legislators, and the general public that the humanities and the arts needed sustained and widespread Federal support.

Most of the Endowment's support for development of public school curriculum materials occurs within the Division of Education Programs. In fiscal years 1975 and 1976, about $4.5 million was obligated for these projects, which are selected from unsolicited grant proposals. Primary emphasis in 1975 was on projects

--designed both to improve teaching and to develop curriculum materials that draw on recent scholarship in the humanities,

--which involve collaborative efforts between schools and other cultural and educational institutions,

--which show promise of applicability in a wide range of schools and school systems, and

--designed to enrich the training and learning of humanities through the effective use of media.

One project, supported under this program, is developing instructional modules for students and teachers from kindergarten through 12th grade. The modules are based on eight concepts--authority, justice, privacy, responsibility, participation, diversity, property, and freedom--and are designed to encourage understanding and support for the fundamental values, principles, and processes of constitutional democracy. The project has received about $1.2 million since fiscal year 1974.

Another project received $50,000 to develop an elementary school Latin program specifically adapted to an urban setting. The Endowment's support enabled the project Director to design
workbooks and teacher manuals and to test the material in a large city school system.

A third project was a $27,000 grant to a State university to conduct an intensive 6-week summer workshop for junior and senior high school teachers selected from several States. The participants develop materials for and practice a student-centered approach to the study of literature, which they will use in their classes during the academic year.
Honorable Elmer B. Staats
Comptroller General of the United States
441 C Street, N.W.
Washington, D.C. 20548

Dear Mr. Staats:

I am concerned about the controversies which have arisen in various parts of the country over the content of certain textbooks being used in classrooms and school libraries.

Parents of school children in West Virginia, New Jersey, Texas, Maryland and elsewhere have protested that the books are subversive, irreligious, immoral, racist, sexist and just plain filthy. When I first heard of the controversy, I naturally assumed that this was strictly a matter for State school administrators and local school boards. It is something that the Federal government should not be involved with.

Since I am Chairman of the Subcommittee responsible for education appropriations several of my colleagues have contacted me about the extent, if any, of Federal involvement in the origin of the textbook controversy. I think that the best way to approach this matter is to have your office conduct an in-depth inquiry.

Therefore, I request that the General Accounting Office undertake an immediate examination of this matter with particular attention to the following:

- Extent to which Federal funds are used in the creation of textbook manuscripts.
- The Federal role in the promotion or use of textbooks in local schools.
- Federal support of teacher training directed toward the promotion of new curriculum materials developed by or for the Federal government.
In general, I think what we are trying to determine is the extent to which the Federal government is—directly or indirectly—involved in the promotion of textbooks used by local schools.

Your prompt consideration would be appreciated.

Sincerely yours,

Daniel J. Flood
Chairman
Subcommittee on Labor-HEW Appropriations
June 4, 1975

The Honorable Elmer Staats
Comptroller General of the U.S.
General Accounting Office
441 C Street, NW
Washington, DC 20548

Dear Mr. Staats:

In the past several months, a number of incidents have
come to my attention in which charges have been made
that the Federal government is funding activities aimed
at modifying the behavior of school children. These
charges have been both numerous and persistent.

Although I fully recognize that a good deal of what the
Federal government is engaged in, such as the rehabili-
tation of criminals, could be classified as behavior
modification, the most serious charges center around
activities in the classroom directed at modifying tra-
ditional or accepted views of society.

Because I am concerned that these charges continue to
persist, I am formally requesting the General Accounting
Office to undertake a study to determine to what extent
there is Federal funding for programs of behavior modi-
fication. I would like to know under what authority and
where it is being carried out.

I would like to ask that your investigation include not
only programs funded through the Education Division of
HEW but also programs in other HEW agencies, the National
Science Foundation, the Defense Department, and other
agencies funding programs which reach the public schools.

B-164031(1)
The Honorable Elmer Staats  
June 4, 1975  

Page 2

Prior to beginning your investigation, you may wish to have your staff contact Christopher T. Cross, a member of my staff, to work out details of the study. His phone number is 225-1743, and he is located in 2179 Rayburn House Office Building.

I would like to have this task completed by the beginning of the second session of the 94th Congress.

With kind regards, I remain

Sincerely yours,

ALBERT H. QUIE  
Member of Congress

AHQ:cka
**APPENDIX IV**

**APPENDIX IV**

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**PRINCIPAL OFFICIALS RESPONSIBLE FOR ACTIVITIES DISCUSSED IN THIS REPORT**

<table>
<thead>
<tr>
<th>Tenure of office</th>
<th>From</th>
<th>To</th>
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<tbody>
<tr>
<td><strong>DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE</strong></td>
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**SECRETARY OF HEW:**
- Joseph Califano  
  Jan. 1977 - Present
- David Mathews  
- Caspar W. Weinberger  
- Frank C. Carlucci (acting)  
- Elliot L. Richardson  
  June 1970 - Jan. 1973

**ASSISTANT SECRETARY FOR EDUCATION:**
- Philip Austin (acting)  
  Jan. 1977 - Present
- Virginia Y. Trotter  
  June 1974 - Jan. 1977
- Charles B. Saunders, Jr. (acting)  
  Nov. 1973 - June 1974
- Sidney P. Marland, Jr.  
  Nov. 1972 - Nov. 1973

**COMMISSIONER OF EDUCATION:**
- William F. Pierce (acting)  
  Jan. 1977 - Present
- Edward Aguirre  
- William F. Pierce (acting)  
- Terrel H. Bell  
  June 1974 - July 1976
- John R. Ottina  
- John R. Ottina (acting)  
  Nov. 1972 - Aug. 1973
- Sidney P. Marland, Jr.  

**DIRECTOR, NATIONAL INSTITUTE OF EDUCATION:**
- Harold L. Hodgkinson  
  May 1975 - Present
- Emerson J. Elliott (acting)  
  Nov. 1974 - May 1975
- Thomas R. Glennan, Jr.  
  Oct. 1972 - Nov. 1974
- Emerson J. Elliott (acting)  

**ASSISTANT SECRETARY FOR HEALTH:**
- (note a) James Dickson, M.D. (acting)  
  Jan. 1977 - Present
- Theodore Cooper, M.D.  
  May 1975 - Jan. 1977
- Theodore Cooper, M.D. (acting)  
  Feb. 1975 - May 1975
- Charles C. Edwards, M.D.  
- Richard L. Seggel  
- Merlin K. DuVal, M.D.  
  July 1971 - Dec. 1972
- Roger O. Egeberg, M.D.  
  July 1969 - June 1971

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## Tenure of Office

<table>
<thead>
<tr>
<th>Position and Agency</th>
<th>Name and Title</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrator, Alcohol Drug Abuse and Mental Health Administration:</strong></td>
<td>Neil Waldrop, M.D. (acting)</td>
<td>Jan. 1977</td>
<td>Present</td>
</tr>
<tr>
<td><strong>Director, National Institute of Mental Health:</strong></td>
<td>Bertram S. Brown, M.D.</td>
<td>June 1970</td>
<td>Present</td>
</tr>
<tr>
<td><strong>National Science Foundation</strong></td>
<td>Richard C. Atkinson (acting)</td>
<td>Aug. 1976</td>
<td>Present</td>
</tr>
<tr>
<td><strong>Deputy Director:</strong></td>
<td>Edward C. Crewtz (acting)</td>
<td>Aug. 1976</td>
<td>Present</td>
</tr>
<tr>
<td></td>
<td>Richard C. Atkinson</td>
<td>June 1975</td>
<td>Aug. 1976</td>
</tr>
<tr>
<td><strong>Assistant Director for Science Education (note b):</strong></td>
<td>Harvey A. Averch</td>
<td>Sept. 1976</td>
<td>Present</td>
</tr>
<tr>
<td></td>
<td>Harvey A. Averch (acting)</td>
<td>Sept. 1975</td>
<td>Sept. 1976</td>
</tr>
<tr>
<td><strong>National Endowment for the Humanities</strong></td>
<td>Robert Kingston (acting)</td>
<td>Jan. 1977</td>
<td>Present</td>
</tr>
<tr>
<td></td>
<td>Ronald S. Berman</td>
<td>Nov. 1971</td>
<td>Jan. 1977</td>
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<tr>
<td></td>
<td>Wallace B. Edgerton (acting)</td>
<td>July 1970</td>
<td>Nov. 1971</td>
</tr>
</tbody>
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*a* Prior to April 1973, title was Assistant Secretary for Health and Scientific Affairs.

*b* Prior to June 1975, title was Assistant Director for Education.