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#### **ABSTRACT**

This report describes and evaluates Title I, the largest federal aid program in elementary and secondary education, with appropriations of over \$3 billion in 1980. It assesses the impact of the program and introduces new efforts that were undertaken to enhance state and local coordination. Special attention is given to how the amendments of 1974 were implemented to ensure greater accountability and more stringent evaluation requirements. The evaluation data have been used subsequently in program planning. The report has the following five chapters: (1) major findings and highlights; (2) program objectives and operations; (3) the nature and implementation of compensatory education programs; (4) student achievement; and (5) implementation and use of evaluations at the state and local levels. Changes that will occur when Title I is succeeded by Chapter 1 of the Education Consolidation and Improvement Act of 1981 are briefly discussed throughout the report. Statistical data are presented in tables and figures. A list of references is included. (VM)



# AN EVALUATION OF ESEA TITLE I -PROGRAM OPERATIONS AND EDUCATIONAL EFFECTS

A REPORT TO CONGRESS

March 1982

Prepared by:

U.S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
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## THE SECRETARY WASHINGTON, D.C. 20202

#### TO THE CONGRESS OF THE UNITED STATES:

I am pleased to transmit to Congress "An Evaluation of ESEA Title I -- Program Operations and Educational Effects." This report to Congress is required under Section 183(g) of Title I of the Elementary and Secondary Education Act, as amended (P.L. 95-561), which states:

"The Secretary shall make a report ... no later than February 1, 1982, concerning the results of evaluations of programs and projects required under this section, which shall be comprehensive and detailed, as up-to-date as possible, and based to the maximum extent possible on objective measurements, together with other related findings and evaluations and ... recommendations with respect to legislation."

Some of the information in this report has already been presented to Congress in the Department of Education's 1981 Annual Evaluation Report. That report and earlier reports or testimony to Congress (including the National Institute of Education's Survey of Compensatory Education and earlier reports on the evaluation of Title I) concentrated particularly on program operations, including the distribution of funds and the characteristics of Title I participants.

The major purpose of this document is to provide information, in greater detail than has previously been available, to the Congress concerning the patterns of services provided in Title I programs and the educational impacts of such services, and to provide a single document that summarizes the results of Title I studies to date. Secondarily, a description is provided of efforts undertaken by the Department of Education (ED), in coordination with State education agencies and local school districts, to improve the ways in which instructional and evaluative activities are implemented across the country.

This report includes, for the first time, comprehensive information obtained from several sources: information provided to ED by all State educational agencies (based on district evaluation reports) on participation, staffing, instructional treatment and educational impact of the Title I program in the 1979-8D school year; and information obtained through nationally representative studies, including longitudinal studies of compensatory education conducted between 1975 and 1981 and results from the National Assessment of Educational Progress which summarize national trends from 1970-1980.

Title I has, in a sense, already been reauthorized and substantially amended by the passage of Title V (the Education Consolidation and Improvement Act of 1981, or ECIA) of the Omnibus Budget Reconciliation Act of 1981. Chapter I of that title -- "Financial Assistance to Meet Special Educational Needs of Disadvantaged Children" is scheduled to take effect on October 1, 1982. Changes in the goals and program



requirements to Title I of ESEA that will occur when Chapter 1 is implemented are briefly discussed throughout this report. However, we will not in this report offer any explicit recommendations for legislative consideration other than those implied by the findings.

The report is organized into five chapters, the first of which is a brief "executive summary" describing the major highlights and findings provided in the report. Subsequent chapters provide more detailed information on Title I program objectives and operations; on the nature and implementation of compensatory educational programs; on the educational impacts of such services on student achievement; and on national trends towards improving and using evaluations, as evidenced by case studies of State and local district activities.

We hope you find this report useful as you continue the difficult task of re-examining and revising the Federal role as it pertains to assistance and guidance for elementary and secondary education programs.

T. H. 8ell

#### **ACKNOWLEDGEMENTS**

This report would not have been possible without the extensive efforts of the many dedicated individuals who have contributed to the Title I program development and evaluation efforts of the past seven years. Among the people we wish to thank the most are those staff in the Office of Planning, Budget and Evaluation who assisted us in the preparation of this report: Dr. Janice K. Anderson, the Director of the Elementary and Secondary Programs Division, Mr. James J. English, Mrs. Kathy Crossley and Mrs. Rhonda Lewis. We are also indebted to Dr. Thomas Enderlein and Dr. William Lobosco, of the Office of Compensatory Education, for their ongoing cooperation and for their contributions to improving the quality and accuracy of this report.

Much of the substance of this report has been gleaned from work done far from Washington, D.C. We wish to acknowledge the contributions made by the Title I staffs and/or the evaluation staffs of each of the 50 States, the District of Columbia and the various Territories, and by each of the local school districts within those States which provided information about their Title I projects. Their substantial efforts to learn and then implement a new system for Title I evaluation enabled us to provide a truly national picture of the nature and effects of Title I programs.

Finally, we wish to thank the many independent researchers and evaluators who contributed to this report. We are especially indebted to the Directors and staff of the Title I evaluation Technical Assistance Centers for their help in assembling much of the case study materials, and for their long-standing efforts to disseminate the art and practice of evaluation to Title I project staff across the country. We also wish to thank the staff of RMC Research Corp. for their work in developing and helping to implement the Title I Evaluation and Reporting System, especially David Kaskowitz, Christine Wood and G. Kasten Tallmadge. A note of thanks is also in order for some people with whom we did not work directly when preparing this report, but whose information and findings we drew heavily upon -- the staff of System Development Corporation who have conducted the Sustaining Effects Study for the past six years, especially Launor Carter and Ralph Hoepfner.

As a last note, we would like to extend our gratitude to the inventors of word processors. Without them, we would still be on Chapter III.

Robert M. Stonehill Judith I. Anderson



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#### CHAPTER I

#### MAJOR FINDINGS AND HIGHLIGHTS

Chapter I contains a summary of the major findings of each of the sections of this report to Congress. Additional detail on each of the summary points can be found in the respective chapters of this report.

#### <u>Chapter II Highlights: Program Objectives and Operations</u>

Chapter II describes the size and scope of Title I programs and reviews the objectives of Title I. In addition, the operation of Title I programs is discussed, including the identification of eligible schools, the selection of students, and the participation of parents and other important groups in decision-making. The major provisions of Chapter 1 of ECIA are discussed and compared to Title I. The principal findings include the following:

- o Title I is the largest Federal aid program in elementary and secondary education, with appropriations growing from \$959 million in FY 1966 to over \$3 billion in 1980.
- o About 87% of all school districts received Title I funds in the 1979 fiscal year, and about half (7,000) received Concentration Grants, 80% of which were awarded for programs in urban areas.
- o While approximately 13% of the local education agencies receive no Title I funds, in the poorest districts Title I can account for up to 16% of a district's total educational funding.
- o Ten States -- California, New York, Texas, Ohio, Pennsylvania, Illinois, Puerto Rico, Michigan, Florida, and New Jersey -- receive over 50% of the Title I monies available.

## Chapter III Highlights: The Nature and Implementation of Compensatory Education Programs

Chapter III provides a description of Title I projects as they are currently carried out by local education agencies. Information is provided on the characteristics of students served, the staffing patterns of Title I projects, the types of services provided, and on summer school projects.

### Characteristics of Students Served

- o Approximately 5.4 million students were served by Title I projects during the I979-80 school year.
- o Approximately 11.6% of the nation's elementary and secondary school students in public schools participated in Title I in 1979-80. This varied by State from 4% to 26% of the public school students.
- o Approximately 3.7% of nonpublic school students were served by Title I in 1979-80.



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- o Approximately 72% of the public school Title I students and 76% of the nonpublic school Title I students were in grades 1 to 6.
- o Slightly more than one-half of the Title I participants were White, about one-quarter were Black, about 15% were Hispanic, and the remainder were Asian, Pacific Islander, or American Indian.
- O The typical Title I reading student was at the 22nd percentile in reading achievement when the program began. This varied by grade from a high of the 28th percentile in grade 2 to a low of the 12th percentile in grade 12. Large variations also were found across the States.
- o The typical Title I mathematics student was at approximately the 24th percentile in mathematics achievemen at the beginning of the program. This varied by grade from a high of the 35th percentile at grade 2 to a low of the 21st percentile in grade 10. Again, large variation was found across the States.

#### Title I Staffing

- o Over 200,000 full-time equivalent staff members were employed on local Title I projects during the regular school term of 1979-80.
- o Approximately 39% of the staff members were teachers and 46% were teacher aides. Only 3% of the staff members were classified as administrative staff.

### Types of Services Provided

During the regular term of 1979-80:

- o Approximately 4.2 million students (78%) received services in reading; approximately 2.5 million (46%) did in math.
- o Large numbers of students also were served in language arts (19%), health and nutrition services (28%), and other instructional areas (19%). Fewer students were served by non-instructional programs, such as programs in attendance, social work, guidance, and psychology (15%); pupil transportation (3%); English to limited English speaking students (7%), and other supporting services (8%). Only 9,084 students received special services for the handicapped, and 5,571 received vocational services.
- O Students were more likely to be served in pull-out projects than in any other setting. Language arts projects are more likely to be in the regular class than are mathematics and reading projects, but even in language arts less than one-half of the students are served in the regular class.
- o Title I students tend to be served in small groups. Approximately 75% 90% of the elementary school students in grades 2 and 6 are served in settings where the student to teacher ratio is 10:1 or less.



#### Summer Term Activities

During the summer term of 1979-80:

- o Over 300,000 students were served by Title I projects, mostly in reading (66%) and mathematics (63%).
- o Over 31,000 full-time equivalent staff members were employed, the majority of whom were Title I teachers (59%) or teacher aides (25%).

#### Chapter IV Highrights: Student Achievement

Chapter IV contains information on the achievement of students in Title I programs, including information on short-term achievement impact, information on achievement over three years both for students who continued in Title I and for Title I "graduates," and information on factors related to school year achievement.

A comparison of compensatory education students in grades 1 to 6 with a similar group of students who did not receive compensatory education showed that:

- o Compensatory education students gain more than similar students who do not receive services in grades 1, 2, and 3 in reading and in grades 1 to 6 in mathematics.
- o The positive effects of compensatory education are true particularly for Title I students, though these benefits of compensatory education are not great enough for the participants to "catch up" with non-disadvantaged non-compensatory students.

Information collected over three years showed that:

- o In reading, students who have left the Title I program because of high performance do not fall back noticeably after they cease participation in Title I.
- o In mathematics, students who have left the program because of high performance tend to show a decline after participation ceases.

A study of the relationships between types of services and the effects of compensatory education showed that:

- The amount of regular instruction and tutor/independent work has positive, but modest, effects on achievement growth.
- The amount of instruction by special teachers, by aides or assistants, or in very small groups (less than 7 students) does not often have detectable effects, and when it does, those effects are negative. In almost all cases, however, these relationships between instructional factors and achievement growth are weak.



o Students taught by more experienced teachers tend to attain greater growth in reading and mathematics achievement. It was consistently found that the teaching experience of the regular staff was positively related to achievement.

## <u>Chapter V Highlights: Implementing and Using Evaluations at the</u> State and Local Level

Chapter V provides a review of the evaluation requirements and goals of Title I and a summary of ED's efforts to implement the evaluation requirements. In addition, a set of case studies developed to provide a national overview in key areas of evaluation and program improvement is provided.

- o The Title I Evaluation and Reporting System was required for the first time in the 1979-80 school year. All States submitted Title I participation and achievement information using the system, so that for the first time comparable data were received from all of the States.
- o The Title I Technical Assistance Centers expanded from their early role of providing assistance on the Title I models and reporting requirements to providing assistance on a wider range of topics related to Title I evaluation that were requested by State and local Title I staff. Areas of assistance included data quality control, evaluation of early childhood education projects, process evaluation, and use of evaluation for program improvement.
- o During the 23 mm ths from November 1979 through September 1981, the Technical Assistance Centers provided over 5600 workshops and consultations to nearly 82,000 clients.
- o Title I staff in numerous States and districts are utilizing Title I evaluation procedures that go beyond the requirements of the Title I Evaluation and Reporting System. Often, the focus of these activities is to examine program implementation.
- Many States have successfully implemented extensive quality control procedures for reviewing, editing, and correcting evaluation information submitted by local school districts. Many States have also begun providing descriptive information and information on achievement gains back to participating school districts and are providing districts with information on how their evaluation procedures can be strengthened.
- There is a nationwide focus on identifying and sharing information about exemplary programs.



#### CHAPTER II

#### PROGRAM OBJECTIVES AND OPERATIONS

Title I of the Elementary and Secondary Education Act was enacted in 1965 "to provide financial assistance...to expand and improve... educational programs...which contribute particularly to meeting the special needs of educationally deprived children" (ESEA Title I, Section 10I, P.L. 89-10, as amended by P.L. 95-561). Since then, all State Educational Agencies (including the District of Columbia, Puerto Rico, the Bureau of Indian Affairs and the various insular Territories) and approximately 14,000 local education agencies (LEAs) have provided services funded under Title I. By far, Title I is the largest Federal aid program in elementary and secondary education, with appropriations growing from \$959 million in FY 1966 to over \$3 billion in 1980 (See Table II-1).

Table II-1
Funding History of ESEA Title I

Year:		Authorization: I	Appropriation
1966	\$	1,192,981,206	\$ 959,000,000
1967		1,430,763,947	1,053,410,000
1963		1,902,136,223	1,191,000,000
1969		2,184,436,274	1,123,127,000
1970		2,523,127,905	1,339,050,900
197 <b>1</b>		3,457,407,924	1,500,000,000
1972		4,138,377,672	1,597,500,000
1973		4,927,272,941	1,810,000,000
1974		4,182,509,627	1,719,500,000
1975 <sup>2</sup>		7,954,872,444	3,776,000,000
1976	(FY77)	4,692,511,963	2,050,000,000
1977 (	(FY78)	4,660,666,596	2,285,000,000
1978	(FY79)	5,075,334,514	2,735,000,000
1979 (	(FY80)	5,680,447,238	3,228,382,000
1980	(FY81)	6,291,969,913	3,215,343,000
1981	(FY82)	7,047,423,325	3,104,317,000
1982	(F Y83)	3,480,000,000 <sup>3</sup>	2,886,000,0004

The authorization and appropriation levels shown in these columns pertain to the entire Title I program, and include grants to LEAs (Part A programs), concentration grants and State administered (Part B) programs, viz. the Migrant Education Program and the Program for Neglected and Delinquent Children. The authorizations and appropriations for Part A programs are shown in Table II-2, while funding for Part B programs can be found in the 1981 Annual Evaluation Report.



Commencing in 1976, the program became advance-funded from the prior year's appropriation. This resulted in a doubling-up of funding in 1975.

Budget authority established for ESEA Title I, under Section 513(a) of the Omnibus Budget Reconciliation Act of 1981.

<sup>4</sup> Level of the 1982 continuing resolution.

#### PROGRAM GOALS AND OBJECTIVES

Section 101 of Public Law 89-10, "The Elementary and Secondary Education Act," as amended in 1978 by Public Law 95-561, states:

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

Section 124, which states the requirements of local district programs, specifies under subsection (a) "Purpose of Program" that a district may use Title I funds only for programs "designed to meet the special educational needs of children ..." and must include in its project evaluation "objective measurements of educational achievement" (subsection (g)). Additional emphasis is given to educational goals and instructional services to meet those goals in Section 124 (f)(2), which prohibits the use of Title I funds for health, social, or nutrition services unless the district has requested help from the State in locating and using other sources of funds for those services and has been unable to find any. Implementing these legislative provisions are regulations requiring the development of educational objectives and instructional strategies to achieve those objectives (Section 201.105, Federal Register, Volume 46, No. 12, January 19, 1981, p. 5173).

#### PART A -- PROGRAMS OPERATED 8Y LOCAL EDUCATIONAL AGENCIES

The operations of Title I are clearly specified in the law and accompanying regulations, and are described below in terms of eight major activities: (1) the allocation of funds to districts, (2) the identification of eligible schools, (3) the selection of eligible students, (4) the provision of services to them to meet their needs, (5) the documentation that Title I services do not replace those they are already entitled to (from district, State, or other Federal programs), (6) inclusion of important groups such as parents in decision-making, (7) evaluation of the efforts, and (8) State and local district administration of the program components described above. Each of these eight major activities is described in terms of the legislation and the scope of such activities as they occur in the current implementation of Title I.

In addition, changes to these sections made in the Education Consolidation and Improvement Act of 1981 (ECIA) are presented. A discussion of how well State and local education agencies have achieved the objectives of each activity area is provided where appropriate, though issues related to the nature of Title I services or recipients are treated specifically in Chapter III of this report, and issues pertaining to the educational impact of services are discussed in Chapter IV.



#### The Allocation of Title I Funds

There are two types of grants to districts: 8asic and Concentration. 5 As might be expected given the purpose of this program to assist local agencies with concentrations of students from poverty backgrounds (see above), the allocation of funds for Basic Grants to districts is based on a formula which incorporates, as one of its elements, counts of children from poor families living within their boundaries. The other element is the State's average per-pupil expenditure (or 80% or 120% of the Nation's average per-pupil expenditure if a State's average falls outside this range).

Specifically, a district is authorized under Section 111 of Title I to receive a grant equal to:

40% times the number of students ti
aged 5-17 from families
in poverty living in
the district plus
the number of students
from local institutions
for the neglected, or
delinquent, or in
foster homes (Section 111(c))

times the State's average

per-pupil expenditure (or 80% or

120% of the Nation's

average per-pupil
figure, as noted

above)
(Section 111(a)(2)(A))

A family is defined as "in poverty" for the purpose of the above counts if its income meets either of two conditions: (1) the income falls below the criterion of poverty used by the Bureau of the Census (Section 111(c)(2)(A)), or (2) the income exceeds that criterion due to the receipt of payments under the Aid to Families with Dependent Children program (Section 111(c)(2)(B)).

Census data are crucial to the workings of the formula, and the law contains several provisions to overcome problems caused whenever Census data are used. For example, in cases where Census data describe a geographical unit other than school districts (usually counties), the grant is computed by ED for those other units, and the State is responsible for distributing the funds to districts (often called "subcounty allocations") (Section 111(a)(2)(8)). Also, since Census data are collected infrequently, there are provisions for computing district allocations on more recent data if the district's population has changed drastically (Section 111(a)(3)(D)).

An additional funding complication requires that 1/2 the funds in excess of the national FY 1979 appropriation be distributed to States and districts on the basis of the number of children in families below 50% of the national median income for a family of four (according to the 1975 Survey of Income and Education). The remaining half of the excess over the FY 1979 level is distributed according to the formula described above.



<sup>5</sup> A third category of grants, Incentive Grants, has remained unfunded.

Section 111(c)(1)(8) provides, however, that grants for FY 1979 could count only 2/3 of those children whose families met this second condition, making the formula for grants that year the same as before the Education Amendments of 1978.

The formula and provisions for collecting the various possible data are used to determine the size of the grant a district is entitled to receive. When appropriations for the Title I program as a whole are insufficient to fund all the grants as computed, however, the Part B programs to State agencies (for migrant, neglected/delinquent, and handicapped programs) are funded first, since their set-asides are computed before the remainder of available funds is distributed under Part A (in proportion to each district's entitlement). Section 193(a) provides, however, that no district shall receive, due to this "ratable reduction," a grant which is less than 85% of the one it received the previous year.

Section 117 provides for a second type of grant, the Concentration Grant. The purpose of such a grant is "to provide more effective programs of instruction, especially in the basic skills of reading, writing, and mathematics, to meet the special educational needs of educationally deprived children" in districts whose counties have especially high concentrations of children from families in poverty (Section 117(a)). To qualify, a district's county must have 5,000 or more students counted for the purpose of determining the size of its Basic Grant (Section 111(c)) or have 20% or more of its students be those so counted. The size of a district's or county's Concentration Grant is the same proportion of the national total appropriated for Concentration Grants that year as the area's Basic Grant is to the national total of Basic Grants. The Concentration Grant is viewed as a supplement to the Basic Grant, to be used as described in the district's project application approved by the State.

A third type of grant to districts is the <u>Incentive Grant</u> authorized in Section 116 of Title I. A district's eligibility for an Incentive Grant depends on whether its ite has a compensatory education program which (1) serves only educationally deprived children, (2) has performance objectives related to educational achievement and evaluates projects according to them, (3) provides supplementary services to meet special educational needs of participants, (4) keeps and makes available necessary records, (5) is closely monitored, and (6) distributes at least 50% of its funds within a district to schools serving high concentrations of students from poor families (Section 116(a)(2)). However, Incentive Grants have remained unfunded through 1982.

As noted above, the purpose of Title I is to provide funds for extra services to educationally disadvantaged students in districts with areas of high poverty. The formula uses estimates of the amount of poverty in the area (counts of children from poor families) and average educational expenditures to determine the size of district grants. One rough way to assess the adequacy of the formula for allocating funds to districts in poor areas is to note the correspondence between the numbers of children counted as being from impoverished backgrounds and the amount of funds received.



The Department of Education's 1980 <u>Annual Evaluation Report</u> described the relationship between the numbers of formula-eligible children and per-pupil expenditures. It was shown that the South, with 45.5% of the formula-eligible children, received 29.9% of the allocated Title I funds. In contrast, the Northeast received 22.9% of the allocated Title I funds although only having 18.8% of the Nation's formula-eliqible children. The reason for this difference is primarily due to differential regional costs of education. Most Northeastern States receive over \$200.00 (in FY 77) for each formula-eligible child as a result of high State per-pupil-expenditures in these States. In contrast, over one half of the States in the South received the inimum sum of \$163.00 (80% of the national average) per formula-eligible child as a result of their lower funding in education.

The correspondence between numbers of students from poor back-grounds and receipt of funds is high. The National Institute of Education (NIE) found, specifically, that: (1) as the number of formulaeligible children in a county increases, the average Title I allocation to the county rises consistently, and (2) district allocations reveal patterns similar to those observed at the county level (NIE, Survey of Compensatory Education, 1377). Additional information on school poverty and Title I participation is provided in Chapter III of this report.

Chapter I of the "Education Consolidation and Improvement Act" generally maintains the same basic provisions for funds allocation as ESEA, Title I. However, some modifications to the funding levels of State-administered Part B programs have been enacted which limit the funding of such programs to 14.6 percent of the total appropriation (Section 513(a) of the Omnibus Budget Reconciliation Act of 1981) for 1982.

To summarize, a district's Basic Title I grant (and its Concentration Grant if that subprogram has been funded that year) is based on its numbers of students from families in poverty and the per-pupil expenditures for its State. The law also contains several provisions for updating the counts or adjusting for drastic shifts in population. (Section 111(a)). More information is provided in Chapter III of this report concerning the relationship between poverty levels and achievement levels of participating schools and students.

Title I funds continue to represent about 3% of the total national expenditure for public elementary and secondary education. Table II-2 depicts the funding of Part A, Regular grants to local districts, over the thirteen-year period from 1970-1982. Shown there are the authorized level, the actual appropriations, and those appropriations adjusted for inflation with 1970 as the base year. The increase in authorizations (up until 1981) was 160% while appropriations (including 1982) increased 112%; however, "constant dollar" appropriations decreased about 22%.



Table II-2

Annual Funds for ESEA Title I, Part A Regular Grants
(In Millions of Dollars)

Year	Authorized Level	Actual Appropriations	"Adjusted" Appropriations
1970	2,392	1,219	1,219
1971	2,869	1,340	1,274
1972	3,429	1,407	1,292
1973	4,187	1,536	1,355
1974	3,408	1,446	1,172
1975	7,448	3,212	2,341
1976	4,375	1,721	1,172
1977	4,317	1,926	1,239
1978	4,685	2,356	1,420
1979	5,211	2,630	1,389
1980	5,778	2,633	1,237 8
19B1	6,334	2,513	955
1982	n.a.	2,413 <sup>9</sup>	922

Funding for the two other types of Part A grants: Concentration Grants and Incentive Grants, has been smaller of course -- Table II-3 shows those figures. As ECIA is scheduled to begin implementation on October 1, 1982, both types of grants remain unfunded.

Table II-3
Funds for Part A, Special Grants
(In Millions of Dollars)

Budget	Year	Concentration Grants	Incenti <u>ve Grants</u>
1979 <b>(</b> FY	80)	147	0
1980 (FY		98	0
1981 (FY		99	0
1982 (FY	83)	0	Ô

Information from 1976 (NIE, 1976) is compared with more recent data (AdTech, 1982) in Table II-4 to portray the breakdown of costs for a typical, large Title I project:



 $<sup>^{8}</sup>$  Assuming 11% inflation in 1979, 10% inflation in 1980 and 10% in 1981.

<sup>&</sup>lt;sup>9</sup> From 1982 continuing resolution

Table II-4

Average Allocations of Expenditures for Title I Projects

Budget Items	Percent of Cost	1981 Percent of Cost
Instruction	78 🙎	81 %
Auxiliary services (e.g. parent training, health, etc.)	3	3
Administrative costs (incl. evaluation)	6	6
Operations, maintenance	2	2
Fixed charges (e.g. personnel benefits, etc.)	10	8
Capital outlays	1	0.5

To summarize, all 50 States, the District of Columbia, Puerto Rico, and all outlying Territories (e.g., American Samoa, Guam, Trust Territories of the Pacific, the Virgin Islands, and the Northern Marianas) and the Bureau of Indian Affairs receive Title I funds. 10 The size of Title I grants, and the portion of district funding that Title 1 represents varies considerably. Some highlights concerning the size and scope of Title I grants follow:

- o About 87% of all school districts received Title I funds for the 1979 fiscal year, and about half (7,000) received Concentration Grants, 80% of which were awarded for programs in urban areas.
- o Most grants (62%) are between \$10,000 and \$100,000, but 25% of them are \$100,000 or more (accounting for 84% of the funds).
- o While approximately 13% of the LEAs receive no Title I support at all, in the poorest districts Title I can account for up to 16% of a district's educational funding.
- o Nine "urban" States (having both high proportions of enrollment and of enrollment in districts with more than 25,000 students) receive grants that account for about 50% of the total Title I monies available. These States are California, New York, Texas, Ohio, Pennsylvania, Illinois, Michigan, Florida and New Jersey.

Some Territories have elected to receive consolidated grants (e.g. American Samoa and the Virgin Islands). In these cases, while Title I funds are included in the consolidated grants, each Territory can select, from a limited list, which program requirements to follow when submitting their consolidated grant application. To date, Title I has not been selected by any consolidated grant applicant.



#### The Identification of Eligible Schools

Once a district receives its Title I allocation it must rank its attendance areas on the basis of the concentrations of children, aged 5 to 17, in those areas who are from low-income families. In making this determination, a district can use any or all of a number of measures (Census counts, AFDC, free lunch, housing, health, etc.) if approved by the State.

There are several alternative ways to do these rankings. One can simply order the areas, or use variations: apply the 25 percent rule, meaning that any school with 25% or more of its students from poverty backgrounds can be designated a Title I school as long as certain funding constraints are met (Section 122(a)(I)); serve previously eligible attendance areas (Section 122(c)); use eligibility by actual enrollment (Section 122(b)); or, serve lower ranked areas having a greater incidence of educational deprivation (Section 122(a)(2)(A)).

Two recent surveys have found that districts have Title I programs in 90-95% of their eligible elementary schools (NIE, 1976; Wang, et al, 1978). Of just over 62,500 public schools having any of grades I-6 in 1976-77, about 68% received Title I funds (27% only Title I plus 41% Title I and some other compensatory program funds); 14% received only other compensatory funds, 18% received none (Hoepfner, et al., 1977). A survey of 213 Title I districts in 1976-77 found that most often (in 73% of the districts) they used data on the number of children receiving free or reduced-price lunches for each of their schools to rank them for the purpose of determining Title I eligibility. Second in frequency (in 57% of the districts) was the use of AFDC counts; third was census data on family income (42% of the districts) (Hemenway, et al., 1978). (Oetails concerning characteristics of schools receiving Title I funds are provided in Chapter III of this report.)

Chapter I of the "Education Consolidation and Improvement Act" contains revised procedures for identifying eligible attendance areas. School districts will be eligible to receive funds if they provide assurances in their grant applications to the State agency that projects are conducted in "attendance areas ... having the highest concentrations of low-income children or are located in all attendance areas of an agency which has a uniformly high concentration of such children, (Section 556(b)(1)(A) and (B)) or are designed to utilize part of available funds for services which promise to provide significant help for all such children served by an agency (Section 556(b)(1)(C)).

### Selection of Students to Participate in Title I

An assessment must be made of the special educational needs of children residing in eligible attendance areas (called a <u>needs assessment</u>) to: (1) identify the educationally deprived children, (2) identify the general instructional areas for the program to focus on, and (3) diagnose the specific needs of children (Section 124(b)).



Once the eligible attendance areas and general instructional areas of emphasis have been identified, the district must select as participants those students who show the greatest need for those services (Section 123(a)). In general this means serving the educationally needlest students, but there are also provisions for continuation of services to educationally deprived children no longer in greatest need (Section 123(b)); continuation of services to educationally deprived children transferred to ineligible areas in the same school year (Section 123(c)); skipping children in greatest need who are receiving services of the same nature and scope from non-Federal sources (Section 123(d)); and serving all students (in a schoolwide project) if the school has 75% or more of its students from families in poverty and contributes funds from its own sources to the special compensatory program (Section 133).

As noted above, ECIA maintains the importance of serving educationally needy children, but only "permits" and may not require that only the neediest children be selected for services (Section 556(b)(2)). ECIA also allows for programs which will in part serve all low-income children in a district (Section 556(b)(1)(C)).

An annual assessment of educational needs which identifies educationally deprived children, permits selection of those with the greatest needs and determines the needs of participating children is still required in ECIA (Section 556(b)(2)).

A detailed discussion of the types of children typically served in Title I programs, especially as regards their educational vs. economic disadvantagement, is presented in Chapter III of this report.

#### Providing Services to Meet Special Educational Needs of Participants

As noted above, Title I services are primarily instructional in nature. Health, social, or nutritional services can be provided if the district has requested State help in finding other ways to support them but has been unable to locate such other sources of funding (Section 124(f)(2)). The services must be of sufficient scope to show promise of remediating student needs (Section 124(d)), be coordinated with services from other sources (Section 124(f)), show consideration for evaluating and sustaining student gains (Sections 124(g) and (k)), and whenever possible, be guided by a plan developed for each student (Section 129). Services must be available to students in public and non-public schools of the attendance areas identified as eligible (Section 130).

The requirements of sufficient size and scope, evaluations examining sustained gains, and availability of services for non-public school students are maintained in ECIA (Sections 556(b)(3)-(5)).

Detailed information on the nature and frequency of services provided in Title I is presented in Chapter III of this report.



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#### Documentation by the District that Title I Services Do Not-Replace Those to Which Students Are Already Entitled

The presence of Title I funds in a district should not diminish the services available to students from other sources of funds. Specifically, the amount of resources devoted per-pupil, or in the aggregate, to education in the local agency must equal or exceed those expended the year before (maintenance of effort (Section 126(a)). If for some unforeseen reason this cannot be the case, the district can get a waiver from the requirement, but only for one year.

Furthermore, Title I funds can be used only for services which exceed the average per-pupil expenditure in a district (excess costs Section 126(b)). Similarly, services supported by State and local funds in Title I schools cannot differ from the amount supported on the average in non-Title I schools by more than 5% (comparability of services (Section 126(e)).

For educationally deprived students, the Title I services must be extra to those provided from non-Federal sources ("supplement, not supplant" (Section 126(c)). In some  $s_i$  ial instances, costs and services for State and local compensatory programs — or for programs being phased in to restructure education in a district to meet needs of educationally deprived students — may be excluded from the various computations (Sections 126(d) and 131). Sites offering school-wide projects need not comply with all the fiscal requirements as long as certain other conditions are met (Section 133(c)(2)(A)).

To summarize, Title I has four fiscal requirements to ensure that Title I students get their "fair share" of services from their districts: (a) comparability of services (district and State-funded services in each Title I school must be comparable to the average provided in a district's non-Title I schools); (b) maintenance of effort (local and State funding in a district cannot decrease from one year to the next); (c) excess costs (Title I funds can be used only for costs of Title I projects which exceed the district's perpupil expenditure); and (d) Title I funds must supplement, not supplant, other funds for services to Title I students.

The first two of these fiscal requirements have been examined in recent studies. The findings of these studies, as well as a brief look at the revisions of ECIA Chapter 1 on all four of the fiscal provisions, follow:

#### Comparability

Some members of Congress heard testimony during the 1978 Title I reauthorization hearings that the current comparability requirements are burdensome and overly rigid, and that they unintentionally detract from the effectiveness of Title I services. As a result, the Education Amendments of 1978 authorized (in P.L. 95-561, section 102) a study in which a limited number of districts were to formulate and use alternative comparability criteria, which would provide greater flexibility without compromising the purpose of the comparability provision.



The study, "Utilization and Effects of Alternative Measures of Comparability," has been completed. A report of its findings was delivered to Congress, as mandated, by September 30, 1981.

The study was designed to address five questions: (1) what are the comparative administrative, reporting, monitoring, auditing and enforcement burdens created by the existing provisions; (2) to what extent do the comparability provisions and alternatives conflict with local, State or Federal policies; (3) to what extent do the provisions ensure that districts provide equal local and State resources to little I and non-little I schools alike; (4) to what extent do district and State processes account for variability in the above three areas; and (5) to what extent are the administrative burden, policy conflicts and allocations of equivalent resources influenced by contextual factors of districts (e.g. enrollment size, staff, etc.).

A sample of approximately 500 school districts was selected from 23 States. The 500 were telephoned to determine their interest in participating in the study and of the 405 for which responses are available:

- o 27 reported administrative burden
- o 94 reported conflict with State/local resource allocation policies
- o 18 reported both administrative burden and conflict with State/ local resource allocation policies
- o 266 reported no problem with comparability.

Of the 44 districts volunteering and participating in the study, 34 were granted waivers to implement alternatives and 10 were not, but were to report under existing provisions. Of the 34 waiver districts, 24 implemented an alternative as proposed or with minor changes and reported under their alternative to their SEAs. Three districts implemented their alternative but chose to report under the existing provisions to their SEAs. Seven districts did not implement their alternative and chose instead to comply with the existing comparability provision.

The major findings of the study follow:

o Little evidence was found that the existing comparability provision results in excessive administrative burden. Ninety-five percent of the study's 44 districts identified one or more comparability-related task as burdensome. However, over 50% reported spending less than 10 staff days per school-year on comparability and 23% reported spending 10 to 30 staff days per school-year on comparability. Most of the burden reported by districts is associated with data co:lection because often data are not available in a format required for comparability.



- o Seventy-five percent of the 44 districts perceived comparability requirements to conflict with State or local resource allocation policies. However, only one of these districts was able to provide a concrete example of how it was prevented from carrying out local policies for allocating staff, programs, and services. All other districts reported that they did carry out local policies for allocating staff, programs and services. The one conflict described was the reallocation of staff to comply with comparability after the school year began. Except for eight districts, reallocations involved fewer than three staff members.
- Alternative comparability provisions were shown to have little uniform impact on administrative burden. Some changes examined had the potential to eliminate tasks many districts consider to be burdensome. However, changes could increase burden for some other districts (e.g., collecting data on expenditures for instructional services per pupil for districts that do not now collect such data).
- o Since most implemented alternatives were designed to reduce administrative burden, they had little impact on conflict.
- No evidence was found to support changing the existing comparability provision. However, it was found that if SEAs are given greater discretion in administering comparability (e.g., by permitting districts to use alternative criteria, on a case-bycase basis), many districts could benefit.

While these study findings have been made somewhat moot by the passage of the "Education Consolidation and Improvement Act of 1981," they can serve as valuable evidence in later debates on the merits of the new provision as opposed to merits of the provision as of 1978-80. The intent of the comparability requirements has been maintained in the new Act (i.e., to equalize resources in project and nonproject areas). Under the ECIA, however, a district can satisfy the comparability requirement, by filing a written assurance with the SEA that it has established: a districtwide salary schedule; a policy to ensure equivalence among schools in teachers, administrators and auxiliary personnel; and, a policy to ensure equivalence among schools in the provision of curriculum materials and instructional supplies.

#### Maintenance of Effort

Section 417(a) of the General Education Provision Act (as amended by Section 126 of the Education Amendments of 1978) requires that special attention be given in the <u>Annual Evaluation Report</u> to the maintenance of effort requirement. As noted earlier, this requirement is intended to insure that an SEA or LEA does not lower its level of expenditures in a fiscal year (or years) so that Federal funds constitute a greater proportion of their total expenditures. This determination is made by comparing expenditures on an aggregate or per-pupil basis for the two fiscal years preceding the year in which funds are sought. If an SEA or LEA fails to maintain its level of effort, it risks losing its Title I funds. (An allowance is made for exceptional



circumstances which lead to a decline in the financial resources of an SEA or LEA, but waivers are granted for one year only, and agencies receiving waivers may not take that year into account when computing the final effort in subsequent years.)

There are three main sources of information on maintenance of effort: waiver applications, audit reports, and i study completed by the Rand Corporation in October, 1980 entitled "Maintenance of Effort Provisions: An Instrument of Federalism in Education" (Gurwitz and Darling-Hammond, 1980). In the period from October 1, 1978 to September 30, 1979, four waiver requests were received and three were granted by the U.S. Office of Education. The reason for granting these three waivers was that the school districts presented special levy propositions to the voters which were defeated twice within a 12-month period. In the single district where the request was denied, the district elected to maintain a large cash reserve in anticipation of future levy failures and therefore had sufficient resources to meet the maintenance of effort requirement. There were no Health, Education and Welfare Audit Agency reports with a finding that a local district failed to maintain effort during that particular period.

The Rand study involved visits to ten States. The highlights of their report include the following:

- O Local districts out of compliance with the maintenance of effort requirement typically are poor, spend little in education, have a large proportion of minority students, and are "Federally reliant." Many are also small.
- o Only 28 LEAs fell out of compliance with the maintenance of effort provisions between fiscal years 1977 to 1980. Of these, 25 were granted waivers by the U.S. Office of Education.
- The current rules for maintenance of effort did not distinguish between "unwillingness and inability" to maintain spending levels.
- However, the Rand researchers predicted an increasing problem in meeting maintenance of effort provisions due to the effects of inflation and the declining tax bases (sometimes the result of tax-limitation initiative, such as "Proposition 13" in California and "Proposition 2 1/2" in Massachusetts) in many districts, particularly in the Northeast and North Central regions. Rand estimated that over 100 districts would be out of compliance by fiscal year 1981.

The picture painted by Rand may be offset somewhat by revisions in the "Education Consolidation and Improvement Act." While continuing the intent of the maintenance of effort provisions, the requirement for maintenance is decreased from 100% of the previous fiscal year to only 90%. In addition, an LEA's allocation will be reduced only in the exact proportion to which the LEA fails to meet the maintenance of effort requirement by falling below the 90% level.



#### Excess Costs

The excess costs provision of Title I was designed to require districts to use Title I funds only for the "excess costs of programs and projects." Excess costs are defined as those which exceed the average per pupil expenditure of LEAs. In the final regulations for Title I, published on March 27, 1981 in the Federal Register, the excess costs proposed regulations were relegated to the status of guidelines. In the "Education Consolidation and Improvement Act," the excess costs provision was not included.

#### Supplement, Not Supplant

The intent of Section 126(c) of Title I was to have LEAs use funds received under this title so as to "supplement and, to the extent possible, increase the level of funds that would, in the absence of Federal funds, be made available ... for the education of pupils..." The proposed rules for the supplement, not supplant provision were published as guidelines, rather than program requirements, on March 27, I981, in the Federal Register. In the "Education Consolidation and Improvement Act," the general intent of supplement, not supplant is maintained.

To summarize, provisions regarding supplement, not supplant, maintenance of effort and comparability of services are provided in ECIA, but in general, they state less stringent criteria for applying these provisions.

#### Inclusion of Important Groups in Decision-Making

The Title I law not only specifies requirements for local and State activities, but also requires that teachers and school boards be included in 'he planning and evaluation of the effort (Section 124(i)). Similarly, parents of participating children must be informed of the program's goals and their children's progress as well as make recommendations and assist in helping their children (Section 124(j)). Parent involvement is required in a formal sense, also, in the establishment and operation of Parent Advisory Councils. Each district, as well as each school having one or more FTE Title I staff and more than forty Title I participants, is required to have such a council with a majority of the elected members being parents of Title I participants (Section 125).

#### Parent Involvement

Two major sources of recent information on parent involvement in Title I are reported on below. A "Study of Parent Involvement in Four Federal Programs," in which parent activities in Title I and three other programs were examined in a nationally representative sample of districts, has been recently completed. In addition, parent involvement information was provided by all SEAs as part of their Title I annual evaluation reports. For the sake of completeness, information is also presented in this section which has been available from some earlier studies.



The "Study of Parent Involvement" was conducted in a representative (for each program studied) sample of districts during the 1978-79 school year to provide national data on the extent of parental participation in governance and instructional areas and on the coordination of parental involvement. A more intense and detailed examination of parental involvement in a smaller set of projects, the Site Study, was conducted during the 1979-80 school year. The sample was selected to have districts with greater or lesser degrees of parent involvement in project governance and instruction, representation of both urban and rural districts, and instances of districts with differing numbers of Federal programs in place. Sixteen Title I sites were selected. System Development Corporation (SDC), the contractor for the study, looked at five areas in which parents participate in Title I projects: governance, instruction, parent education, school support, and community-school relations. The highlights of the findings are summarized below:

Project governance. Almost all parental involvement in project governance occurred through District Advisory Councils (DACs) and School Advisory Councils (SACs). Almost every project had a DAC, with the majority of members being parents. However, there was little involvement of the DACs in project decision-making. In addition, few SACs were actively involved with decision-making about a school's Title I activities. While there were few highly involved DACs and SACs, those that were involved managed to make meaningful contributions to the design and implementation of Title I projects.

(The Sustaining Effects Study found in 1975-76 that most parents (67%) know whether their children's schools have special programs for low-achieving students, but few (40%) know of Title I and even fewer participate in local governance of the Title I program.)

<u>Project instruction</u>. Involvement in project instruction occurred through parent participation as paid aides, instructional volunteers, and tutirs of their own children. It was reported that students developed better attitudes towards their work when their parents were involved with the school's instructional program, and in two projects where systematic home tutoring occurred there was also evidence of improved student achievement.

Other areas. Most projects offered some form of parent education, including parenting skills and assisting children with classwork. School support activities (project activities through which parents can provide non-instructional support to a school or project) took place infrequently and were not a major activity where they occurred. Virtually all projects engaged in community-school activities. These activities were primarily communication and seldom dealt with interpersonal relations.



Information on parent participation in Title I also was collected in the State Title I evaluation reports and is presented in Table I1-5. To highlight these results:

- Over 272,000 elected members of school advisory councils were parents of Title I students. Of these, 19,000 were parents of nonpublic school students.
- Nearly 399,000 elected members of councils received training related to school advisory councils. Thus, it can be estimated that at least 117,000 elected members of school advisory councils were not parents of Title I students. (People who are not parents of Title I children may serve as members of school advisory councils, as long as the majority of council members are parents of Title I children.)
- o Over 6600 LEAs provided Title I funds for advisory council activities. The average number of people attending school advisory council meetings was 14, including parents of Title I and non-Title I students as well as community personnel, school personnel and other individuals.

#### Table II-5

#### Title I Parent Activity Information for 1979-80

#### Advisory Councils

Number of elected members of a school advisory council who:

0	were parents of Title I public school students	272,556
0	were parents of Title I nonpublic school students	19,390
0	received training for school advisory council activities	398,952

#### Parent Activities

Number of parents of Title I students involved in the following Title I activities:

o project planning, implementation, and/or evaluation	387,235
o volunteers in the Title I classroom	126,238
o volunteers outside the Title I classrooms	90,410
Number of other parents involved in activities:	163,322
Average number of people who attended school advisory counc	:11
meetings:	13.8
(Range:	4 - 116)

Information on planning and training activities available for members of parent advisory councils was gathered in the "Sustaining Effects Study." This information is summarized in Table II-6.



Table II-6
Parent Advisory Council Planning Activities and Training

Type of involvement in planning the	Percent of
district's Title I program	<u>Districts</u>
Regularly scheduled meetings	78
Briefings by Title I staff	68
PAC meetings with Title I staff to plan	
the program	47
Mailed information on plans	34
PAC not involved in planning the program	4 1
No district Title I PAC	1
Training topics provided to the PAC by the district	96
Needs assessment, program planning, evaluation	86
How Title I works at national, State and local Budget Preparation	levels 82 53
How to get people to work together	40
Parliamentary procedures	26
No training provided	8 1
nko tratinina provinca	_

To summarize, the numbers of parents of Title I children who participated in various types of Title I activities is presented below in Figure II-1.

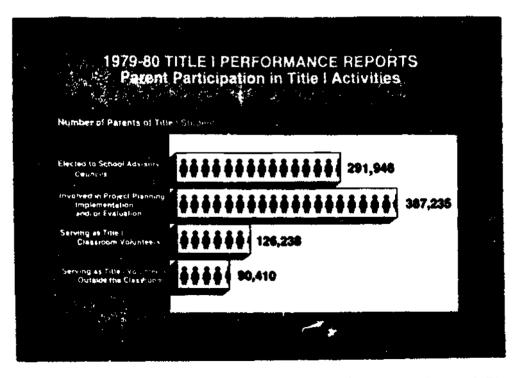


Figure II-1. Title I parent participation. (From the 1979-80 Title I Evaluation and Reporting System reports.)



#### District Planning and Training Activities

As noted earlier, Title I requires that teachers in Title I schools, school boards, and parents be involved in the planning and evaluation of local Title I projects (Section 124(i) and (j)). The extent of such involvement is difficult to assess because "planning" and "involvement" encompass many different activities and interpretations.

When asked about planning activities for the NIE Survey of Compensatory Education in 1976-77, 84% of the Title I districts described a process beginning around April (on the average) of the preceding year, and mentioned the importance of district planning meetings. The topic most often covered at such meetings was needs assessment; least often was in-service training. Participation at such meetings is depicted in Table II-7.

Table 11-7
People Attending Title I District Planning Meetings

Attended Planning Meeting	% of Title I Districts	
Compensatory education teachers	76	
Other compensatory education staff	68	
Non-compensatory teachers	62	
Principals/Assistant principals	94	
District staff	81	
Parents	74	
(from NIE, 1978, page 116).		

A second aspect of school and community involvement, in addition to the planning function, is to keep interested persons informed of program operations and effects. Only through the timely dissemination of program information can involvement in program decisions be encouraged. Districts have a variety of ways to accomplish this, and their relative effectiveness is difficult to assess. A survey of administrators in 213 districts in 1976-77 found districts using different numbers and combinations of eight major information dissemination strategies, as shown below in Table II-8.

In addition to information about the training of parents and parent advisory council members, the 1980 State Title I reports contain descriptive information regarding training opportunities afforded to staff members. This information is summarized in Table II-9. No information was collected, however, on the relative intensity and comprehensiveness of training opportunities afforded to Title I vs. non-Title I staff. It is often the case that non-Title I staff training consists of introductory material to familiarize them with the Title I program, while training of Title I staff may offer more in-depth presentations on program-related topics.



Table II-8
Frequencies of District Title I Communication Procedures

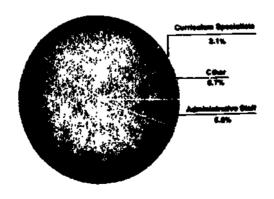
Question: During this school year how many times did your district use the following procedures to keep such persons informed about the district Title I programs?

	Average No. of Times/Year
District-wide meetings of all concerned persons	2.5
Meetings of principals of Title I schools	3.8
Meetings of teachers of Title I schools	4.0
Meetings of District Title I Parent Advisory Council	3.9
Meetings of School Title I Parent Advisory Councils	3.8
Presentations of Title I information to the Board	
of Education	2.3
Presentations in district publications not specifical	11y
devoted to Title I	2.4
Stories in local news media	3.0

Table II-9
Numbers of Staff Receiving Training Funded by Title I

Job Classification	Title I Staff	Non-Title I Staff
Administrative Staff	6,893	10,387
Teachers	79,096	85,620
Teacher Aides	<b>85</b> ,836	5,892
Curriculum Specialists	4,601	1,642
Other (e.g. Tutors, Community Aides, accounting personnel)	9,243	10,764

The proportions of staff, both Title I and non-Title I, that received Title I funded training are shown in Figure II-2.



Staff Receiving Title ! Funded Training





To summarize, Title I contains the requirement that parents of participating children be permitted to participate in the establishment of programs and "are informed of, and permitted to make recommendations with respect to, the instructional goals of the program and the progress of their children in such programs," and that parents are "afforded opportunities to assist their children in achieving such goals."

Under ECIA, a district will no longer be required to have Parent Advisory Councils, but may continue those Councils if it wishes to do so. A related requirement in the new Act states that programs "be designed and implemented in consultation with parents and teachers (Section 556(b)(3))."

#### Evaluation of the Effectiveness of Services

Districts must evaluate the effectiveness of their programs in meeting the special educational needs of participating students according to a schedule proposed by the State and approved by ED which ensures that each year the State's evaluation report is representative of efforts in the State (Sections 124(g) and 183(b)). These required evaluations must include "objective measures of educational achievement" (Section 124(g)(2)), be structured according to one of three evaluation models or an approved alternative (Section 183(d) and 45 CFR Sections 116a.170 - 116a.177), and include a measure of sustained achievement over longer than twelve months (Section 124(g)(2)).

ECIA Chapter 1 will require districts to evaluate projects "in terms of their effectiveness in achieving the goals set for them, and that such evaluations shall include objective measurements of educational achievement in the basic skills and a determination of whether improved performance is sustained..." (Section 556(b)(4)).

Evaluation efforts undertaken by ED, by States and by local education agencies will be discussed in detail in Chapters IV and V of this report.

#### Administration of Title I by State and Local Agencies

While local education agencies (LEAs) bear the major responsibility for designing, implementing and evaluating their programs, State agencies (SEAs) are responsible for the oversight of LEA programs. In general, the responsibility for ensuring that districts comply with the law and regulations falls on State educational agencies. Specifically, the law provides for State approval of district applications, rule-making, technical assistance, monitoring, withholding of funds, program audits, and audit resolutions (Sections 164-170 of Title I). To perform these duties, a State receives up to 1.5% of the total grants received by districts and agencies in the State or \$225,000, whichever is more (Section 194).

Each LEA provides to its SEA, in its three year application for a Title I grant, information describing its plans to comply with Title I ragulations, guidelines, and program criteria. Similarly, States are required to submit a "Monitoring and Enforcement Plan" describing activities to ensure that such compliance exists.



A 1976-77 study of State administration (NIE, 1978) found that States varied widely in how they administered Title I. For example, some States had no general information mailings to Title I districts, while others reported as many as 30; the number of conferences held to provide assistance ranged from 0 to 500; and the number of individual visits to Title I districts ranged from 0 to over 1,000.

The enormous diversity was attributed to two factors: (1) a lack of clarity in the Federal legal framework about precisely what States are supposed to do, with many States confused about their exact responsibilities and authorities in the areas of rulemaking, disseminating information, providing technical assistance, and monitoring and enforcing compliance, and (2) substantial variations among States in the number of staff they have available to administer the program.

The study noted the importance of State staffing, finding that those States identified as having administrations of poor quality had lower staffing levels than would be expected given the size of their set-asides, the proportion of the population that was urban, the number of Title I districts, and their organizational characteristics. A study of selected cases showed that: (1) the greater the efforts & State made to clarify, record, and disseminate regulations, the less likely its districts were to experience compliance problems, and (2) the degree of personal interaction and amount of time spent between State Title I officials and local district personnel appeared to be strongly related to the general quality of local district administration.

Given these findings, the 1978 Amendments to Title I were written by the Congress to provide greater clarity in the law, and the setaside for State administration was increased. Two studies are currently underway to describe the effects of these changes on State and on local school district administrative practices. The major goals of these studies are:

- o to describe how States and districts, through guidelines and management practices, implement the provisions of Title I
- o to describe State and local assessments of the utility and burden associated with various administrative requirements
- o to identify effective State and local management practices and materials that can be disseminated to other sites to help them improve their administration of Title I and Chapter I.

While neither of these studies are yet complete, some preliminary highlights of each will be presented below. For the State management study (AIR, 1982), these results are based upon the following:

- o a review of state Title I management documents and ED reports
- o a telephone survey of 49 State Title I coordinators
- o onsite visits to seven SEAs and interviews in a sample of 35 local education agencies (LEAs) in seven states.



Background information about each State's Title I budget, staffing, and organization as well as other demographic data and information about State characteristics was assembled from a variety of sources, including the U.S. Bureau of the Census and the National Center for Education Statistics. This information will be presented in an appendix to this report.

State Title I Coordinators were asked to rate the importance of each State responsibility and district program requirement as having little, moderate, or significant importance in achieving the Title I program goals, and to specify the percentages of time that they and their staffs spent on each of their management responsibilities. Table II-10 presents information on the importance of various State responsibilities: approval of LEA applications, monitoring, technical assistance and dissemination, and recordkeeping were rated as most important in meeting the purposes of the Title I program, while monitoring and enforcement plans received a low rating as to their importance. Coordinators reported that they and their staffs spent a large proportion of their time on three of the four highly-ranked areas-approval of LEA applications, monitoring, and technical assistance and dissemination-but not on recordkeeping.

Table II-10
Importance of Legislated State Responsibilities

Responsibilities	Rank	Average 11	Percent Time Spent on Task (Median)
Approval of LEA applications	1	2.9	18.0
Monitoring	2.5	2.8	<b>30.</b> 0
Technical assistance/dissemination	2.5	2.8	20.0
Recordkeeping/fiscal controls <sup>12</sup>	4	2.7	7.0
Prohibition of federal aid	5	2.4	
Audits/audit resolution	7	2.1	5.0
Sate rulemaking	7	2.1	2.0
Access to information	7	2.1	
Withholding of payments	10	2.0	<b>0.</b> 0
Reporting	10	2.0	3.0
State applications	10	2.0	1.0
Complaint resolutions	12	1.7	1.0
Monitoring and enforcement plans 13	13	1.6	-· •

- 11 Each item was rated on a three point scale as follows:
  - 1 = Little or no importance in meeting the purposes of the Title I law,
  - 2 = Moderate importance in meeting the purposes of the Title I law, and 3 = Substantial importance in meeting the purposes of the Title I law.
- 12 Time spent on recordkeeping/fiscal controls, prohibition of federal aid, and access to information were combined under this category.
- Time spent on this task was included in the time spent on "State applications."



State Title I coordinators were asked to indicate the importance that they and their staffs attach to district requirements. Table II-11 presents the average rating and the rank of various responsibilities within each of these program areas. The two most important areas were seen to be the targeting and eligibility of children to be served and the assessment of educational need, while schoolwide projects, construction, comparability, complaint resolution, and parent advisory councils were among the five lowest ranked areas. (It is interesting to note that while parent advisory councils were given a low rating, parent involvement was rated quite high).

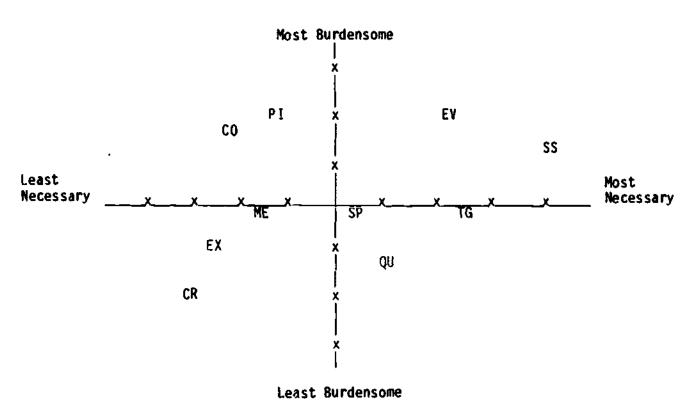
Table II-11
State Title I Coordinators' Ratings of the Importance of Legislated District Responsibilities

Responsibility	Average Rating 14	Rank (in total group)
Funds Allocation		
Supplement not supplant	2.8	3.5
Maintenance of effort	1.9	19.5
Excess costs	2.0	17
Comparability	1.8	?4
Targeting and Eligibility		
Children to be served	3.0	1
Private school participation	2.3	12
Oesignating school attendance areas	2.2	15
Schoolwide projects	1.3	28
Program Planning and Oesign		
Assessment of educational need	2.9	2
Purpose of program	2.7	6
Control of funds	2.7	6 6 6
Accountability	2.7	6
Sufficient size, scope, quality	2.5	9
Planning	2.4	10
Other program coordination	2.2	15
Teacher/school board participation	2.3	12
Training of aides	2.3	12
Information dissemination	1.9	19.5
Individualized plans	1.9	19.5
Ranking of project areas	1.9	19.5
Jointly-operated programs	1.8	24
Complaint resolution	1.8	24
Non-instructional duties	1.8	24
Construction	1.4	27
Evaluation	<b>†</b>	
Evaluation	2.8	3.5
Sustaining gains	2.2	15
Parent Involvement		_
Parent involvement	2.6	8
Parent advisory councils	1.8	24



<sup>14</sup> See Table II-10 for a description of the rating scale.

Preliminary results from the ongoing "Study of Oistrict Management Practices" (AdTech, 1982) tend to support the findings from the "State Management Practices" study, at least in terms of activities and responsibilities judged beneficial overall to the proper functioning of the Title I program. Figure II-3 summarizes the ratings of district personnel of the importance, and relative burden, of various local administrative activities. Oistrict personnel felt that while four activities were burdensome (parent involvement, evaluation, comparability and student selection), two of those were considered to be necessary (student selection and evaluation) while two were rated as being somewhat unnecessary (comparability and parent involvement). Complaint resolution and excess cost requirements were considered the least necessary, though neither was judged to be particularly burdensome.



Key: SS = student selection

EV = evaluation

TG = targeting

QU = adequate size, scope and quality

SP = supplement, not supplant

PI = parent involvement

ME = maintenance of effort

EX = excess costs

CR = complaint resolution

CO = comparability

Figure II-3. Oistrict Ratings of Burden and Importance of Activities

Additional information on the characteristics of States and local educational agencies, particularly with regards to the nature of their compensatory educational programs, is presented in Chapter III. In addition, a report being prepared by the EO Office of Elementary and Secondary Education summarizes the Progress made in implementing the monitoring and enforcement plans developed by each SEA.



Chapter 1 of LCIA will enact substantial changes in the nature of the State role and responsibilities for overseeing compensatory education programs. State agencies "shall" approve local applications if the program assurances described earlier are provided (Section 556(b)). States must keep records and provide information to the Secretary as needed for fiscal accountability and program evaluation (Section 555(d)). However, the role of States in monitoring and enforcing local programs is greatly reduced (Section 596(a)), and the State administrative set-aside has been reduced to a maximum of 1% of the total grants received, with a minimum payment of \$225,000 per year (Section 554(d)).

#### PROGRAMS OPERATED BY STATE AGENCIES (PART 8 PROGRAMS)

Three programs are specifically created in ESEA to be administered by SEAs: a program for migratory education, a program for handicapped children, and a program for neglected and delinquent children.

Two of these subprograms -- the migrant education program and the program for institutionalized neglected or delinquent children -- have recently been extensively studied, and the results of these evaluations have been transmitted to Congress. The executive summaries of the evaluations of the migrant education program and the program for neglected and delinquent children are attached as appendices to this report. The executive summaries contain descriptions of the scope and operations of the programs as well as the evaluation findings and recommendations; hence, they will not be discussed here. For more comprehensive descriptions of these Part 8 programs, the reader is referred to the Oepartment of Education's 1981 Annual Evaluation Report.

The Title I handicapped program, which is administered by ED's Office of Special Education and Rehabilitative Services, similarly will not be discussed here, primarily for two reasons: (1) the program is being considered for inclusion into a larger "Special Education" block grant, and (2) a study is now being planned, to begin by the Fall of 1982, of how the program operates and how effective its services are at meeting the legislated goals. The study will be able to provide information which will describe the block grant's effects on services and on participants. A description of the current program's goals and operations is provided in the 1981 Annual Evaluation Report.



#### CHAPTER III

THE NATURE AND IMPLEMENTATION OF COMPENSATION PROGRAMS

The purpose in Chapter III is to provide a description of Title I projects as they are currently carried out by loca; education agencies (LEAs). Information on the following aspects of Title I will be provided:

- o Numbers of public and private students served by Title I,
- o Characteristics of schools and students receiving Title I services,
- o Staffing patterns of Title I projects,
- Types of services provided,
- Information on summer school programs.

Several sources were utilized to obtain this information, including reports submitted by State Education Agencies (SEAs) and the results of national states. The Executive Summaries of special studies of Title I, Part 8 (State operated) programs are provided in appendices.

#### Sources of Information

Information on Title I programs was available from several sources, the most recent of which are the Title I Evaluation and Reporting System (TIERS) and the Sustaining Effects Study (SES). An older, but still useful, source is the NIE <u>Survey of Compensatory Education</u>. A brief description of each source of information follows:

Title I Evaluation and Reporting System (TIERS). ED received TIERS reports from all SEAs with little I programs. (The development and implementation of this system is decribed in greater detail in Chapter V of this report.) Information collected as part of this system includes:

- o Numbers and characteristics of students served,
- o Nature of the services provided, and
- Numbers and characteristics of staff and others (parents, administrators, etc.) who work in Title I.

The State performance and evaluation information was collected using a standard form (ED 686-2). The 1979-80 school year was the first year of nationwide implementation of the system. Reports were received from SEAs during the spring and summer of 1981 and numerous revisions were made as State and Federal personnel reviewed the forms during the summer and fall.

Sustaining Effects Study. The Sustaining Effects Study (SES) is a five year longitudinal study conducted by System Development Corporation (SDC) of Santa Monica, California. The study was designed to determine:

o Who receives compensatory education,



- o What is compensatory education,
- o How effective is compensatory education,
- What happens to the achievement of students when their compensatory education services are discontinued,
- o What happens to student achievement over the summer, and is summer school effective.

The study covered students in grades one through six, and initial data collection occurred in the 1976-77 school year. Achievement data were collected over three continuous school years, and will be discussed in Chapter IV of this report.

NIE Survey of Compensatory Education. The NIE Survey of Compensatory Education was conducted in a random sample of Title I school districts during the 1975-76 school year. Interviews were conducted with State and district administrators, school principals, regular classroom and compensatory education teachers, and PAC chairpersons. Results were reported on the scope of compensatory education, the range of services provided with Title I funds, the characteristics of the students served, and the characteristics of compensatory instruction.

#### Who Receives Title I Services?

Information was available on the types of schools and students who receive Title I services, including information on both poverty level and achievement standing. This information is summarized below.

#### Selection of Eligible Schools

District practices result in Title I programs being offered more often in schools with larger proportions of their students from families in poverty, as shown in Figure III-1. It is clear that as the proportion of students from poverty backgrounds increases in a school, so too does the likelihood that it will be a Title I school. Schools with high concentrations of students from poverty background are almost certain to have compensatory education programs (only 5% receive no compensatory funds).

As noted in Chapter II, it is possible for schools to be declared "Title I eligible" if they have large proportions of educationally deprived children (but not necessarily large enough proportions of economically disadvantaged students to rank high in the district's ordering of schools according to the poverty of their attendance areas). It is interesting to note the correspondence between economic and educational deprivation of attendance areas, particularly since the question of whether Title I is designed primarily to serve the educationally deprived vs. the economically disadvantaged is periodically resurrected.



Figure III-2 shows the numbers of schools with different proportions of educationally deprived students offering Title I programs. The pattern is similar to that in Figure III-1. In fact, the correlation between the number of educationally disadvantaged students in a school and the number of economically disadvantaged ones is .67. The correlation between those two numbers for schools within the same district is even higher -- .91 (Breglio, et al., 1978). Most schools (91%) having greater than half of their students from poor homes and greater than half performing at least one year below grade level offer Title I programs (97% offer Title I or some other compensatory program). The 3% of these schools which do not have any compensatory program (Title I or something else) are most often located in urban settings.

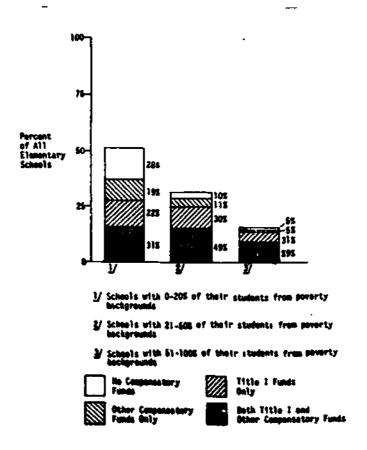


Figure II1-1. Elementary schools with differing proportions of students from poverty backgrounds.



#### Selection of Students

Title I services are supposed to "meet the special educational needs of educationally deprived children" attending school in the eligible attendance areas. The current regulations state that a district mush use "specified criteria and—to the extent possible—objective data to select ... those educationally deprived children who are in the greatest need of assistance ..." (Federal Register, Volume 45, No. 114, June 11, 1980, page 39751, Section 116a.103).

It is difficult to assess how adequately local procedures achieve the intent of the regulations due to differing definitions of educational deprivation and greatest need. Analyses of targeting of services on reudents found that 75% of the schools in the "Sustaining Effects

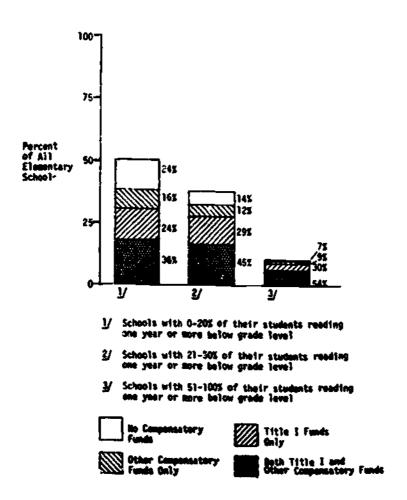


Figure III-2. Elementary schools with differing proportions of educationally deprived students.



Study" (which formed a representative sample of the Nation's schools serving grades 1-6) had more than half of their Title I students falling at or below the 35th percentile on the nationally standardized reading test used in the study (Kenoyer and Cooper, 1980). (The 35th percentile represents a level of performance below which most teachers judge students to need compensatory services.)

Another way to assess the adequacy of selection procedures is to assess the degree to which, for each school, the low-achievers tend to be in Title I and the higher achievers not. This can be examined by a correlation between student achievement ranks on standardized reading tests and whether or not each is in Title I. These correlations are almost all positive in reading, but not strongly so. The average correlation across schools was .37 in reading and .24 in math (Kenoyer and Cooper, 1980).

It is also possible to depict student participation in Title I separately for each quartile of the achievement distribution. The figures for grades 1-6 according to the "Sustaining Effects Study" are shown in Table III-1 (Breglio, et al., 1978),

It is important in reading Table III-1 to note that the percentage figures add to 100% by row (except for rounding errors): that is, for example, 32% of the Nation's students in the bottom quartile are in Title I; 14% of the students in that quartile receive services only from other compensatory programs; 42% are in schools with compensatory programs but receive no services 1; and 11% are in schools which have no compensatory programs. Difficulties in targeting services on the neediest is evident in this table since 457,000 (16% of the students in Title I) placed in the upper half of the distribution (left column, 3rd and 4th rows). Possible explanations include problems with tests and teacher or parent preferences for certain students to be in Title I.

Additional information is available from the TIERS. The results of the achievement testing provide an estimate of the standing of Title I students through the weighted mean pretest scores submitted by States. This information is provided in Tables III-2 for reading and mathematics for students tested on an annual testing schedule (either fall-to-fall or spring-to-spring). Considerable variation was found among the States on the pretest standing of the Title I students (for those with both pretest and posttest scores for a given subject area) as well as between the pretest standing of those tested in the fall versus those tested in the spring. The posttest standing of reading and mathematics students tends to be similar for students tested on a fall-to-spring schedule and for those tested on an annual schedule.

Of particular interest is the 42% figure, showing that many students scoring poorly on standardized instruments do not receive services even when they attend schools that offer compensatory education programs. A combination of factors has been suggested: poor selection procedures, funding levels too low to serve all needy children and, in some cases, the lack of Title I programs at certain grade levels.



Table III-I

Achievement Status and Participation in Compensatory Education, Grades 1 - 6

Achievement Status				satory articipa	nts	Students Not In Compensatory Education			
		Title	Title I		Other Comp. Ed.		In Comp. Ed. School		ooi <u>np. Ed.</u>
		No.	(%)	No.	(%)	No .	(%)	No.	(%)
Bottom	Quartile	1,579,000	(32)	718,000	(14)	2,110,000	(42)	560,000	(11)
2nd	Quartile	910,000	(19)	<b>54</b> 3,000	(11)	2,809,000	(58)	605,000	(12)
3rd	Quartile	368,000	(7)	411,000	( 8)	3,600,000	(70)	762,000	(15)
Тор	Quartile	89,000	( 2)	301,000	( 6)	3,772,000	(75)	869,000	(17)

Table III-2

1979-80 Title I Pretest Standing for Students Tested on an Annual Testing Cycle (in Percentiles)

Grade <u>F</u> Minimum <sup>2</sup> Ave		Reading	<u>l</u>	Mai	thematics	
	Average <sup>3</sup>	Maximum <sup>4</sup>	Minimum	Average	Maximum	
2	9	28	50	12	35	48
3	6	23 23	4 I 39	<del>9</del> 9	31 <b>2</b> 8	50 49
5	11 9	23 22	40	8	26	49
6	9	22	39	9	24	43
7	7	22	43	8	23	39
8	10	22	40	9	23	44
9	9	20	37	9	23	46
10	7	17	39	9	21	52
11	6	Ī4	24	7	24	49
12	5	Ī2	28	8	22	51

The minimum is the lowest reported pretest score of all SEAs with at least 100 students tested.



The average is the percentile equivalent of the weighted average NCE score of all reporting SEAs.

The maximum is the highest reported Pretest score of all SEAs with at least 100 students tested.

For reading, across all States, students tested on an annual schedule averaged at the 22nd percentile in the elementary grades. Some States report pretest figures much higher or lower than this, however. At grade 2, the lowest percentile was 9 and the highest was 50. (In the extreme, a rough estimate shows that in one State about half of the students fell below the 9th percentile, while in another State about half fell below the 50th percentile, based on students with both pretest and posttest scores.)

For <u>mathematics</u>, the students tested annually showed national percentile standing ranging from a high of the 35th percentile at grade 2 to a low of the 21st percentile in grade 10. Considerable variation was found among the scores reported by States, with percentiles at grade 4 varying from a low of the 8th percentile to a high of the 49th percentile.

Other aspects involved in "targeting" involve the numbers of students with different characteristics being served by the program (as a consequence, presumably, of the selection procedures emphasizing educational need). Data on the sex, age and language groupings of participants in Title I are shown in Table III-3 (as reported in the 1980 Annual Evaluation Report and dating from Fiscal Year 1977; from the "Sustaining Effects Study.")

Table III-3

Characteristics of Title I Participants in Grades 1 - 6
(Sustaining Effects Study)

Language	-	
English spoken at home	2,470,000	(84)
Spanish spoken at home	353,000	(12)
Other language spoken at home	113,000	(4)
<u>Age</u>		
5-6 years	354,000	(12)
7 *	506,000	(17)
<b>8</b> 9	519,000	(18)
9	503,000	(17)
10	510,000	(17)
11	418,000	(14)
12	128,000	( 4)
Sex		
Female	1,094,000	(44)
Male	1,412,000	(56)



In addition, on the TIERS forms, States were asked to record the number of Title I students during the regular term of 1979-80 according to five ethnic groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black not Hispanic, Hispanic, and White not Hispanic. Each student was to be counted in only one group. Nine SEAs did not report ethnic group information, and other States used estimates or had incomplete information. Table III-4 presents the ethnic group characteristics of Title I students for the reporting SEAs and for all SEAs using estimates for the missing data. The missing data were estimated by use of 1970 Bureau of Census population estimates to proportion the Title I students into ethnic categories. This procedure will probably overestimate the number of white not-Hispanic Title I participants.

Based on available information, it is estimated that slightly over one-half of Title I participants during the regular term of 1979-80 were white not-Hispanics, slightly more than one-quarter were Black not-Hispanic, between one-seventh and one-sixth were Hispanic, and less than 5% were Asian, Pacific Islander, or American Indian.

The TIERS data on race was provided by several States who did not have actual counts available and thus had to estimate. Other estimates of these counts come from NIE, 1977, and are based on a 1976 sample: White (54%), Black (34.5%), Hispanic (10%) and other (1.5%).

#### 1979-80 TITLE I PERFORMANCE REPORTS Ethnic Characteristics of Title I Participants During the Regular Term

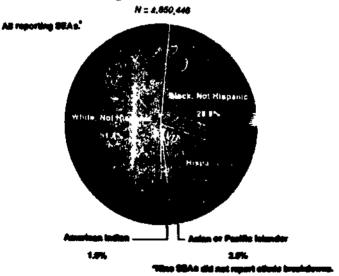


Figure III-3. Ethnic characteristics of Title I participants based on States reporting ethnic data in 1979-80.



III-9

Table III-4

Ethnic Characteristics of Title I Participants
During the Regular School Term in 1979-80

Ethnic Group	Number	(%)
White, Not Hispanic	2,490,868	(51)
Black, Not Hispanic	1,399,044	(29)
Hispanic Asian or Pacific Islander	76 <b>8,54</b> 2 98 <b>,</b> 207	(16) ( 2)
American Indian	93,785	( 2)
11 SEAs <sup>6</sup> (TIERS)		
<u>Ethnic Group</u>	Number	( \$)
White, Not Hispanic	2,947,006	(55)
Black, Not Hispanic	1,466,833	(27)
Hispanic	774,529	(14) (4)
Asian, Pacific Islander, or American Indian	192,577	( 4)
ustaining Effects Study		
Etinic Group	Number	(_\$)
White, not Hispanic	1,762,000	(61)
Black, not Hispanic	740,000	(26)
Hispanic Other	328,000 58,000	(11)

Nine SEAs did not report ethnic breakdowns.



State population data were used to estimate missing information.

## Number of Students Served by Title I

States were required to report the number of Title I participants during the regular term of 1979-80 by public and nonpublic designation and grade level. Participants in local, but not State, institutions for neglected or delinquent children were to be included. Any student who received any amount of Title I funded instruction in a subject matter area was considered to be a participant, and each student was to be counted only once regardless of the number of subject matter areas in which he or she received instruction. Participants in ungraded classes were to be assigned to grades on the basis of age at the beginning of the school year. (See the <u>Handbook</u>: Instructions for Title I Reporting, 1980 for complete information.)

Data were received by all 56 SEAs (see Table III-5). However, some SEAs reported pupils in ungraded classes in the totals but not in the individual grades, and some SEAs did not report local Neglected or Delinquent program students by grade level and public/nonpublic designation; therefore the rows and columns in Table 1 will not add to the total number served.

Table III-5

Number of Regular Term Title I Participants by Grade Level
and Public/Nonpublic Status During 1979-80

Grade	Public 7		Nonpubl	ic	Total	
	<u>Number</u>	( %)	Number	(%)	Number_	( %)
Prekindergarten	61,587	(1)	677	(0.4)	62,234	(1)
Kindergarten	293,182	( 6)	6,666	(4)	299,848	(6)
1	616,131	(12)	20,917	(11)	637,048	(12)
2	666,218	(13)	26,849	(14)	693,067	(£ i j
2 3	673,650	(13)	27,439	(14)	701,089	(i š)
	616,716	(12)	25,834	(14)	642,550	(12)
Š	601,055	(12)	23,404	( i2)	624,459	(12)
<b>4</b> 5 <b>6</b>	501,515	(iō)	20,675	(iii)	522,190	\iō}
7	383,588	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	13,486	\ ' <i>i</i> {	397,074	}' <del>7</del> {
ν ο	312,929	(6)	10,585	(6)	323,514	} 6 <b>\</b>
8 9	21 2,465	)	6,374	(3)	218,839	) ×
		) (	3,005	(2)	125,521	(2)
10	122,516	<b>(</b> ?)		) {{	70,897	<b>)</b> {{
11	69,100	5 17	1,797	- 1 11		- } !{
12	40,283	( 1)	1,176	( 1)	41,459	( 1)
Total	5,170, <b>9</b> 35	(100)	188,884	(100)	5,359,819	(100)
Total <sup>8</sup> (including ung	5,173,718 raded)		189,654		5,402,341 <sup>9</sup>	)

<sup>7 8</sup>IA students were included in the Public category.



<sup>8</sup> Some SEAs reported pupils in ungraded classes in the totals but not in individual grades.

Some SEAs did not report local N or D students by grade level and public/nonpublic designation.

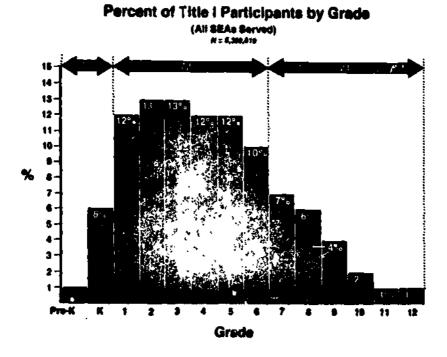


Figure III-4. Percent of Title I participants by grade level.

During 1979-80, approximately 5.4 million students were served by programs funded by Title I grants to local education agencies. Approximately 3.5% of these students were in nonpublic schools, and the majority, both in public and nonpublic schools, were in the elementary grades. Approximately 72% of public school participants and 76% of nonpublic school participants were in grades 1 through 6. Only 8% of participants were in grades 9 through 12, and 7% were in prekindergarten and kindergarten programs.

## Public School Participation

Forty-four SEAs reported serving public school students at the prekindergarten level. However, the majority of these SEAs served small numbers of students; only 23 SEAs served more than 500 students at the prekindergarten level. Fifty-four SEAs served students at the kindergarten level; 41 served more than 500 kindergarten students. All 56 SEAs served students in grades 1 through 3, all but one SEA (the District of Columbia) served students in grades 4 and 1, and all but two SEAs (D.C. and Guam) served public school students in grade 6. At the junior high and high school levels the number of students served decreased rapidly, especially at the higher grades. In grades 12, only 40,283 public school students were served by Title I programs.



#### Nonpublic School Participation

Fourteen SEAs reported serving nonpublic school students at the prekindergarten level; only 677 prekindergarten students were served nationwide. Thirty-five SEAs served kindergarten students, and all SEAs except the BIA (all BIA students were included in the public school count) served students at some combination of grades 1 through 12. Nonpublic participation decreased rapidly after grade 8, however, and in grade 12 only 1176 students in 27 SEAs were in Title I programs.

## Participation by Local Institutions for the Neglected or Belinquent

SEAs reported the total number of Title I participants during the regular term in local (not State) institutions for neglected or delinquent children. Each student was to be counted once regardless of the number of times he or she entered a local institution for neglected or delinquent children. Forty-two SEAs reported serving a total of 71,364 students. The range of the number of students served was from 41 to 33,599. Twenty States reported serving more than 500 students and 13 reported serving fewer than 250 students.

#### Percent of Population Served by Title I

In order to obtain an estimate of the percentage of public school students who were served by Title I programs (Table III-6), the total elementary and secondary public school enrollment in the fall of 1978 (National Center for Education Statistics figures) was used. The enrollment included the 50 states plus the District of Columbia. (Enrollment figures for the fall of 1979 were not available at the time the analyses were made for the 1979-80 Title I data.) During the 1979-80 school year, 4,929,504 students from the 50 states plus the District of Columbia were in Title I programs; using the 1978 enrollment as an estimate of the 1979 enrollment, it can be estimated that approximately 11.6% public school students were served by Title I.

Estimates were not made by grade level but it is speculated that a larger percentage of students were served at the lower grades than at the higher grades. The percentage of students served varied across States from 4% to 26%. The 14 States with State compensatory education programs serving populations similar to Title I served 11.9% of their students with Title I programs; States without such State compensatory education programs served 11.2% of their students by Title I.

Nonpublic institutions served 189,654 students in Title I programs in 1979-80. NCES figures for 1978-79 estimated that there were 5,085,633 private school students. Therefore, the approximate percentage of non-public school students served was 3.7%.

States with compensatory education programs serving similar types of students as Title I reported serving approximately the same percentage of students in Title I as did States without such programs.



Table III-6

Percent of Students in Title I Programs in States With and Without State Compensatory Education Programs

**III-13** 

	Number of FY 80 Public School	1978 School	Percent Served in Title		
	Title I Students	Enrollment 	Average	Range	
States with state compensatory education programs	2,584,522 /	21,640,352	11.9	6.6 - 18.6	
States without state compensatory education programs		20,919,584	11.2	4.0 - 26.3	
All 51 States	4,929,504	42,559,808	11.6	4.0 - 26.3	

#### Title I Staff

Table III-6 presents the number of staff members employed full-time in Title I projects during the regular term of 1979-80. Staff members who worked for Title I projects for a greater percentage of time than they were paid with Title I funds were counted in terms of the amount of time that they worked in Title I, not the amount of time that they were paid by Title I. (For example, if a teacher worked full-time in a Title I projects, but 25% of his salary was paid with district funds, the teacher would be counted as one full-time equivalent, not .75 FTE.) Staff members were recorded in seven categories: administrative staff, teachers, teacher aides, curriculum specialists, staff providing supporting services (such as social work, guidance, psychological counseling, health, nutrition, attendance, library, speech pathology, audiology, evaluation, and psychological testing services), clerical staff, and other (e.g., accountants, bookkeepers, custodians, vehicle operators, food service personnel).

Table III-7

Number of Staff Employed in Title I Projects During the 1979-80 Regular Term in Full-Time Equivalents

Job Classification	Full-Time Equivalents	( %)
Administrative Staff	6,312.0	( 3)
Teachers	78,494.8	(39)
Teacher Aides	91,457.2	(46)
Curriculum Specialists	6,241.8	(3)
Staff Providing Supporting Services	6,303.7	(3)
Clerical Staff	5,076.4	(3)
Other	6, <b>60</b> 7.6	( 3)
Total	200,493,5	(100)



Over 200,000 full-time equivalent staff members, or one for approximately every 27 Title I students, served the Title I program during the regular term of 1979-80. Thirty-nine percent of the staff members were teachers and 46% were teacher aides; thus 85% of the staff were directly involved with providing educational services to Title I children.

## 1979-80 TITLE I PERFORMANCE REPORTS Title I Project Staffing

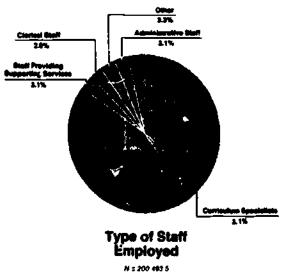


Figure III-5. Title I project staff during the regular term of 1979-80.

## Types of Services Provided

SEAs reported through TIERS the number of Title I participants during the regular term by type of service and public, nonnublic, and local neglected or delinquent designation. Table III-8 presents this information. Service areas were divided into instructional areas and supporting areas, as follows:

o Instructional areas:

Reading
Mathematics
Language Arts
English for limited-English speaking
students
Vocational
Special services for the handicapped
Other (including as natural sciences,
social sciences and social studies,
business, health, safety driver and
physical education, and industrial
arts)



o Supporting areas: Health and nutrition

Attendance, social work, guidance and

psychology

Pupil transportation

Other

A student was counted once for each instructional area in which he or she received services and once for each category of supporting services that he or she received.

All except one SEA (the BIA) reported the number of students served by service area. Based on the 55 SEAs which reported this information, 4,197,336 (78%) of the Title I participants received services in reading. The second must common area for services was mathematics (2,483,044 students, or 46%). The three next most common areas, health services (28%), language arts (19%), and other instructional services (19%), together served fewer students than were served by reading. The fewest students were served by programs in vocational education (only 7 SEAs reported programs in this area) and special activities for the handicapped (14 SEAs reported programs).

#### <u>Public School Participants</u>

In 1979-80, reading continued to be the most common service area in Title I. Over four million public school Title I students (75%) received services in reading. Mathematics, with over 2.3 million students served (47%) was second, and health and nutrition services, with over 1.5 million students (29%) was third. Over one million students were reportedly served by other instructional areas; three-quarters of these students were in one State (California), which reported that the students in this category primarily received multicultural services. Other common areas were language arts programs in Spanish (Puerto Rico) and early childhood projects.

## Nonpublic School Participants

Nearly 190,000 nonpublic school students received Title I services during the regular term of 1979-80. Seventy-eight percent of nonpublic Title I participants received services in reading. This percentage is comparable to the percentage of public as not Title I students who receive reading. The percentage of the students who receive mathematics instruction funded by Title I was 36% or nonpublic versus 47% for public students. No make than 9% of the monpublic Title I students received services in any of the other instructional or support services.

## Participants in Local Institutions for the Neglected or Delinquent

Over 71,000 students were reported to have been served by Title I programs in local institutions for neglected or delinquent children. More of these students (49%) received services in reading than in any other area. Approximately 30% of the students received Title I mathematics instruction; no more than 11% of the students received services in any of the other instructional or support areas.



Table III-8

Title I Participants by Service Area During the Regular Term of 1979-80

111-16

Service Area	٦	Total 10							
	Public		Nonpubli		Local N	or P		•	
	Number (	(%)	Number	(%)	Number	( %)	Number	(%)	
Instructional									
Reading	4,009,200	(79)	148,972	(78)	34,917	(49)	4,197,336	(78)	
Mathematics	2,388,955	(47)	68,875	(36)	21,551	(30)	2,483,044		
Language Arts	1,030,307	(20)	16,784	(9)	3,583	( 5)	1,053,144	l (19)	
Other	1,014,714	(20)	16,818	(9)	4,707	(7)	1,039,651	(19)	
Limited English	351,822	(7)	12,440	(7)	1,602	(2)	374,590	) ( 7)	
Vocational	5,087	()	39	()	15	()	5,571	()	
Special for Handicapped	7,623	()	1,320	(1)	141	()	9,084	· ()	
<u>Supporting</u>									
Health, Nutrition	1,504,674	(29)	12,464	(7)	1,660	(2)	1,518,798	(28)	
Attendance, guidanc	e 767.845	(15)	16,755	(9)	8,015	(11)	792,615	i (15)	
Other	408,841	(8)	10,186	(5)	2,043	(3)	421,070	) (8)	
Transportation	132,637	(3)	4,877	(3)	634	(1)	138,148	, ( 3)	
Total Number Served	5,102,324 <sup>3</sup>	11	189,654		71,364		5,402,311	l	

Some States counted N or D public twice (the N or D public are included in Public and Nonpublic as well as the N or D column); others listed only Totals with no Public, Nonpublic and N or D breakdowns. Therefore, the Total column is not the sum of the other three columns.



This number is an estimate obtained by subtracting all local Neglected or Delinquent participants from the total number of Public participants. Since some local Neglected or Delinquent participants may be in Nonpublic institutions, the number underestimates the number of Public participants not in Neglected or Delinquent programs. For the same reason, the number of Nonpublic participants is an overestimate.

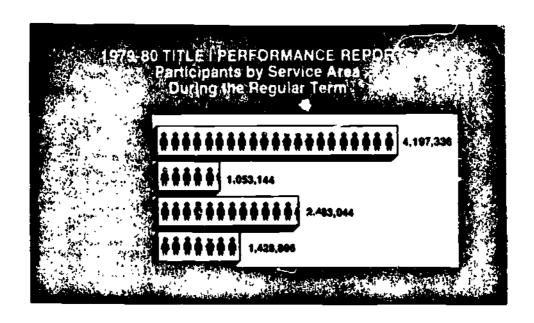


Figure III-6. Participation by instructional service area during the regular term of 1979-80.

## The Nature and Intensity of Reading and Mathematics Services

It was noted previously that it is hard to are lyze costs or services in education using per-pupil expenditures. In two national studies of Title I, an analysis method has been used which involves estimating the amount and type of educational resources (teacher training and time of instruction, type of materials, etc.) to which students are exposed. Then, the method applies to each resource an estimate of its average (or "standard") cost. Hence, for each Title I student or group of students, one can record the "inputs," or resources used, multiply each by its estimated standard cost, and sum across resources. This yields an estimate of per-pupil costs attributable to the particular educational activity rather than to local salary and expense schedules. Comparisons across sites and various analytical efforts (relating costs to degrees of effectiveness for example) thereby become more meaningful. (See especially Haggart, 1978, for more discussion of this technique.)

It is possible, through this method, to note the costs of programs received by Title I students in contrast to these received by their peers. Results of these analyses were presented in detail in the 1980 Annual Evaluation Report, and will not be repeated here. In summary, Figure III-7 describes the comparison of "standard" costs for both Title I and Non-compensatory students, in reading and in mathematics. The resource costs estimated include those due to teaching personnel, support (clerical aides and other auxiliary personnel), and equipment and materials.



Of interest in Figure III-7 is the clear difference between the amounts of resources comprising reading and math programs for Title I and noncompensatory students. For both reading and mathematics, the Title I students are offered substantiall, more services/resources than are offered to their non-compensatory peers. The amount and the patterns of supplementary service allocations vary somewhat across grades, as shown in Figure 3, with the resources devoted to compensatory reading greatly increasing as the grade level increases (although the total amount of resources devoted to reading declines, and the amount of resources devoted to non-compensatory reading declines dramatically). The level of regular mathematics resources allocated remains fairly constant across the grade levels, while the amount of compensatory mathematics resources increases slightly.

Although, as has been noted, estimates of per-pupil expenditures are difficult to collect from districts, and where available are subsequently difficult to interpret (due to different accounting methods, etc.), rough indicators of Title I efforts do exist. A survey of 100 Title I districts estimated the Title I per pupil expenditures to be \$347 in 1975-76 (NIE, 1976). An estimate for the following year from the Sustaining Effects Study was \$415, compared to \$317 per-pupil from special district or State compensatory education programs (Hemenway, et. al., 1978.)

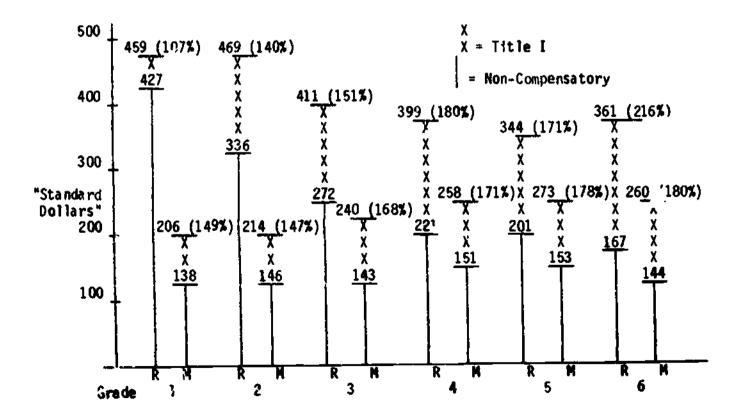


Figure III-7. Estimates of services to Title I and non-compensatory students; reading and mathematics, grades 1 - 6 (1976 data).



To repeat some of the observations noted above, and in an attempt to describe what accounts for the majority of the differences in costs between services received by Title I and non-compensatory students, it should be noted that:

- o especially in grades 3-6, Title I students receive more hours of services in reading than their non-compensatory peers,
- o Title I students in all of grades 1-6 receive more math,
- o fitle I services are more often in smaller groups, and/or
- o those services are more often offered by a subject area specialist.

These figures about specific measures of services in reading and math are taken from a study in public schools. There is little comparable information to describe services to non-public students. In a sample of 214 Title I districts in 1977-78, 98, or 46% of the districts were providing services to non-public students; most of those services (in 89 of the 98) were provided in the non-public school itself; and most of them (in 92 of the sites) offered the services during normal school hours (Hemenway, et al., 1978).

#### Project Characteristics

States reported on various characteristics of their Title I projects in grades 2, 6, and 10, including the project setting, the student to teacher ratio, the hours per week of instruction, the total hours of instruction, and the total number of weeks of instruction. These figures are reported in Tables III-9 to III-12 by the percent of students falling into each category by grade level and subject area.

## Project Setting

The type of seting in which the Title I project took place was characterized as regular class, pull-out, laboratory (where instruction used machines primarily or exclusively), or a combination of methods. Table III-9 shows that students are more likely to be served in pull-out projects than in any other setting. This is especially true for reading projects in grades 2 and 6. Few students are served by laboratories using machines for instruction, and few are served by combinations of methods. Language arts projects are more likely to be in the regular class than are reading and mathematics projects, but even in language arts less than one-half of the students are served in the regular class.

#### Amount of Instruction

The amount of instruction was measured by two variables: the number of hours per week that the typical student received Title I instruction in the subject area and the total number of hours of Title I instruction



III-20
Table III 9
Percent of Students in Different Types of Project Settings

Subject	Grade							
		Regular Class	Pui I -Out	Lab	Regular Class & Pull-Out	Regular Class & Lab	Pull-Out & Lab	Other
Reading	2	12%	69%	3%	8%	3%	3%	2%
	6	13%	62%	7%	8%	3%	5%	2%
	10	30%	41%	7%	5%	6%	3%	9%
Math	2	19%	53%	4%	10%	4%	2%	8%
	6	14%	5 <b>8%</b>	7%	<b>5%</b>	5%	2%	6%
	10	23%	42%	3%	12%	5%	3%	12%
Language	2	40%	51%	1%	3%	1%	3%	1%
Arts	2 6	35%	49%	7%	6%	2%	1%	1%
	10	26%	38%	2%	12%	2%	0%	19%

Table III-10

Percent of Students by the Total Hours of Title I Instruction Received During the Regular School Year

Subject	Grade	Total Hours							
		Less than 40.1	40.1 - 60.0	60.1 - 80.0	80.1 - 100.0	100.1 - 120.0	0ver 120.0		
Reading	2 6	6 <b>%</b>	9%	21%	23%	15%	27%		
	10	5% 3%	6% 2%	18% 13%	18% 12%	18% 19%	34% 5 <b>0%</b>		
Math	2	8%	12%	20%	19%	13%	28%		
	6 10	8% 13%	10% 4%	19% 10%	18% 17%	12% 7%	33% 49%		
Language		7%	7%	20%	27%	5%	34%		
Arts	6 10	9% 1%	18% 11%	20% 4%	13% 13%	5% 5%	36% 66%		

III-21
Table III-11
Percent of Students by Hours Per Week of Instruction

Subject	Grade	<del></del>		<u>ek of Instruc</u>		<del></del>
		1.0	1.1 - 2.0	2.1 - 3.0	3.1 - 4.0	Over 4.0
Reading	2	4%	16%	41%	24%	16%
	6	3%	14%	33%	29%	20%
	10	2%	8%	28%	25%	37%
Math	2	5%	19%	36%	21%	18%
	6	4%	20%	32%	24%	21%
	10	6%	16%	19%	22%	37%
Language	2	1%	16%	43%	12%	28%
Arts	6	0%	28%	27%	15%	29%
	10	1%	11%	12%	29%	47%

Table III-12

Percent of Students by Student to Teacher Ratio in Title I
Projects During the Regular School Year

Subject	Grade	Student to Teacher Ratio							
		1.0	1.1 -	2.1 ~	4.1 -	6.1 -	10.1 -	üver	
			2.0	4.0	6.0	10.0	15.0	15.0	
Reading	2	12%	5%	24%	31%	20%	<b>6%</b>	3%	
	2 6	11%	4%	19%	26%	26%	10%	5%	
	10	6%	2%	19%	16%	30%	14%	13%	
Math	2	15%	5%	23%	22%	20%	9%	4%	
	6	14%	3%	18%	23%	24%	10%	7%	
	10	7%	2%	19%	18%	28%	23%	3%	
Language	2	12%	5%	2 <b>0%</b>	18%	22%	7%	16%	
Arts	6	15%	3%	21%	17%	18%	10%	17%	
••	10	3%	3%	8%	14%	40%	29%	4%	



that the typical student received during the year. Tables III-10 and III-11 present this information.

The typical second grade student receives 2.1 - 3.0 hours per week of Title I instruction regardless of the subject area. The typical 6th grade student receives slightly more Title I instruction per week, and the typical 10th grade student receives the most instruction per week --over 4.0 hours--in reading, math or language arts. The typical 10th grade student also tends to receive more hours of instruction during the project, with 51% of the reading students, 49% of the math students, and 66% of the language arts students receiving over 120 hours of instruction during the project.

#### Student to Teacher Ratio

Title I students tend to be served in small groups. (See Table III-12.) Approximately 75% - 90% of the elementary school students in grades 2 and 6 are served in settings where the student to teacher ratio is 10:1 or less. About 70% of the grade 10 students are served in project settings with a similar student to teacher ratio. Relatively few students--3% - 13%--are served in settings where the student to teacher ratio is over 15:1.

#### Summer Term Activities

SEAs were requested to submit information on the number of students served by grade level and public/nonpublic designation, the number of students served by service area, student ethnic group counts, and the number of staff employed by job classification for the summer term of 1980. The summer term was defined to be that period of time directly following the regular school year of 1979-80. Information on summer school programs was less complete than information on the regular school year and in many cases the numbers should be considered lower bounds. Eight SEAs did not report on summer term activities. Three stated that there were no summer programs, one stated that the summer program was very limited and no information was available, and it was unclear from the reporting forms submitted by the other four SEAs whether or not there were summer programs.

#### Number of Participants

Based on the information received (see Table III-13), over 314,000 students participated in Title I programs during the summer. Nearly 12,000 of these students were in nonpublic schools. The majority, 71%, were in grades 1 to 6; only 4% were in grades 9 to 12. Of these students, 6139 were in local institutions for the neglected or delinquent in 24 SEAs.

#### Types of Services Provided

Table III-14 provides information on participation by service area. A majority of the students received instruction in reading (66%) or mathematics (63%). Only five SEAs reported providing vocational services, and only five reported providing special services for the handicapped.

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Table III-13

Number of Title I Participants During the Summer Term in 1979-80 by Grade Level and Public-Konpublic Designation 12

Grade	Public		Nonpub1	ic	Total	
	Number	(%)	Number	(%)	Number	(3)
Prekindergarten	7,241	( 3)	210	(2)	7,451	( 2)
Kindergarten	14,818	(5)	1,858	(15)	16,676	( 6)
1	46,523	(16)	1,488	(12)	48,011	(16)
2	51,682	(18)	1,568	(13)	53,250	(18)
3	47,922	(17)	1,620	(13)	49,542	(16)
4	32,326	(11)	1,478	(12)	33,804	(11)
2 3 4 5 6 7	28,640	(10)	1,244	(10)	29,884	(10)
6	21,677	(8)	1,034	( 9)	22,711	( 8)
7	14,594	( 5)	469	(4)	15,063	( 5) ( 3)
<b>?</b>	9,268	(3)	395	(3)	9,663	( 3)
9	6,491	(2)	222	( 2)	6,713	( 2)
10	3,680	(1)	<b>23</b> 8	(2)	3,918	(1)
11	2,326	()	148	(1)	2,474	(1)
12	1,232	()	36	( <b></b> )	1,268	()
Total	288,420	(100)	12,008	(100)	300,428	(100)
Total including all ungraded an	301,422 d N or D		12,816		314,252	

Data are incomplete due to incomplete reporting. The actual numbers are probably higher.

#### Percent of Title I Participants by Grade 1979-1980 Summer Term

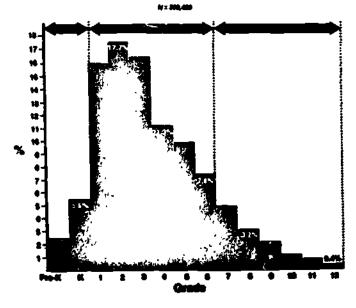


Figure III-8. Percent of participants by grade level during the summer term of 1979-80.



Table III-14

Title I Participation by Service Area for the 1979-80 Summer School Term

Service Area		Type of	Partic	<b>ipation</b>	Total	
	Public	Nonpublic		Local N or D	<b>-</b>	
	Number ( %)	Number	( %)	Number ( %)	Number (%)	
Instructional						
Limited English	45,370 (15)	173	(1)	24 ()	45,567 (15)	
Reading	194,018 (66)	9,170	(72)	4,581 (75)	208,768 (66)	
Language Arts	44,086 (15)	1,484	(12)	780 (13)	46,350 (15)	
Mathematics	189,616 (64)	6,204	(48)	3,114 (53)	198,934 (63)	
Vocational	955 ()	29	()	118 ( 2)	1,702 ()	
Special for Handica	pped 382 ()	15	()	0 ()	397 ()	
Other	85,142 (29)	1,958	(15)	832 (14)	87 <b>,</b> 932 (28)	
Supporting						
Attendance, etc.	71,688 (24)	894	(7)	656 (11)	73,237 (23)	
Health, nutrition	44,737 (15)	2,156	(17)	301 ( 5)	47,194 (15)	
Transportation	90,559 (31)	5,352	(42)	250 (12)	95,6 <b>8</b> 3 (30)	
Other	68,899 (23)	279	(2)	344 ( 6)	69,522 (22)	
Total Number Served	<u>1</u> 295,303 <sup>13</sup>	12,816		6,139	314,252	

This number is an est are obtained by subtracting all local Neglected or Delinquent participants from the total number of Public participants. Since some local Neglected or Delinquent participants may be in Nonpublic institutions, the number is an underestimate. For the same reason, the number of Nonpublic participants is an overestimate.

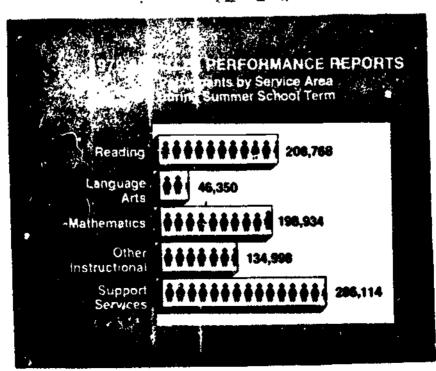


Figure III-9. Number of participants by service area during the 1979-80 summer school term. 64



#### Title I Staff

Summer school Title I staff were classified in four categories: administrative staff, teachers, teacher aides, and other. Over 31,000 FTE staff members (see Table III-8) were employed in Title 1 projects, or roughly one for every 10 Title I participants. The majority of the staff members, 84 percent, were teachers or teacher aides.

Table III-15

Number of Staff Members Employed in Title I Projects
Ouring the Summer Term of 1979-80

Job_Classification	Full-Time Equivalents	(%)
Administrative Staff	1,214.5	(4)
Teachers	18,612.6	(59)
Teacher Aides	7,992.4	(25)
Other	3,738.5	(12)
Total	31,558.0	(100)

#### Number of Staff Employed in Title i Projects During the Summer Term of 1979-80 in F 4l-Time Equivalents

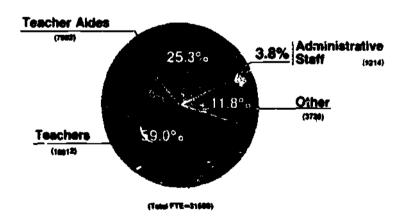


Figure III-10. Title 1 project staff during the summer term of 1979-80.



#### CHAPTER IV

#### STUDENT ACHIEVEMENT

Chapter IV contains information on the academic achievement of students in Title I programs, including:

- O Information on "short-term" (i.e. either within a school year or at most spanning one calendar year) achievement growth as measured by both six month (fall-to-spring) and 12 month (typically spring-to-spring) testing cycles,
- O Information on "long-term" (i.e. spanning more than one full year) achievement growth patterns, including measures over three years for students who continued in Title I during that time as well as those who "graduated out" of the program, and
- o Factors related to school year achievement.

Additional analyses are being undertaken in ED and will be reported at a later date. In particular, project level information collected through the Title I Evaluation and Reporting System is currently being analyzed. The results for projects within each State will be provided directly to the States for them to share with their participating districts, and overall national analyses will be reported by the summer of 1982.

#### Sources of Information

Evidence about the effectiveness of Title I services comes primarily from two sources: reports from States based on local evaluation data and focused Federal studies of specific evaluation issues, in particular, the Sustaining Effects Study. In addition, case study reports from State and local education agencies are included in this chapter in order to exemplify how evaluations are implemented and used, and in order to highlight some national trends in these areas.

### Sustaining Effects Study

The Sustaining Effects Study (SES) is a major, six-year study of the Elementary and Secondary Education Act (P.L. 95-561) Title I programs that is nearing completion. Authorized by Section 151 (now Section 183) of Title I (which requires the Department to conduct independent evaluations "which decribe and measure the impact of programs ... assisted under this title"), the Sustaining Effects Study was designed to document the following: (1) the characteristics of districts, schools, and students participating in Title I; (2) the nature of Tit's I ser ices provided to program participants; and (3) an analysis of the effectiveness of those services over several years of program participation.

The Sustaining Effects Study represents the most comprehensive effort to date in attempting to document and analyze the nature and effects of compensatory education programs. Data were collected on all students in a nationally representative sample of over 200 elementary schools during the three year period from the fall of 1975 through



the spring of 1978. Not only were data collected on the characteristics of students, teachers and principals, on student progress in the basic skills, and on attitudes toward school, but interviews were conducted with the parents of a representative sub-sample of 15,000 students. Information on the patterns of student achievement over a one-year period and over three years is now available.

#### Title I Evaluation and Reporting System

The 1979-80 school year marked the first year in which all States participated in the Title I Evaluation and Reporting System (TIERS), the system of models and reporting forms designed to yield aggregatable, nationwide information about Title I participation and effects. Reports were received from all of the States by the late summer of 1981. In addition to the participation and staffing information presented in Chapter III, the reports included achievement information on students participating in reading, mathematics, and language arts programs in grades 2 through 12.

States had the option of reporting data from all of their local education agencies (LEAs) or from a sample of one-third of their LEAs. Twenty States reported on a sample of their LEAs, and their test data were subsequently weighted for the national data analyses. For each grade, test cycle and subject, the States reported the following information: membership (the number of children enrolled in the Title I project on a given day), the number of students with pretest and posttest scores, the weighted average posttest score, and the weighted average gain. In addition to this aggregate information, States provided project-level information for grades 2, 6 and 10. Project-level information included an LEA identification code, a descriptor of the type of project, subject area, evaluation model used, test interval, hours per week of instruction, total number of hours of project instruction, student-instructor ratio, membership, number of students with pre- and posttest scores, a posttest identification code, the mean posttest Normal Curve Equivalent (NCE) score and the mean NCE gain. 1

The TIERS State aggregate data must be viewed at this stage with some caution, since these data: (1) are based on scores aggregated across many different tests, of varying quality and appropriateness, and administered under locally controlled conditions; (2) in some situations data were obtained in States or districts implementing new evaluation procedures for the first time; and (3) in some situations quality control procedures may not have been adequately implemented. While these particular problems are not features of the Sustaining Effects Study, it is nevertheless the case that sometimes the TIERS data may prove more valid than the Sustaining Effects Study Data, since local control over test selection may account for a better match between the test and the instructional objectives of the Title I programs.

Test scores were reported in Normal Curve Equivalent Units (NCEs). The NCE is a standard score metric with a mean of 50 and a standard deviation of 21.06. The use of a standard score metric allows arithmetical computations of the cata which would not be possible with percentiles. For this report, data will generally be reported in percentiles in order to ease interpretation.



Achievement data were collected from all SEAs; however, this report summarizes only data from the 50 States plus the District of Columbia. The insular territories reported conditions dissimilar to the other SEAs (e.g., lack of availability of suitable tests and norms, testing in languages other than English), so their data were not aggregated with that of the other SEAs since they were not thought to be comparable.

The primary focus of this report will be on the State level data from the TIERS and on information from the Sustaining Effects Study. The TIERS project level information, as mentioned previously, is still being analyzed.

#### Short-term Achievement Impact

Short-term achievement impact, i.e., information on achievement over one year or less, is available both from the SES and from the TIERS. Information over both a full year and over the six months typical of a fall-to-spring evaluation are available from both sources. Overall, it was found that compensatory services, particularly Title I services, often have positive impacts on achievement. Different patterns of achievement were found for different groups, however. In addition, information from the TIERS shows that students tested on an annual testing schedule consistently showed much smaller gains than those tested fall-to-spring.

A comparison of compensatory education (CE) students in grades 1 - 6 with educationally needy non-CE groups, where the comparison groups have similar pretest achievement levels as the CE students (SES, 1982), shows that:

- o Compensatory education students gained more than similarly needy students who did not receive services in grades 1, 2 and 3 in reading and in grades 1 through 6 in mathematics, though they did not gain significantly more in grades 4 6 in reading. (The SES examined only grades 1 6, while the TIERS provides information spanning grades 2 12).
- o Positive effects of compensatory eduation are found most often for students who participate in Title I (sometimes in combination with other compensatory services), as compared to those only served by other (e.g. State or local) compensatory education programs.
- o While the achievement levels of Title I students are often raised, the benefits of CE are generally not great enough for its participants to "catch up" with non-disadvantaged non-CE students.

Some differences were found between the results of the SES and the TIERS, however. For example:

- o The SES found sitive compensatory education effects more frequently in grades 1 and 2, while the TIERS found more positive effects in grades 5 and 6.
- o The SES and the fall-to-spring TIERS data show that the impacts of CE on achievement growth are more noticeable in math than in reading, whereas the annual TIERS data show similar results for both reading and math.



As mentioned previously, 1979-80 was the first school year in which all States participated in the implementation of the Title I Evaluation and Reporting System (TIERS), the system of models and reporting forms designed to yield aggregatable, nationwide information about Title I participation and effects. Tables IV-1 through IV-3 and Figures IV-1 through IV-6 show the achievement level and gains of students included in the evaluation of reading, mathematics, and language arts programs. In addition, Tables IV-4 through IV-7 present the range of values reported by States for reading and mathematics.

In reading, students tested on an annual testing .ycle showed modest positive gains at all grade levels except grades 10 and 12. The largest gain was reported in grade 6, where the typical student moved from the 22nd to the 27th percentile. Differences among the grades are small, however, and should not be interpreted to indicate actual differences in program effectiveness at different grade levels. (In fact, one would expect to see greater gains made at lower grade levels, due to the ways in which tests are normed.) There was great variation among the States on the gains and pretest standing reported. The range of reported gain scores, as expected, tends to decrease across grades, although considerable variation is found at all grades.

Table IV-1

Title I Reading Achievement Results (1979-80 TIERS)

		Annual	Testing		Fall-to-Spring Testing					
Grade	Perc	entile		Percent	Perce	ntile		Percent		
	Pre- test	Post- test	NCE Gain_	Additional Growth2	Pre- test	Post- test	NCE Gain	Additional Growth		
2	28	29	1.0	4	18	32	9.4	77		
3	23	26	2.4	17	16	26	7.4	90		
4	23	26	1.9	20	16	25	7.0	111		
5	22	26	2.3	32	16	25	6.1	132		
6	22	27	3.2	42	17	25	6.0	158		
7	22	25	1.8	27	16	23	5.5	12*		
8	22	<b>2</b> 5	2.2	31	16	22	5.0	113		
9	20	22	1.8	38	15	22	5.2	163		
10	17	17	-0.7	-16	16	21	4.2	131		
11	14	12	-2.2	-43	14	18	3.2	123		
12	12	14	1.4	33	12	17	4.4	133		

The \* .nt additional growth" measure represents the academic growth made by compensatory education participants above and beyond that which would have been expected had they not received supplementary instruction. E.g., a percent additional growth measure of 50% indicates that the Title I students showed one and a half times as much academic gain as children comparable to them in initial achievement but who did not receive Title I. These measures vary substantially from test to test (the figures here are based upon averages across the most commonly used tests in Title I) and should be interpreted with caution, particularly at the upper grades.

In mathematics, students tested on an annual testing cycle showed modest positive gains at all levels except grade 10. The largest gains were found in grade 6, where the typical student moved from the 24th to the 31st percentile. The variability among States was even greater for mathematics than it was for reading.

Table IV-2
Title I Mathematics Achievement Results (1979-80 LIERS)

Grade			Annual I	esting	Fall-to-Spring Testing				
	Per	centile		Percent	Percentile		34	Percent	
	Pre- test	Post- test	NCE Gain	Additional Growth	Pre- test	Post test	NCE Gaifn	Additional Growth	
2	35	37	1.1	5	20	. 36	10.5	88	
3	31	32	0.4	0.2	19	32	8.6	69	
4	28	30	1.8	15	. 18	31:	·· 9.0	134	
5	2 <b>6</b>	30-	2.5	23	18	30.	8.2	115	
6	24	31	3.9	44	18	2 <b>9</b>	7.7	141	
7	2 <b>3</b>	· 26	2.2	29	18	27	6.3	150	
8	23	27	2.8	44	17	26	6.2	184	
9	2 <b>3</b>	24	0.5	10	17	25	6.2	200	
10	21	19	-1.4	-34	20	27	5.3	204	
11	24	24	0.4	11	20	29		311	
12	22	24	1.0	48	18	29 27	6.5	650	

In language arts, student tested on an annual testing cycle showed modest positive gains through grade 6, though it should be noted that relatively few students were tested in language arts.

Table IV-3

Title I English Language Arts Achievement Results (1979-80 TIER)

		Ānnu	al Test	ing	Fall-to-Spring Testing				
Grade	Perce	ntile		Percent		entile_	32	Percent	
	Pre-	Post test	NCE Gain	Additional Growth	Fre- test	Post	NCE Gein	Additional Growth	
2	17	19	2.2	10	2 <b>3</b>	34	6.9	64	
3	18	20	1.9	14	20	33	8.0 <sup>§</sup>	90	
4	21	22	0.7	17	2 <b>0</b>	31	6.8	113	
•	19	22	1.5	14	.22	31	5.8	87	
t	21	24	2.3	45	22	32	<b>5.</b> 7	20 <b>3</b>	
7	18	21	2.3	44	74 16 1	23-	- 5, 2	179	
8	16	20	2.8	43	18	22	3.4	85	
ğ	15	15	0.4	13	17	2 <b>3</b>	4.7	2 <b>35</b>	
10	14	12	-1.4	-27	15	21	4.5	127	
11	12	10	-2.6	-48	14	<u>19</u>	3.6	109	
12	10	10	-0.6	-22	14	18	3.2	160	



## 1979-80 TITLE I PERFORMANCE REPORTS Full-Year Reading Achievement Results

(60 States Plus the District of Columbia)

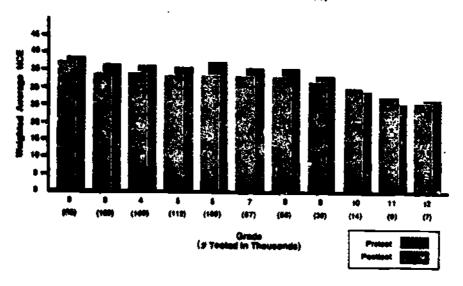


Figure IV-1. Reading achievement results for students tested on an annual cycle in 1979-80 (TIERS).

#### 1979-80 TITLE I PERFORMANCE REPORTS Fall-to-Spring Reading Achievement Results (40 States Plus the District of Columbia)

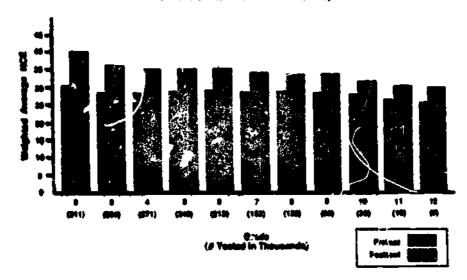


Figure IV-2. Reading achievement results for students tested on a fallto-spring cycle in 1979-80 (TIERS).



# 1979-80 TITLE I PERFORMANCE REPORTS Full-Year Mathematics Achievement Results (80 States Plus the District of Columbia)

Figure IV-3. Mathematics achievement results for students tested on an annual cycle in 1979-80 (TIERS).

## 1979-80 TITLE I PERFORMANCE REPORTS Fall-to-Spring Mathematics Achievement Results (50 States Plus the District of Columbia)

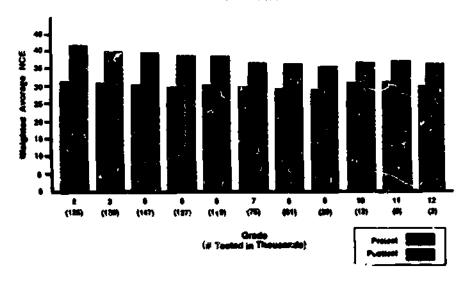


Figure IV-4. Mather\_tics achievement results for students tested on a fall-to-spring cycle in 1979-80 (TIERS).



# 1979-80 TITLE I PERFORMANCE REPORTS Full-Year English Language Arts Results (50 States Plus the District of Columbia)

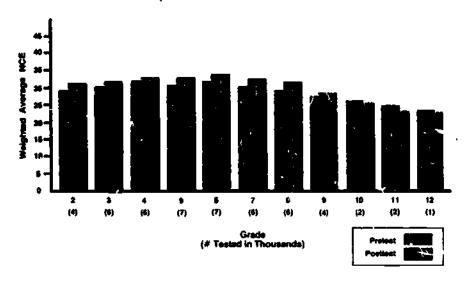


Figure IV-5. English language arts achievement results for students tested on an annual cycle (1979-80).

# 1979-80 TITLE I PERFORMANCE REPORTS Fall-to-Spring English Language farts Results (50 States Plus the District of Columbia)

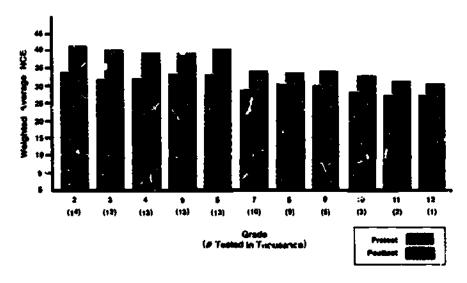


Figure IV-6. English language arts achievement results for students tested on a fall-to-spring cycle in 1979-80 (TIERS).



[V-9

Grade	Number of States			Normal Curve						
			Prete:	st.	Postest			Equivalent Gain		
		Min	Median	Max	Min	Median	Max	Min	Median	Max
2	34	9	24	50	15	32	55	-3.9	3.1	12.6
3	31	6	21	41	12	25	45	-1.0	2.6	13.0
4	33	11	20	39	15	23	43	-2.5	2.7	8.2
	32	9	18	40	11	23	44	-0.1	3.2	9.2
<b>5</b> ົົນ	33	9	19	39	13	24	43	-0.7	3.4	6.7
7	26	7	17	43	6	20	45	-4.5	2.0	6.0
8	23	10	15	4G	12	17	44	-2.8	2.2	5.5
9	15	9	17	37	6	20	43	-8.2	2.5	4.8
10	10	7	16	39	6	12	42	-5.6	0.2	3.3
11	8	6	12	24	3	ıï	26	-5.3	0.8	3.7
12	8	5		28	5		28	-4.2	2.3	4.8

Table IV-5

1979-80 Title I Fall-to-Spring Reading Achievement Results for All State Education /.jencies With at Least 100 Students Tested

Grad <b>e</b>	Number		-	Perc	Normal Curve					
	of States		<u>Prete</u>		Posttest			Equivalent Gain		
		Min	Median	Max	Min	Mediar	Max	Min	Median	Max
2	51	6	19	<b>3</b> 5	12	33	49	0.0	8.9	16.9
3	50	Š	15	28	13	27	40	2.6	7.6	13.0
4	49	5	16	27	12	26	40	1.1	7.1	12.1
5	48	6	17	31	7	25	39	-1.5	6.2	11.8
6	50	6	16	26	5	24	38	-1.9	5.9	11.1
7	47	6	15	27	10	24	44	2.9	5.8	9.9
8	46	5	15	26	Ž	22	33	2.4	5.6	11.1
9	39	7	14	22	9	21	38	3.1	5.1	11.3
10	35	6	15	28	10	21	37	-1.2	4.7	11.7
11	24	3	12	21	5	16	30	1.5	7.9	6.8
12	12	4	13	23	ē	17	34	0.0	4.1	7.0

Table IV-6

1979-80 Title I Annual Mathematics Achievement Results
For All State Education Agencies With at Least 100 Students Tested

Grade	Number of		1	ercer	Normal Curve					
			Pretest			Posttest			Equivalent Gain	
	States	Min	Median		Min	Median	Max	Min	Median	Ma x
2	23	12	27	48	18	34	46	-3.2	3.8	10.5
3	26	9	24	50	15	30	53	-3.0	3.4	18.6
4	31	9	21	49	15	27	53	-8.4	4.2	15.7
5	30	8	21	49	12	26	62	-1.5	3.5	14.8
6	29	9	20	43	16	26	50	1.1	4.4	10.1
7	23	8	20	39	11	25	52	-0.9	2.9	7.9
8	22	9	21	44	14	24	43	-5.0	2.8	7.5
9	13	9	17	46	11	20	49	-6.3	1.5	8.7
10	7	9	11	52	8	14	47	-5.6	-1.2	5.9
11	6	7	11	49	11	13	45	-1.9	1.5	7.2
12	6	8	14	51	7	18	43	-4.4	2.4	5.9

Table IV-7

1979-80 Title I Fall-to-Spring Mathematics Achievement Results
For All State Education Agencies With at Least 100 Students Tested

Gra de	Number of	_	- 1	ercen	Normal Curve Equivalent Gain					
				t				Posttest		
	States	Min	Median	Max	Min	Median	Max	Min	Median	族 X
2	44	5	19	30	8	35	51	2.6	10.3	23.5
2 3	45	3	19	28	5	30	46	1.5	8.4	15.1
4	43	6	18	28	12	30	46	2.6	9.5	18.0
5	44	5	18	28 .	. 8	29	45	2.8	8.3	15.5
6	46	5	17	37	8	28	5ს	2.0	7.6	14.0
7	41	3	17	26	10	28	43	2.1	6.2	15.2
8	37	4	16	28	13	26	38	1.0	6.3	18.4
8 9	25	8	16	22	14	72	37	2.0	6.1	10.6
10	17	- 11	19	32	14	25	39	-0.1	4.7	10.3
11	7	7	22	28	12	33	36	2.3	5.0	8.4
12	4	18	21	31	20	31	38	0.2	5.2	7.9



### Test Cycle Effects in the TIERS

Different patterns of results were found for students tested on a fall-to-spring schedule (typically October to April) and for those tested on an annual schedule (typically April to April). The gains for students tested annually are uniformly lower than the gains for students tested fall-to-spring. However, the posttest scores show a tendency to be similar for the two groups; therefore, the difference lies in the fact that the pretest scores tend to be lower for the fall to-spring group.

The differences in annual and fall-to-spring test results have been noted in numerous state and local evaluations. Some of the reasons postulated include the following: students forget what they have learned over the summer, different student populations are tested annually as opposed to fall-to-spring, a greater proportion of program participants are included in the fall-to-spring evaluations, students are more likely to have changed test levels in the annual evaluations, and annual testing programs are likely to have greater accountability since they serve general district purposes as well as Title I purposes. While some of these possible explanations can be discounted, others may have some validity.

The results obtained from the annual testing cycle evaluations more closely resemble the results obtained in the Sustaining Effects Study than do the results of the fall-to-spring evaluations. As mentioned above, the reasons for the differences between the annual and the fall-to-spring results are not fully understood at this time. One source of information will be the studies conducted by districts to see if their project gains are sustained over time. A limited amount of this information is provided in Chapter V in the section on Sustained Effects. While districts are required to conduct these studies, they are not required to report the results to ED or to their SEAs. Thus, while many districts are willing to share their information with ED, there is always the problem that the volunteers may not be representative of the whole group.

# Longitudinal Effects of Title I

The SES contains information on Title I students in grades 1 - 6 over three years, during which time students participated in various combinations of Title I and regular programs. Figure IV-7 presents achievement information for four groups of students:

- Regular students who did not need and did not participate in Title I.
- o Title I participants in Year 1 who 'graduated out' of Title I in Year 2 and stayed out.
- o Title I participants in Years 1 and 2 who 'graduated out' of Title I in Year 3.
- o Title I participants who participated in the program for all three years.



The dotted line segments in Figure IV-8 indicate Title I participation across time. An examination of these lines shows that:

- o In reading, Title I graduates do not generally fall back noticeably after participation ceases.
- o In math, there generally is a decline after participation ceases.

Three year participants do not show improvement over the three years, which is to be expected -- had they showed substantial improvement, they would have been graduated out of the program. This does indicate, however, that some students will not show gains even after multiple years of compensatory education.

In summary, it appears that Title I has some sustained benefits for program participants, particularly in reading, but that some students, particularly in math, regress when Title I support is removed. (Growth in practical skills was found not to benefit from participation in CE programs, and the relationships between attitudes and participation are unclear.)

These results contradict somewhat some of the previous findings, and they confirm others. In particular, early reports from the SES (Interim Report, 1980 and Report 11, 1981) compared the achievement levels of regular students, Title I 'graduates,' continuing Title I students, and students who were no longer in the program because of promotion to a grade with no services or because the school lost funding. The Title I 'graduates' were compared to those students whose services were continuous over two years. The growth rate of students who 'graduated' was higher than the growth rate of students still receiving services, leading to the conclusion that termination of services and not result in students disastrously falling back to the level of continuing students. This is a different situation, however, than when students are compared over time.

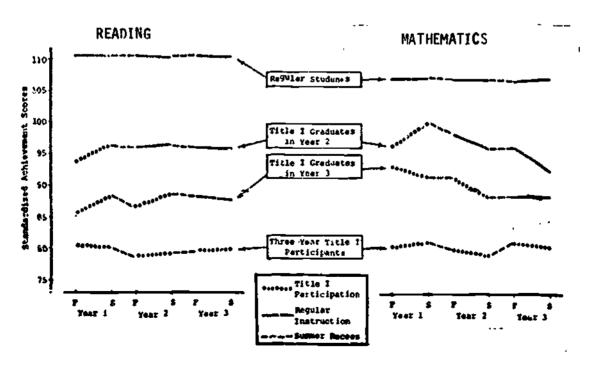


Figure IV-7. Effects of "graduation" from Title ! on student achievement.



### Factors Related to School Year Achievement

The relationships between types of program services and the effects of compensatory education were considered in the Sustaining Effects Study. In general, as reported earlier, compensatory services have positive impacts on reading achievement at the first three grades (and possibly at grade six), and on mathematics achievement at all six grades. These positive effects were noted primarily for programs funded at least in part by Title I. However, it has proven difficult to demonstrate that substantial, consistent relationships exist between project characteristics and educational achievement. As discussed below, some factors descriptive of programs and instructional services were found to be <u>statistically</u> related to educational achievement, but in general these relationships seem weak. Due to the tenuousness of these relationships, further reflection on project implementation at the local level is strongly advised. The following findings are provided in the Sustaining Effects Study:

- o The amounts of regular instruction and tutor/independent work have positive, but modest, effects on achievement growth. However, the amount of instruction by special teachers (e.g. subject area specialists), aides, and assistants; or in very small groups (less than 7 students) does not often have detectable effects, though when it does ...e effects are generally negative.
- o Students taught by more experienced teachers tend to attain greater growth in both reading and mathematics achievement. It was consistently found that the teaching experience of the regular staff was positively related to achievement.
- o More frequent feedback to students regarding their academic progress sometimes helps them to achieve greater reading and mathematics growth. In some grades, the time teachers spend on planning and evaluation is also positively related to the reading achievement growth of their children.
- o Temporary disruptions in instruction, such as that caused by physical fights or violence, tends to hamper reading and mathematics achievement in grades four through six, though not in grades one through three.

## Other Evidence of Effectiveness

Other studies also suggest that a fifteen year decline in educational achievement is beginning to reverse, particularly among low-achieving groups. For instance:

o The National Assessment of Educational Progress has documented improvements in the educational status of minority group nine-year olds over the past four years and has also shown improved achievement levels in Title I schools. At least partially, these achievement gains may be attributable to increased attention to basic skills and to effective compensatory education programs.



- o In a sample of 16 New York City Community School Districts, under a new competency testing program that stressed reading comprehension, gains improved by 50% in comprehension and by 16% in vocabulary between 1980 and 1981. At the same time, citywide test scores as well as the Scholastic Aptitude Test results for New York State also exhibited gains, surpassing national averages for the first time in years.
- o In each of the past two years, the typical pupil in Chicago Title I classes improved in reading by at least 4 percentile points, as measured by standardized tests. Some of the schools did even better, with gains in some classes 67% higher than those of similar students in appropriate norm groups. In addition, 80% of the parents of these Title I children concurred with involved teachers and principals in endorsing the Title I projects.
- o In New Jersey, Basic Skills Improvement (BSI) programs represent compensatory education programs funded through combinations of ESEA Title I, State compensatory education, and school district errorts. New Jersey reported that not only had the programs accelerated the acquisition of basic skills, but the acceleration was greater in 1980 than it has been since the State first began evaluating its programs. In reading, BSI students improved their performance from an average pretest mean at the 23rd percentile to a posttest mean at the 36th percentile. In mathematics, students moved from the 26th percentile at the beginning of the program to the 42nd percentile in the following spring.



### CHAPTER V

### IMPLEMENTING AND USING EVALUATIONS AT THE STATE AND LOCAL LEVEL

Since the inception of Title I, evaluation of the effects of the program has been a requirement of the law. Evaluation and reporting of the evaluation results are required at all three levels of Title I program administration: local, State and Federal. The goal of introducing and maintaining such evaluation requirements seems twofold: to improve evaluation practices at the local and State levels so that the information obtained can be used for program improvement, and to standardize evaluation and reporting practices so that a national picture of program effects might emerge.

The purpose of this chapter is to document the processes and progress to date in accomplishing these two objectives of evaluation under ESEA Title I -- improvement of evaluation practice and educational services. To do that, a review of the evaluation requirements and goals and a discussion of ED's efforts to accomplish these is presented. Following that, a set of case studies -- developed in order to furnish a national overview in key areas of evaluation and program improvement activity -- is provided.

# The Development and Implementation of the Title I Evaluation and Reporting System

Historically, State Educational Agency (SEA) Title I evaluation reports did not provide a satisfactory source of information regarding the national effectiveness of the Title I program. Differences in the style and substance of the reports, in the evaluation techniques and measures utilized, and in the types of participat. In and achievement data reported virtually precluded the possibility of accurately synthesizing the disparate information into a report describing the national program. Similarly, it was not clear whether local evaluations provided any information which could be of use in identifying program strengths, weaknesses, or educational impacts on participants.

The problems of the lack of comparability and validity of the Title I data were addressed in the enactment of Section 151 of ESEA in 1974 (P.L. 93-380). The 95th Congress further amended ESEA in the Education Amendments of 1978 (P.L. 95-561), which consolidated the previous ESEA legislation and more specifically defined SEA, local education agency (LEA) and Department of Education (ED) evaluation and reporting requirements in Section 183. The basic requirements of Section 151 were maintained in Section 183 as follows:

- "...(a) Independent Evaluations -- The Secretary shall provide for independent evaluations which describe and measure the impact of programs and projects assisted under this title. Such evaluations may be provided by contract or other arrangements, and shall be made by competent and independent persons...
- "...(b) Evaluation Standards and Schedule -- The Secretary shall
  (1) develop and publish standards for the evaluation of program
  or project effectiveness in achieving the objectives of this title,
  and (2) develop ... a schedule for conducting evaluations ... designed
  to ensure that evaluations are conducted in representative samples of
  the local educational agencies in any State each year...



- "...(c) Jointly Sponsored Studies -- The Secretary shall consult with State and local educational agencies in order to provide for jointly sponsored objective evaluation studies of Programs and projects assisted under this title within a State...
- "...(d) Evaluation Models -- The Secretary shall provide to State educational agencies, models for evaluation of all programs conducted under this title... which shall include uniform procedures and criteria to be utilized by local educational agencies and State agencies, as well as by the State educational agency in the evaluation of such programs...
- "...(e) Technical Assistance -- The Secretary shall provide such technical and other assistance as may be necessary to State educational agencies to enable them to assist local educational agencies and State agencies in the development and application of a systematic evaluation of programs in accordance with the models developed by the Secretary...
- "...(f) Specification of Objective Criteria -- The models developed by the Secretary shall specify the objective criteria which shall be utilized in the evaluation of all programs and shall outline techniques ... and methodology ... for Producing data which are comparable on a statewide and nationwide basis."

In summary, it was determined that new requirements and procedures for Title I evaluation would be implemented in order to provide systematic and valid information on the effectiveness of the Title I program.

### Independent Evaluations

Independent evaluations have traditionally provided the best information available pertaining to the scope and operations of the Title I program. Among the studies which have been used by Congress during oversight or reauthorization hearings, two have been particularly influential: the National Institute of Education's "Compensatory Education Study" and the Office of Planning, Budget and Evaluation's "Sustaining Effects Study," particularly the early volumes which deals with the relationships of academic achievement, poverty and the formula for allocating Title I grants. Both of these studies have been discussed extensively in this report.

Other studies recently carried out by the Office of Planning, Budget and Evaluation are also discussed as appropriate throughout this report. A list of the most relevant (not exhaustive) of these studies includes the following:

- o a Study of District Title I Management Practices
- o a Study of State Title I Management Practices
- o Alternative Measures of Comparability
- o Parental Involvement in Four Federal Programs (including Title I)
- o a Study of the Local Use of Test and Evaluation Information
- o a Study of the Title I Migrant Education Program.

In addition to these, smaller independent afforts were designed and implemented to provide support to ED, States and local districts in examining and implementing the Title I Evaluation and Reporting System.



## The Title I Evaluation and Reporting System (TIERS)

In 1974, USOE (now ED) awarded a contract to begin the development of a system to be used by LEAs, SEAs and USOE for Title I evaluation and reporting. RMC Research Corporation undertook the difficult (and controversial) task of developing a set of evaluation models, reporting forms and support documents and materials. During the course of this project, each SEA was visited (as were three LEAs within each State) to assess their current evaluation practices and to determine how disruptive a proposed system might be to SEAs and their LEAs. The combination of models, implementation requirements and reporting system, referred to as the Title I Evaluation and Reporting System, or more commonly as <u>TIERS</u>, had a slow development/implementation process.

By the summer of 1976, the preliminary work on developing the ideas and implementation procedures behind each of the basic models had been completed (Bessey, kosen, Chiang & Tallmadge, 1976(a),(b); Tallmadge & Wood, 1976) and relatively widely disseminated -- yet, at the time of passage of the Education Amendments of 1978, P.L. 95-561, the RMC-USOE models and reporting system had still not been implemented nationwide. From the beginning, the development of the models and reporting system had spawned intense debates on technical and procedural issues.

Until recently, these debates have continued or resurfaced with predictable regularity; presently, however, the TERS has not only been implemented nationally, but the system is accompanied with general satisfaction. The seems notable that so much criticism arose in opposition to a system designed to provide uniform evaluative information, the lack of which had generated so much criticism prior to 1974. (For a more thorough treatment of the checkered history of Title I evaluation consult McLaughlin, 1977; Rossi et al., 1977; Wisler and Anderson, 1979 or Stonehill and Groves, 1982).

There were numerous constraints placed on the models due both to the nature of the Title I program and to the requirement that all LEAs would be required to submit evaluation reports. The first constraint was that since the Title I program was designed to serve the educationally neediest children within eligible districts (and 90% of all districts actually did receive Title I funds), most standard experimental designs calling for a comparison group of similar, but unserved students, were impossible -- if not actually illegal -- to implement.

A second constraint was that the majority of districts were small, and did not have experienced evaluators or the resources to purchase evaluation services. Thus, any evaluation and reporting system would have to be relatively easy for district personnel to understand and to implement and would need to be restricted in the amount of information included. Third, the data collected from districts would have to be easily aggregatable by SEAs, in order to allow for a cohesive Federal report.

Based on a review of evaluation efforts already underway in all SEAs and in many LEAs, on a synthesis of aspects of those efforts, and on other technical considerations, a Title I evaluation system was developed that consisted of the following key elements:



- o' LEAs carry out evaluations of their projects (according to a schedule developed by the and concurred with by ED) using one of the published evaluation models, or an acceptable alternative.
- o The LEA evaluation results are forwarded to their respective SEA. In turn, each SEA summarizes the results of their locally-conducted evaluations and reports biennially to ED.
- o ED staff review the State results and analyze the data to produce national level information summarizing participation, staffing, services, training and educational impact.

Thus, the TIERS is used by ED to provide national information about the operation and effectiveness of the Title I program based on data originally provided by LEAs. The TIERS has been formally in place only since the late fall of the 1979-80 school year, when on October 12, 1979, ED published regulations governing the evaluation process for LEAs and SEAs, including specific models to be used in examining the effectiveness of projects that provide compensatory instruction in grades 2 - 12, for reading, mathematics or language arts. In fact, all of the SEAs had begun implementing the TIERS models, even though they were not yet formally required at the beginning of the 1979-80 school year. The regulations describe the following components of TIERS:

Technical standards. In their application to the SEA for their Title I grant, each LEA must describe how its evaluation procedures will be designed and conducted so as to be as accurate as possible. The areas that LEAs must consider and describe in their applications include the following: (1) application of evaluation procedures that assure that participants in the evaluations and the results obtained are representative of those children who receive Title I services; (2) selection of appropriate measurement instruments; (3) use of procedures that minimize errors (e.g. in scoring, analysis, test administration, etc.); and, (4) the use of an evaluation model that yields a valid assessment of achievement growth in the basic skills areas for which compensatory education has been provided.

The evaluation models. In order to provide achievement test information that can be aggregated at the LEA, SEA and national levels and yet still provide some flexibility in selecting instruments that reflect instructional objectives of the LEAs, a set of models and implementation procedures has been developed and published as part of the Title I evaluation regulations. Provisions also exist for the dev lopment and approval of alternative modes, given that they satisfy the information needs of the SEA and ED.

Reporting requirements. Requirements for the periodic reporting of Title I information, including participation and evaluation data, are provided for SEAs, LEAs and ED. Currently, LEAs and SEAs report annually on the descriptive information collected in the TIERS, and biennially on the evaluation impact information (though each report summarizes the evaluations of the previous two years).



Allowable costs. The regulations specifically describe which evaluation activities may be implemented using Title I funds, and which may not.

Supporting materials. To accompany TIERS, ED has developed and published or ntherwise disseminated materials and documents designed to help Title I evaluators understand the evaluation requirements and the ways in which the TIERS can best be implemented. Among these materials are the following: (1) The Title I Evaluation Policy Manual, required by Congress, is an interpretive supplement to the evaluation regulations; (2) the User's Guide is a how-to-do-it volume describing the technical features of the TIERS models and the implementation procedures that can be used; (3) the Evaluator's References, a volume of further reading about technical evaluation issues of general information to TIERS implementors; and (4) a series of Technical Issues papers giving an in-depth presentation of selected evaluation issues. In addition to those documents already discussed, ED has published a series of monographs and technical pamphlets pertaining to Title I evaluation. Other reports produced during the performance of Title I evaluation-related contract work are also available.

Requirements under ECIA. The Education Consolidation and Improvement Act of 1981 will require districts to evaluate their Chapter I projects "in terms of their effectiveness in achieving the goals set for them, and that such evaluations shall include objective measurements of educational achievement in the basic skills and a determination of whether improved performance is sustained..." (Section 556, b, 4). Districts may continue to use the evaluation and reporting system that is required by Title I to evaluate their Chapter I projects. No specific reporting and evaluation system will be required for Chapter I, however.

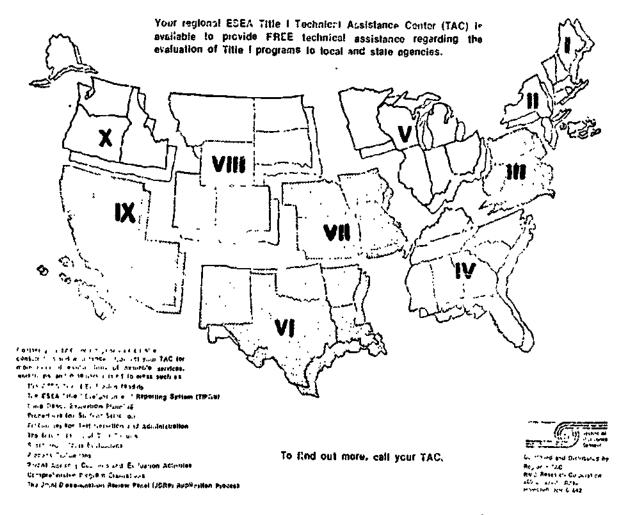
## <u> Technical Assistance Centers</u>

In order to help SEAs and LEAs improve their evaluation capabilities and to implement the requirements of TIERS, ten regional Technical Assistance Landers (TACs) were established. (See Figure V-1 for a map of the different regions and the Centers that serve them.) The TACs have been in operation since 1976, providing consulting services at no direct charge to SEAs and LEAs. Starting with an emphasis on training Title I administrators and evaluators in basic evaluation concepts and on implementing the TIERS models, the TACs have expanded their operations to include the provision of services, at the request of SEAs and LEAs, in all areas of evaluation, including process evaluation and the use of evaluation to improve projects.

The Title I Technical Assistance Centers (TACs) provide consulting services to State and local education agencies (SEAs and LEAs) that receive ESC Title I funds. The TACs operate at the direction of the SEAs and consult with a contact person appointed by the Chief State School Officer in each State to determine the needs of the State and local personnel. Emphasis is placed on providing services which are tailored to the needs of each State; this has resulted in differing delivery modes as well as assistance areas across the country. Consultations with the contact persons are on-going and the TACs have been flexible enough to meet changing needs within regions. The primary objective of the Project is to provide training and improved capabilities for SEA and LEA personnel in evaluation and Program management.



The Technical Assistance Centers were originally funded (through competitive procurement procedures) in the fall of 1976. The TACs were funded for 15 months with an optional 15 month extension, which was exercised in all cases. These contracts were extended for an additional 6 months to allow impletion of an assessment of the technical assistance efforts are new competition. On September 30, 1979, new contracts were signed for each of the 10 HEW regions of the country, with two option years possible. All options were exercised, and current funding will expire on September 30, 1982 -- just as ECIA Chapter 1 will go into effect. Later Centers will operate differently, as appropriate, to help States and districts design their own efforts.



```
PMC Relarch Corporation (Portsmouth, NH)
Region
       I:
            Educational Testing Services (Princeton, NJ)
Region II:
Region III:
            NTS Research Corporation (Durham, NC)
            Educational Testing Services (Atlanta, GA)
Region IV:
            Educational Testing Services (Evanston, IL)
Region
        ٧:
            Powell Associates (Austin, %)
Region VI:
            American Institutes for Research (Palo Alto, CA)
Region VII:
Region VIII, IX, and X: Northwest Regional Educational
            Laboratory (Portland, OR)
```

Figure V-1. The regional Technical Assistance Centers.



Services provided. The TACs provide technical support and training to SEAs and LEAs that are evaluating the effects of their compensatory educational programs. Specifically, through a combination of onsite and regional workshops and consultations and through telephone contacts and correspondence, the TACs:

- o Assist SEAs and LEAs to plan and implement valid evaluations.
- o Help SEAs and LEAs analyze and interpret the results of the evaluations they have conducted.
- o Assist SEAs and LEAs in the development of data management and quality control systems, particularly with respect to testing, demographic and participation information.
- o Develop materials that can be used in SEA and LEA-sponsored workshops or in a stand-alone capacity, for such purposes as basic evaluation instruction, program improvement through evaluation, training Parent Advisory Councils, and communicating the results of evaluations to parents and school boards.
- Assist SEAs and LEAs in more in-depth technical investigations to improve or refine evaluation procedures and programs. The topics of a technical investigation might include (but not be limited to) the following: reduction of testing burden through mult ple uses of single instruments, development of strategies to measure the fidelity of program implementation, development of personal computer software that can be used by small and medium-sized LEAs to manage pupil school and evaluation records, and development of procedures to better communicate evaluation results.
- o Sponsor periodic regional coordinating council meetings, at which representatives from all States within a region can discuss their progress and problems, review and discuss new materials, and share their perceptions and ideas with ED program officers.

The TACs are contractually forbidden to participate in the following activities or to provide the following services:

- o Representation or interpretation of State or Federal laws or policies.
- o Provision of advice regarding specific educational curricula.
- o Endorsements of any specific tests of instruments.
- o Conducting evaluations or writing evaluation reports for SEA. and LEAs.



Table i-1 summarizes the amount of services the TACs have provided during the first two years of their current contract period. The fairly substantial variation in numbers of services and clients served across the regions is natural, reflecting many factors including geographic distance and population. A more thorough discussion and assessment of TAC services will be forthcoming as a result of a current study of the entire Title I Evaluation and Reporting System and technical assistance. The Executive Summary from this effort will be attached as an appendix to this report.

Table V-1
Technical Assistance Center Activities from November 1979 through September 1981 (23 months)

<u> Wo</u>	rkshops and	Consultations	Number of Telephone	Amount of		
Region	Number	<u>Clients 1</u>	Conversations with SEAs and LEAs	Correspondence with SEAs and LEAs		
Ĭ	1049	7,244	2,728	1,855		
11	954	8,171	1,322	4,601		
III	664	7,973	2,160	1,940		
IV	63€	10,857	2,968	2,658		
٧	377	10,027	1,481	1,709		
VI	524	10,236	2,468	1,785		
IIV	325	6,100	1,208	866		
VIII	439	6,741	1,153	766		
IX	462	6,689	1,026	1,604		
X	323	4,692	870	506		
Total	5,653	31,790	17,366	17,690		

Areas of work. The TACs operate, as mentioned earlier, at the requests of SEAs and LEAs. While in the past the TACs have had as a priority the implementation of the TIERS, recently the focus of the work of the TACs has shifted to the areas of improving and using local and State evaluations in order to foster the improvement of educational programs. To this end, the TACs have been requested to develop, sponsor or participate in the following activities:

o Test Information Cencer. Located at the TAC in Evanston IL, the Test Information Center serves as a centralized and coordinated test information resource for all TACs to use when providing test information to their clients. The Center was



This is a duplicated count, since many of the same clients receive multiple services.

established in response to a major need identified nationally for specific information about the many tests being used across the country for Title I evaluation. A method was needed to provide this information while avoiding duplication of TAC and test publishers' efforts.

To meet this need, the Test Information Center was begun in 1978, and it serves as the key communication link between test publishers and the TACs, and through the TACs to SEA and LEA staff around the country. The Center maintains frequent contact with test publishers who respond to requires concerning their tests. Information is provided through written and telephone communications, onsite visits and workshop presentations, newsletters and special publications.

The Center has been influential in alerting SEA and LEA staff to the importance of selecting appropriate tests that match the content of their compensatory education programs, of choosing tests of appropriate difficulty, of administering them under proper conditions, of scoring and interpreting them correctly, and in using test results for needs assessment and diagnosis appropriately.

evaluation Clearinghouse. Located at the TAC in Palo Alto CA, the Clearinghouse contains computerized, keyworded, and abstracted information on available Title I workshop materials and on research and evaluation studies. The Clearinghouse contains materials in various formats, including formally published research documents, informal reports, in-service training packages, and audiovisuals.

The Clearinghouse uses state-of-the-art computer technology to manage these resources and to provide instant access to them. It provides search and document delivery services to any Title I program requesting assistance, and during the year ending September 30, 1981 provided over 3,000 documents upon request.

All SEAs, many of the larger LEAs and intermediate service units, all of the TACs, and EO have been provided access guides and indices to Clearinghouse resource materials. The Clearinghouse is regularly utilized by educators and evaluators representing a cross-section of the national compensatory education community. Classroom teachers have used the Clearinghouse to locate materials for use with parents. SEAs frequently request information for their Title I program or program evaluation departments. The TACs and EO have utilized the Clearinghouse extensively to support both training activities and research activities.

Judging by the levels of voluntary requests for services that have been initiated by SEAs and LEAs, the TACs have proved both popular and effective. In 1978, a performance review and independent evaluation of the TACs was conducted by the Assistant Secretary for Planning and Evaluation in HEW (Millman et al, 1979). The evaluation results in general were quite positive, concluding that "The TACs are working and working well." Nevertheless, suggestions made by the evaluation panel and published in the report were used as a basis for trying to improve the efficiency of TAC operations. As previously mentioned, the Executive Summary of a follow-up evaluation of the TACs will be appended to this report.



Later in this chapter, a discussion of SEA and LEA evaluation and program improvement activities will be presented. In many ways, this work is inextricably linked with the services provided by the TACs. A brief introduction to some of the major areas, each of which will be discussed later in more detail, follows:

Program improvement evaluation. SEAs and LEAs have increasingly requested services aimed at applying what they are learning through evaluation towards enhancing the ways in which is tructional services are provided. Particular interest, as measured by increasing demand for assistance in this area, is in examining the ways in which programs are actually implemented, so as to assess whether program operations actually follow program designs. Other areas related to program improvement stress better communication of evaluation results, better information management, etc.

A set of training modules is under development in this area. The materials address the following: setting goals for programs, identifying instructional strategies, measuring the implementation of those strategies and communicating evaluation results.

- o Improved testing procedures. The TACs stress the improvement of local evaluation methods, including the proper selection of instruments to match program objectives, selection of tests of appropriate difficulty, adherence to technical standards, proper administration and scoring of tests, and appropriate analysis procedures to estimate the impact of educational programs. Additionally, strategies to reduce the testing burden for Title I children are being examined.
- Needs assessment. The TACs have developed materials for use in identifying and selecting children with special academic needs. The materials are available to train SEA and LEA personnel in using multiple measures to assess and diagnose the needs of low-achieving children in order to better target educational services.
- o Quality control systems. The TACs have helped develop both automatic and manual systems for reviewing the accuracy of evaluation and program-descriptive information. In some SEAs, a computer-based system for score conversions has been implemented at the State level, resulting in substantial time and paperwork savings at the LEAs and in increased precision in evaluating and reporting test results. Other systems use a "planning calendar" model, in which LEAs review their evaluation procedures at critical times during the year, following p. e-developed checklists.
- o <u>Sustained effects and summer drop-off</u>. A persistent educational question involves mether students continue to grow academically after special services are intercupted or discontinued. The TA(s have developed materials to enable SEAs and LEAs to address these questions. TACs have also assisted SEAs and LEAs in examining the effects of summer school Title I programs.



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o <u>Ideatifying exemplary projects</u>. SEAs, LEAs and ED have developed methods for identifying, validating and disseminating information about projects that are exemplary in increasing the educational achievement of program participants.

Funding level. For the period from October 1, 1980 to September 3D, 1981, the TACs were funded for approximately \$8.3 million. From October 1981 through September 1982, TAC funding is approximately \$8 million. The role played by the TACs in assisting SEA and LEA program administrators and evaluators will continue to be appropriate when Chapter 1 of ECIA takes effect for the 1982-83 school year. Before that date, ED plans to establish a new network of Technical Assistance Centers for Chapter 1 evaluation support. The new network will operate at a reduced funding level, currently estimated at between \$4.2 - \$5 million per year.

### Jointly Spansored Studies

In response to subsection 183(c) of ESEA Title I (which called for "...jointly sponsored objective evaluation studies of programs and projects ..."), ED initiated a series of competitive procurements limited to SEAs and LEAs in conjunction with their respective SEAs. To date, 29 of these "State Refinements to the ESEA Title I Evaluation and Reporting System" contracts have been awarded.

The primary purpose of these contracts has been to support developmental work in measurement and evaluation by SEAs, with a secondary goal that this work will increase the utility of their Title J evaluations for improving educational decisions and programs. All of the "State Refinements" efforts were to result in the development of instructional and/or implementation aids to improve program evaluation, management or training activities in the originating State; however, the applicability of these materials for use in other States or at the national level was considered when making awards.

Funded as a competitive procurement over the last three years, proposals were invited from all SEAs. SEAs were encouraged to, and did, secure the active participation of their LEAs. SEAs also involved other educational organizations to some extent, e.g. in-State universities, Educational Research and Development Centers, private firms, etc. In all cases, the co-sponsored "State Refinement" activities represented work that would have been virtually impossible to undertake without the supplementary funding available through this competition. SEAs were also required to document their own "in-kind contributions" in order to guarantee that the efforts were, in faci, jointly sponsored.

Fourteen studies were sponsored in 1979, and these efforts can be grouped into two main catgories: (1) improvement of data collection and analysis activities and (2) projects related to improving testing and evaluation methods. The first integory includes projects undertaken by Pennsylvania (to determine the types of errors being made in Title 1 data collection and analysis and to develop materials to reduce the number and severity of these errors) which resulted in the development and implementation of a computerized system for the conversion and analysis, at the SEA, of all local district test scores. Another approach to the same topic was used



in Arkansas, which developed user-oriented instructional materials to reduce the numbers and types of errors usually made in local Title I evaluation and reporting. Materials developed in Arkansas include three filmstrips, four audio tapes and a detailed programmed-text handbook and planning calendar for proper implementation of Title I evaluation procedures.

In 1980, the second year of he "State Refinements" activity, ED added two additional categories for award. One focused on improving the utility of evaluation information at the LEA and SEA levels, and the second examined local management efficiency related to the adoption of the Title I evaluation models. For example, in the former category New York developed a computer-based feedback system for use in reporting Title I evaluation results back to the participating LEAs. This system was designed to be compatible with New York's extant individual student data system and can be used at the LEA to link formative and summative evaluation efforts by displaying student achievement against allocated instructional resources.

The latter category involved efforts to investigate the actual operations of Title I evaluations in order to improve the coordination of Title I evaluation with other district activities, e.g. a review and analysis of how SEA or LEA testing programs could be coordinated with or adapted for SEA or ED information needs. For instance, working in this category, Wisconsin developed a framework of program characteristics such that evaluation data from similar LEAs can be used by those LEAs for comparative purposes.

In 1981, a programmatic decision was made by ED to fund fewer projects, but with the possibility of sponsoring activities with fairly ambitious goals and with a higher level of effort than was previously allowed. Three awards were made in 1981. These ongoing efforts are as follows:

- o The objective of California's project is to increase the use of evaluative information by the local projects. This objective will be achieved by developing a handbook and training workshop, in case study format, to define problem areas related to compensatory educational programs and to provide suggested solutions for these problems based on the application of evaluation firsings.
- o In Missouri, the SEA will document and revise existing computer software and develop additional programming, if necessary, which will enable the SEA to provide timely and comprehensive feedback reports to its LEAs. The system will also be used to provide summary reports for the SEA and for ED and to provide technical analysis reports for the SEA and the LEAs.
- o The goals of the Utah "State Refinement" project are to: (1) examine the relationships between standardized test scores and the ways in which the tests were administered, including an analysis of student test-taking skills, student motivation and item format; and (2) to institute better teacher and student training and motivation in order to improve the performance of test-takers and to increase the validity of the resultant scores.



### Summary

To summarize, the current status of Title I evaluation reflects seven years of work, dating from the 1974 Education Amendments. The TIEPS has been disseminated and pilot tested, with subsequent minor modifications, since 1976; for the first time in the 1979-80 school year, implementation of a TIERS model was required of LEAs, and SEAs were provided with uniform evaluation and reporting requirements to use in providing aggregatable impact and participation information to ED. For the first time since the inception of Title I, an evaluation and reporting system was put in place that had specific evaluation models to choose from, standards for conducting the evaluation, a metric to allow aggregation across projects, and a system of available expertise to provide the quidance necessary to make the system work.

In 1978, both the House and the Senate noted in their respective Committee Reports that the evaluation models should be reviewed. In the Notice of Proposed Rulemaking published in the Federal Register on February 7, 1979, ED first publicized the models and simultaneously stated its intention to comply with this mandate. As already mentioned, studies are now underway to examine the operation and satisfaction, at the Federal, State and local level, of the TIERS and its associated technical support systems (See appendix.)

# Evaluation and Program Improvement Activities -Some Case Studies

To a typical educational practitioner prior to 1979, the terms "evaluation" and "reporting requirements" were virtually synonymus. In many State education agencies and particularly at the local project level, data collected for purposes of complying with mandated Federal reporting requirements was deemed to be of little, if any, value or use in improving how local education programs were designed and implemented. Evaluation data were collected only because they were mandated by Federal law or regulation and an SEA or LEA had to comply in order to remain eligible for continued funding.

At that time, little attention was paid to the quality and accuracy of the data, to whether appropriate measurement devices had been used, to how tests were administered, to whether scores were accurate, data analyzed properly or whether students were tested at their appropriate levels of test difficulty. Most State and local educators responsible for program management were naturally hesitant to incorporate such questionable information into any decisions they made about their programs.

While TIERS is, in fact, a reporting system designed to provide evaluation information for national as well as State and local use, SEAs and LEAs began to recognize that the TIERS did also form a basis for generating valid and reliable student performance data for use in assessing the impact of their programs. In addition, the preamble to the Title I evaluation regulations asserted that the TIERS evaluation models, by themselves, do not substitute for, but only add to, a complete evaluation of a Title I program's implementation, strengths and weaknesses.

With help from the Title I TACs, SEAs and LEAs began the process of training personnel in sound evaluation procedures, modifying reporting forms and developing quality control procedures. Many of the problems



and frustrations that had plagued these educators and had inhibited their use of evaluation information were removed by TIERS and TACs. Once confidence had been restored that accurate information could be collected on Title I student performance and program impact, SEAs and LEAs were ready to take the next step. They realized that impact data on whether a student or program succeeded or failed was not enough -- in order to have a comprehensive program evaluation that would be useful to them, they needed to collect information on now key elements in the program had been implemented and how these elements could be modified in order to maximize the benefits to students.

This process of getting SEAs and LEAs to regard evaluation as something they can actually use, and not just as a mandated reporting requirement, has been an evolutionary one. While every SEA and LEA is now implementing TIERS, and while it appears that progress has been made, there remains a great deal still to be done to improve the quality and utility of the data produced.

To document some of the changes that have occurred, directly and indirectly as a result of Title I evaluation activities, there are numerous examples of SEAs and LEAs in which TIERS guidelines, often accompanied by TAC assistance, have been used to improve evaluation and educational procedures.

Typically these examples occur in several areas, each of which has already been briefly introduced: program improvement evaluation, improved testing procedures, needs assessment, student selection, quality control systems, use of new technology, identifying exemplary projects, summer school evaluations and sustained effects. Case studies, which are used here in order to develop a national perspective on SEA and LEA activities in these areas, follow.

### Program Improvement Evaluation

Df growing significance are the cases of SEAs and LEAs that are utilizing evaluation procedures that go beyond TIERS and beyond only collecting and using impact data. Often, the focus of these activities is to examine program implementation. The following brief examples represent only a small sample of such activities, and while they may often appear to be modest in scope they are significant in that they represent an increasing movement on the part of SEAs and LEAs to use evaluation as a management tool to improve programs. (An objective assessment of the utility of TIERS and TACs in helping to improve local programs is currently underway. While the Executive Summary will be appended to this report, more detailed examples may be found in the portion of that study dealing with Title I evaluation utilization.)

o The New York State Department of Education is the principal architect in the development of a system known as Program Activity Monitoring (or PAM). With the help of a 1980 "State Refinement" contract, this system (which monitors progress of a class throughout the year via test results and teacher responses to a series of questionnaires) is now being implemented in intermediate service units in New York. The system includes descriptive information about Title I programs in different buildings and other data related to program implementation such as time on task. If this information shows that certain factors are not occurring as planned, then steps can be taken to correct them.



- The Nebraska State Title I Office is now in the process of completing field tests on the Nebraska Title I "Program Implementation Scale." The scale enables teachers and administrators to look at a number of different components related to program implementation, including curriculum and administration. There seems to be a correlation between positive responses on the scale, indicating the presence of certain program components, and student achievement. The scale was pilot tested last year on 40 Nebraska Title I projects, and may be used this year even more widely.
- o The States of California and Arizona are emphasizing workshops for SEA and LEA staff on evaluating program implementation. These TAC workshops were completed in November, 1981 and the TAC is presently contacting participants for a follow-up, to take the form of special assistance to Title I sites to help them formulate strategies to examine program implementation. As a result of these initial workshops on evaluating program implementation, Arizona is now working with the TAC to create more specific materials that will help Title I staff to examine related topics, such as measuring time on task in order to increase productive instructional time in the Title I program.
- o The Flagstaff, Arizona school district has developed a comprehensive Title I data hase that includes TIERS as well as other demographic information. This data base allows the district to conduct longitudinal studies related to Title I gains and to examine what happens to students whose Title I services are discontinued.
- o One Virginia county used TIERS data to support their decision on how to configure their Title I staffing when faced with cutbacks. Some Title I students were being taught by rescurce teachers only, while others were receiving instructional services from resource teachers and aides. TIERS data, along with other evaluation information, was used to show that the use of aides, at least in that county, was not cost-effective.
- o The Michigan State Department of Education and its TAC are developing and implementing a plan that will be directed at improving programs in Title I schools that have high needs and limited resources. Currently, the focus of this project is to develop specific intervention strategies for incorporating principles previously identified from the literature into teaching practice. Following these phases, the TAC will assist the Michigan SEA and local Title I projects with evaluating the effectiveness of the implementation strategies.
- o As part of a "State Refinements" contract, two researchers in the Indiana SEA interviewed 10 randomly chosen Title I LEAs to determine how they use evaluation information. The following excerpts are from their final report:



"The data clearly supports the proposition that LEAs are using Title I evaluation information. Only one LEA reported that the sole reason they do the evaluation is because 'the State requires it.' In four LEAs, TIERS performed a major role and provided critical information for major instructional program changes. In two of these four LEAs, TIERS supplied the objective information which confirmed the decision that change was needed. In the other two LEAs, TIERS stimulated local decision makers to examine the Title I programs more closely and to determine if a need for change existed.

"Several other uses of TIERS were evident. Seven of 10 Title I coordinators viewed TIERS as a measure of overall program 'effectiveness' or 'as a global indicator that something is right or something is wrong.' Six LEAs communicated the results to the parents of Title I students. In four LEAs, teachers used TIERS information in instructional planning and student evaluation. One LEA included TIERS data as information utilized in employee accountability.

"Nine of 10 Title I LEAs clearly make an effort at least yearly to determine the effectiveness, strengths, and weaknesses of their Title I programs. All 9 LEAs use multiple sources of information to make these determinations. TIERS is an important source in every situation."

"Overall, LEAs view TIERS in a favorable light. Their opinions range from viewing it as adequate to extremely worthwhile. Only one LEA expressed an unfavorable viewpoint towards it."

o In New Hampshire, State and TAC staff have worked with small groups of local Title I projects using "Strategies," a series of workshops designed to help local projects design and conduct their own program implementation evaluation. "Strategies" has four distinct steps. The first workshop focuses on how to define the key or critical components of their project. This is followed by a session where critical components for evaluation are selected and questions of interest to the project staff are formulated. As requested, State and TAC staff help these Title I projects design their evaluation and select or create instruments. Once this is accomplished, each Title I project implements its own evaluation design. They then share how the data were analyzed, report conclusions, and discuss their recommendations for program changes.

This technique has been used successfully with fire Title I projects in southern New Hampshire and all five made changes in their programs as a result. Among the topics they evaluated were:

- -- the relationship between achievement gains and parent involvement,
- -- the relationship between achievement and teacher or Time I tutor communication.
- -- the types and frequency of communication between classroom teachers and Title I teachers.



o In 1979-80, the largest community in Maine designed and implemented a large-scale evaluation of how its Title I program was being conducted. Based on a review of Title I impact information by the Superintendent of Schools, which showed large variations in gains among Title I students in some schools, the TAC was asked to assist school staff with their program implementation evaluation. The study, involving more than a year of work, lead to 49 recommendations in the area of program implementation.

The following year, an investigation to see the extent to which this program implementation evaluation was used and whether or not the recommendations were followed found that of the 49 recommendations contained in the report, 26 (53%) had been implemented district-wide and others were implemented in different schools. These recommendations were not trivial, ranging from revised Title I student selection criteria to instituting regular planning and in-service programs for Title I teachers.

### Improved Testing Procedures

Improved testing procedures can be seen in the better selection, administration and use of test results as well as in efforts to reduce testing burden. Changes in how tests are selected and used are obvious in several areas. Generally speaking, there has been an increased sophistication on the part of SEAs and LEAs in test selection and use. Improvement in test selection has in turn brought about more cost-effective use of tests, since the selected tests are used to meet a wider array of needs and have increasingly heen used for instructional purposes as well as to evaluate pupil progress and program effects.

Test selection. By and large, there has been an increased awareness on the part of SEAs and LEAs of the benefits of selecting tests with items that match the instructional objectives of Title I projects. There is more awareness of applying appropriate criteria for evaluating tests (e.g., content validity, reliability, administration procedures, scoring options, and costs). This enhanced knowledge has often resulted in SEAs and LEAs selecting new or different tests for Title I projects. Where in the past a single test was used statewide, as in the case of Rhode Island and Hawaii, individual LEAs now select tests which better reflect the instructional emphases of their Title I projects.

Often, an SEA/LEA test review committee was established to examine test materials and to recommend or select suitable tests. This was done, for example, in Bay City, Texas, Breaux Bridge, Lousiana, Rhode Island, Connecticut, and Hawaii. In other instances, participants in a test selection workshop either selected new tests themselves or recommended their choices to the SEA or LEA Title I administrators. This was done in LEAs in Arizona and in Maryland, among other places. The participatory test selection process has generally resulted in a strong commitment on the part of local Title I staff to subsequently using test results for evaluation and instruction.



Test selection based on appropriate criteria coupled with strong staff commitment to test use has contributed to clarification of curricular objectives, better test administration, and more effective test use. For some LEAs, the selection of a new test has meant the restructuring of the testing program to avoid duplication and to reduce test burden. Such was the case in Billings, Montana and Salt Lake City, Utah. In other SEAs and LEAs, test information can be linked to national and local results through test equating (Stamford, Connecticut; Illinois; New Jersey) or by creating State norms (New York and New Jersey).

In Maryland, the Title I State Department of Education has implemented an effort aimed at reducing the burden of Title I evaluation through a series of test selection workshops, accompanied by presentations from test publisher representatives and TAC staff. These workshops were aimed particularly at exploring tests that could be used to provide diagnostic as well as evaluative information to project directors and Title I classroom teachers. Based on these workshops, several counties have changed their testing programs entirely so that a diagnostic, norm-referenced test can now be given in the fall to serve as both the Title I pretest and as a source of diagnostic information, replacing a number of other diagnostic tests that had previously been given.

rest use. A significant departure from past practice is the SEA mandate on test use. In Maryland, for instance, using test data for decision making has become a required element of project applications. Site visit reports prepared by SEA personnel include mention of the extent to which test results were used in the various counties. In States such as Nebraska and Kansas, Title I data are used by the SEA as a criterion for identifying exemplary projects.

Title I test results are increasingly being used for instructional purposes. Examples of such use can be found in Salt Lake City, Utah; Stamford, Connecticut; Maryland; and Hawaii. Test data are used for needs assessment, diagnosis and the preparation of individualized educational plans (IEP's) as well as for summative evaluation. In Salt Lake City, for instance, Title I pretest data were used to identify weaknesses in the instructional process. Title I staff then attempted to remedy the weak areas during the project year.

Another significant use of test results consists of secondary analysis of test data gathered during past project years. In Hawaii, for instance, data are being analyzed on a longitudinal basis for three project years to address SEA level questions concerning effects of project settings, instructional strategies and materials. The district has been implementing an instructional strategies profile which looks at the Title I program in a total school context and includes TIERS as well as program implementation data. This allows the district to use the data to see which instructional strategies are being used with Title I students, and which are having an impact and which are not.



Test use is facilitated by means of creative communications media. Through graphic displays of test data, teacher groups in Hawaii have been at to share test information with parent groups in ways readily comprehensible to the latter. Brief and concise reporting formats have been used to enhance the readability and usefulness of reports. In West Chester County, New York, for instance, concise one-page reports were prepared for school boards. In Yakima, Washington, the use of a video-tape to present Title I data was well received by school board members.

Reducing test burden. In order to evaluate the educational impact of a Title I project and in order to monitor student progress, a variety of information has to be obtained during the course of a Title I evaluation. A "selection test" is often used in order to collect the information by which students are selected for participation in the Title I project. A "pretest" is used to collect information regarding students achievement prior to participation in the project, and a "posttest" is used to collect similar information after participation in the project.

Administration of these tests, especially when combined with those of testing programs unrelated to Title I, sometimes creates a considerable burden on the local school systems, a burden which could be manifested in a number of ways. It may be financial, in that testing costs money. It may also be seen in decreased hours available for instruction, disrupted classroom routine, increased staff responsibility, or any of a variety of other "costs" of testing. Test burden proved to be a serious problem, but Title I funds were attractive enough to local school systems that the burden was borne.

One of the more common problems that the TACs have encountered while working with local systems is that of reducing this test burden while maintaining a high level of technical quality of Title I project evaluations, ensuring that needed educational information for a variety of needs and audiences is produced, and simultaneously assisting SEAs and LEAs in complying with their evaluation requirements. A number of partial solutions to this general problem have proven useful.

One solution is to use some sort of pre-selection information to reduce the number of students who are administered the selection test. For example, teachers' ratings may be used to identify those students who are unlikely to qualify for a Title I program. These students would then not be administered the selection test, thereby reducing the number of direct and indirect financial costs as well as the number of "student-hours" required by the system for testing. Scores obtained through programs unrelated to Title I evaluation, such as those obtained through district or State testing programs may be used in the same way. If this pre-selection measure is of a high quality, a separate Title I selection test may not have to be given to even a small number of students.

Albuquerque, New Mexico, for example, selects students for Title I programs on the basis of a student rating scale completed for each student by their teacher. With TAC assistance, Manatee County, Florida, has developed a novel approach to the selection process. Students work their



way through a series of books of graduated difficulty at their own pace, with the student's progress through the series recorded every few weeks by their teacher. This information is then used to select students for Title I programs.

An additional way to use data already collected involves using testing program information for Title I pretest and/or posttest data. In some cases, norms had to be developed by a State to provide the information required for Title I evaluation. In New York, for example, a criterion-referenced test is administered as a component of a statewide basic skills assessment program. Estimated national norms for this test are being developed and will allow local school systems to obtain the scores they need for Title I evaluation without the administration of a separate test.

Similar activities involve the equating of tests which meet Title I evaluation requirements to tests already in use. South Carolina provides a good example of just such an activity. Since the mid-1970s, South Carolina has sponsored census administration of a norm-referenced test as part of its statewide testing program. This test was administered to third, sixth, and eleventh grade students in the spring of each year, and in a number of districts, census testing was also performed in grades other than those required by the State. This test provides data appropriate for use in Title [ evaluation. 8eginning in 1981, however, the State implemented its own criterion-referenced test in grades 1, 2, 3, 6, and 8 and the norm-referenced testing was changed to grades 4, 7, and 10. At the request of South Carolina, their TAC began a technical investigation of the feasibility of equating the new criterion-referenced test to the norm-referenced test in order to estimate national norms. Otherwise, each Title I project wanting to use the criterion-referenced test for evaluation would also have to administer a norm-referenced test and conduct its own equating. For similar reasons, TAC has assisted in equating a series of locally developed criterion-referenced tests to a norm-referenced standardized test for the Stamford Public School system in Connecticut. A similar project is also underway in New Jersey in which the State-mandated Minimum Basic Skills Test is being equated to a norm-referenced test.

A different approach to reducing test burden involves generating both a pretest score and a posttest score from the results of a single, annual test administration. Each test administration provides posttest scores for the evaluation of the previous year's Title I program along with pretest scores for the evaluation of the following year's program. It is also possible, in certain situations, to use this annual test for selection purposes as well. A program in Rochester, New york, is typical of many districts using this approach.

These and other approaches to reduction of test burden are examples of joint efforts made by local and State school systems, often with help from their TACs. These efforts have resulted in project evaluations which are both as economical as possible while still maintaining a high technical quality.



### Title I Needs Assessment

Section 124(b) of Public Law 95-561 spells out a five step needs assessment process for Title I. The steps call for each district to:

- o identify educationally deprived children in eligible attendance areas,
- o identify the general instructional areas of focus,
- o select Title I students,
- o diagnose Title I students' educational needs, and
- n write objectives and plan instruction based on identified needs.

Objective data are to be used in completing steps two and three. Both States and individual districts have made efforts over the past five years to improve needs assessment by using objective data in completing the planning sequence outlined above. Specific activities relevant to student selection are discussed in other sections of this report. The following sections of this chapter will document State and local efforts in improving their needs assessment processes.

State efforts. States have often voiced dissatisfaction with district-level planning efforts because the Title I plans presented were not based on information that documented local needs. Over the past five years, some SEAs have taken several approaches to improving the quality of their districts' needs assessments. These approaches have included sponsorship of regional workshops focused on needs assessment, restructuring of applications to require specific needs assessment information and development of handbooks or guidelines on needs assessment. TAC involvement in these efforts has included consultation, instrument review and development, co-development of handbooks, and development and presentation of workshops. At the request of ED, the TACs have developed four standard workshops which cover the needs assessment steps.

Massachusetts was early to sponsor needs assessment workshops. These workshops, offered regionally, allowed a number of districts to attend the same presentation. At the State's request the Region I TAC developed a workshop covering use of test scores, survey and questionnaire design and use of other information available in school records. Worksheets and instruments for Collecting teacher ratings were widely disseminated and used by many districts. Similar regional needs assessment workshops have been sponsored by the States of Hawaii, Idaho (which focused on the diagnosis and planning steps), and Maine.

Oregon chose a different approach for enhancing needs assessments by developing a manual on the topic. The manual, called <u>Program Management and Planning: Needs Assessment and Project Development for Oregon Title I, ESEA Projects took several years of work. Initial State activities included increased attention to the needs assessment during monitoring. State monitors encouraged PAC assumption of responsibility</u>



for the needs assessment. At the same time, monitors began to encourage the use of test results for needs assessment and student selection. As districts began to use tests more widely, forms for gathering staff and parent opinions were circulated along with worksheets for combining needs assessment results. A needs assessment model was developed to include the five required steps. In 1980 and 1981 these activities culminated in a manual which describes the model, discusses types of data to collect and includes surveys and summary worksheets which have been successfully used in Oregon. During this process, the Region 10 TAC assisted in finding or developing instruments and also reviewed the manual.

New Hampshire followed a similar path, eventually producing, with TAC assistance, <u>Suggested Procedures for Long Range Planning and Annual Needs Assessment</u>. This manual is usually used in conjunction with Statesponsored workshops. The manual contains sections which describe each step of a long-range planning process and appendices which provide additional guidance and detail. New Hampshire's long-range planning process follows a three-year cycle. The first year is a comprehensive assessment for long-range planning. In subsequent years the assessment serves as an update, checking how well needs are met, problems in meeting needs and satisfaction with the program.

Montana's Office of Public Instruction Title I consultants developed their own needs assessment workshop using TAC developed materials in conjunction with locally designed handouts. The State monitoring form was also revised to place more emphasis on the various needs assessment steps.

Puerto Rico developed a teacher rating scale used throughout the Territory. This rating scale is used to rank all students and identify those who are disadvantaged. The needs assessment steps for identifying eligible students, identifying instructional areas, and selecting students are now standardized throughout the Territory.

District efforts. School districts have also been active in improving the needs assessment process. Their efforts sometimes preceded State activities, but more often evolved from them. District interest in needs assessment is reflected in several ways -- by attendance at State-sponsored workshops, by requests for consultation on their needs assessments, by use of disseminated needs assessment forms and procedures, and by internal studies of their needs assessment process.

Many needs assessment workshops have been sponsored by State Departments of Education and have used TAC staff and materials. In general, districts' attendance at these workshops is optional. Needs assessment topics are popular, however, and workshops offered across the country in 1980-81 attracted numerous participants.



A number of districts have sought TAC assistance in revising their needs assessment procedures. Consultations have been as simple as supplying sample instruments and forms or as complex as analyzing existing needs assessment procedures, recommending alternative practices and training staff in implementing new procedures.

While major changes may take considerable time, more modest changes can occur rather quickly. Inspection of fall pretest data at the primary level in Salt Lake City suggested the need for more emphasis on word analysis skills. Title I staff in each building were apprised of the finding and by the end of the school year children's skills in this area were comparable to their skill levels in other aspects of reading. In this case, the inspection of data patterns resulted in a need being identified and a plan for meeting it being developed.

As concern about budget cuts has increased during the past year, districts showed great interest in employing needs assessments for planning where their Title I programs could be scaled back if necessary. Questions were raised on how to use needs assessments to decide whether to reduce program areas, grade levels served, type of staff or total number of students served.

At least one district has commissioned a study to examine their needs assessment process. The Honolulu school system has recently written an RFP for an outside contractor to look at whether their Title I program meets the needs of Title I schools. Results of this study should be useful, particularly in revising the diagnosis and instructional planning steps.

### Student Selection

ESEA Title I provides services designed to improve the achievement of the most educationally disadvantaged students. A method for selecting participants, in addition to needs assessment procedures. is necessary because schools cannot serve all those who are identified in the needs assessment. Schools have to select students for the program from a local pool of educationally disadvantaged children.

School districts and States have evolved ways of implementing this selection process and they have developed ways to help schools better decide just who their most needy students are.

As discussed earlier, Title I is designed to help educationally disadvantaged students from economically deprived areas. It is not aid to only those who are educationally disadvantaged, nor is it aid to only those who live in economically deprived areas. Although there is a substantial correlation between being educationally disadvantaged and living in an economically deprived area, that correlation is not perfect. Educationally disadvantaged students live in non-economically deprived areas, and not all students living in economically deprived areas are educationally disadvantaged. When combined with measurement instruments that are less than perfect (as are all tests or other forms of objective measurement, e.g. teacher judgment of student need), the net result is that children are selected to receive services who in many cases are not poor, and in some cases may not be very disadvantaged educationally.



It is often difficult to define "educational disadvantagement." Some people base disadvantagement on standardized test scores because they are objective, reasonably valid and reliable, and outside the usual classroom experience. Many States and most school districts (e.g., New York, Ohio, Baltimore, Chicago, and Dallas) now define educational disadvantagement in terms of performance on either a locally developed, State developed, or commercial standardized test.

Critics of standardized tests often contend that standardized test results give only a snapshot of achievement. They suggest that measures of true educational need best come from what teachers say about their students, since they work with students for an extended period of time, and on many educational tasks. Critics of such an approach point to the problems inherent in any such subjective process.

The result is that although test scores and teacher judgments of educational need agree for many students, there is disagreement for many other students, especially those who are on the borderline of being in the program. Unless uniform and consistent procedures are used, a strong case can be made based on one of the two above criteria that the most needy were in fact not being served. Some students who score relatively well on tests will be judged in need of special help by the teacher. Other students who do relatively well in classwork will do poorly on tests.

Examples of difficulty in selecting students abound. At the Federal level, the Decima substudy of the sustaining effects study suggested that many of those who were needy were not being served at the same time that many who could be considered not needy were being served. The 1977 NIE survey of compensatory education corroborated this conclusion. Federal Title I program review teams also indicated that student selection was one of their most frequently observed problem areas.

At the state level, internal program monitoring has uncovered similar problems. Strong cases could be made where schools were not selecting students in ways that were either consistently or uniformly applied. Procedures for selecting students were sometimes arbitrary, unrelated to educational need, or deficient in identifying those most in need.

lince no one at either the local, State, or Federal level was in favor of selecting students who were other than the most needy, response to the selection problem was immediate. At the Federal level, a five step needs assessment process, with student selection as one of the steps, appeared in the 1979 Title I regulations. Local schools were required to explain their selection procedures to the State when they applied for their money. At the State level, standards for educational disadvantagement were being defined (e.g., performance below a certain level on some standardized test) and guidelines for selecting students were developed. Local school personnel began searching for more objective processes with which to assess and define student need, whether by test score or teacher judgment, and they often asked TAC staff for ideas on how best to develop and apply the school's criteria in selecting students. Procedures being used were shared among and between the States and schools, with staff adopting and adapting procedures they found useful.



What has been gained thus far from this concern about how students are selected? First, schools have become more systematic in their use of selection devices. For example, Staunton, Virginia substantially reduced the number and types of tests and ratings uned by their schools to select students. Redundant assessment and its accompanying paperwork were eliminated. Uniform and consistent procedures were introduced. In Puerto Rico, for the first time, uniform criteria are being applied to select their program students for the school year beginning in 1982. There too, paperwork has been streamlined and selection has become more efficient and effective.

Second, States have been either suggesting or requiring that schools use multiple indicators to select those students who are most in need; for example, New Jersey and Massachusetts. Using multiple indicators is more valid than using only one indicator, where poor performance on one indicator can never be compensated for by good performance on some other equally valid indicator. At the local level, more schools are using both teacher ratings and test scores to select their Title I students. Attleboro, Massachusetts, Billings, Montana, and Meridian, idaho are examples of schools that have used composites of both test scores and teacher judgments to select students.

Third, some States have coordinated policies on remedial education with Title I selection criteria. For example, both New York and New Jersey have adopted selection criteria based on performance on their State mandated tests. In both States, students who fail the tests are to be placed in some related remedial program. These State mandates have been incorporated in Title I selection policy where applicable.

Fourth, and most importantly, local schools have adopted more objective, valid, and reliable means of assessing teacher judgment of need for Title I. Schools often experienced difficulty when trying to apply teacher judgment to the selection process. Often students who scored above the 50th percentile on a nationally normed test were being selected for the program. Sometimes the judgments were arbitrary and unstructured. Title I teachers sometimes found students sent to them were not really the neediest. Often, one would not know a student's specific weakness when teachers used unstructured judgment to select program students.

Now, schools are more often assessing teacher judgments of student need through a structured, formal rating system. Such systems have been found to be more valid and reliable than previously used systems. Albuquerque, New Mexico, Granite, Utah, Jersey City, New Jersey, and Lexington, Virginia are examples of local schools that have invested heavily in developing systems for assessing teacher judgment. The Albuquerque method has been widely disseminated and currently is being recommended in other States, such as Arkansas.

Fifth, selection rules that are uniform and consistent are more often used now by schools throughout the nation. Uniform and consistent selection rules are objective. They let parents, teachers, and administrators know exactly what student behaviors indicate a need for Title I.



### Quality Control Systems

An unanticipated by-product of the Title I Evaluation and Reporting System (TIERS) has been the focus of attention on quality control of data reported by LEAs to the SEA Title I unit and subsequently to ED. During the past five years almost every State in the United States has shown some concern about the accuracy of the data reported and has made some attempt to determine how well TIERS implementation rules have been followed.

Documented reports on quality of data exist for at least seven States, and while different types of analyses have been done from State to State over different periods of time, they all add up to one thing -- data submitted by an LEA should be viewed as tentative until verified as accurate. While one can conjecture that tests that are hand-scored at the school level are more susceptible to error than those reported by a reputable scoring service, errors have been detected in computerized class lists that have been prepared by reputable companies. A wrong tape can be mounted, out-of-grade-level conversions can be improperly done, or computer norms tapes may be faulty.

The types of errors discovered with hand-scoring have included reading the wrong table, reading the wrong numbers from the right table, errors in arithmetic, transposition of digits, and the like. In one carefully done study (Pennsylvania, 1979), more than 13% of the individual scores were in error, involving 89% of the LEAs. In another study, Crane (1980) found 32% (1978) and 26% (1979) of the projects examined used incorrect tables in their conversion of standard scores to percentiles. Other studies have found up to 67% of individual student scores in error (Elman, 1981) due simply to coding errors that incorrectly identified characteristics of the test used. While it is difficult to generalize from these findings, it is safe to say that without close attention to data quality, a substantial proportion of evaluation data can be expected to be in error.

From these discoveries have come an increased sensitivity to the failibility of data and the necessity of building in safeguards that will prevent or correct the errors that have occurred in the past.

SEAs have generally taken one of two basic approaches: (1) a heavy reliance on in-service training of LEA staff in the preparation of reporting forms, or (2) shifting the burden of score conversions to the SEA, thus reducing the chances of error at the LEA level.

LEA Activities. Maine, Rhode Island, Arkansas, and a number of States in the northwest regions of the country, especially Oregon, have all taken the first approach and have designed training programs aimed at improving the accuracy of the reports that LEAs prepare for the SEA. In 1976, a quality assurance project called the Maine Verification Program (MVP) was instituted by the Title I Office in Maine. The purpose of the MVP has been to help selected communities conduct a rigorous implementation of TIERS. The Region I TAC provided participating communities with intensive training on TIERS accompained by verification or auditing of the data prepared by LEA personnel and follow-up until the LEA could conduct an error-free evaluation on its own (Herr, 1981).



During the first year, 25 Title I programs were selected to participate in the system. The Maine SEA nominated LEAs because: (1) an LEA had reported unusually high NCE gains, (2) the community had voiced a concern, or (3) the LEA fell in the category of special SEA concerns (i.e., an exemplary or questionable program).

As of fiscal year 1980-81, five cycles of the Maine Verification Program have taken place involving a total of 58 programs. Forty-one of these, or 71%, provided overall usable data. Of the original 25 in the program in 1977, 23 were still in the program and 19 of them (83%) provided overall usable data. These data indicate both that the longer an LEA remains in the system the higher the probability that the quality of its data will improve and that it usually takes longer than one year to register a marked improvement.

In Rhode Island, under a State Refinements contract and with TAC assistance, a formal analysis was made of data submitted during fiscal year 1977-78 to determine: (1) the amount of data error in reported scores, and (2) the common errors made across the State. 8ased upon these findings, Rhode Island developed procedures, materials, and training packages designed to minimize data error. These included a slide-tape presentation that explains how to administer a standardized test, a template for administrators' manuals designed to prevent errors in reading tables, and a newsletter to address those questions commonly asked by Title I directors and teachers.

Arkansas developed an <u>Evaluation Manual</u> that forms the backbone of that State's effort to minimize errors. The SEA also developed a 19-item checklist that provides feedback to LEAs and suggestions for correcting errors in the future. In addition, the SEA has also stepped up the checking of <u>all</u> data sent in by LEAs. This is done for the entire State and represents an improvement over the previous practice of spot checking by different persons who have other monitoring functions in the field.

In Oregon, and some other States in the northwest, intensive group consultations on how to complete forms have been used to improve the quality of the data. The distinctive feature of this approach has been "hands-on" training sessions held twice a year. Participants arrive at joint SEA-TAC fall meetings with their data sheets and record all of the necessary pretest information. They review what subsequent information will be needed to complete their evaluations and then return in the spring to add the posttest data and complete their analysis.

The above examples are meant to be illustrative, not exhaustive, of the types of activities in which States are currently engaged. Around the country, many SEAs are engaging in similar activities with their LEAs that are undocumented in this report.

Activities at the SEA level. An SEA that took an early interest in implementing the second approach toward quality control -- shifting the burden of score conversion to the SEA and away from the LEA -- is the State of Iowa. In a 1977 study, the typical kinds of errors described earlier were found; in fact, about 95% of the LEAs that provided hand-scored information had made errors in their evaluations. The SEA decided



to have LEAs report individual pupil raw scores and make all score conversions and perform all calculations at the SEA level. Assisted by the TAC, Iowa has worked to develop and perfect this system over the past three years. In order to implement the system, it was necessary to use the proprietary materials of test publishers, so special agreements were made with them in order to avoid any infringement of copyright laws.

The enormity of this system, which was built to accommodate 12 commonly used standardized achievement tests (any form, level, edition, and subtest), can best be illustrated by the fact that approximately 15,000 different norms tables currently are required. Part of the programming effort has included checking to see if criteria for proper implementation of the TIERS evaluation models have been met. Progressive increases in the percent of valid data have occurred during the last three years. In 1978, 83% of the reading data were usable and met the criteria for inclusion; in 1979, the percent rose to 92%; and in 1980, to 96%. For mathematics, the results were similar, going from 74% in 1978, to 92% in 1979, and to 95% in 1980.

Both Pennsylvania and Illinois have selected this method of (other States, like New York, already had similar systems in place) collecting individual pupil raw scores as a way to improve quality and reduce the reporting burden on the LEA, and have benefitted greatly from the work previously done in Iowa.

The development of the Iowa system of quality control has also lead to the development of feedback reports from SEAs to their LEAs that:
(1) summarize school and district results, and (2) give diagnostic information regarding the proper implementation of the evaluation models. In addition to Iowa, both Missouri and Nebraska have incorporated this LEA feedback feature in their reporting system. The Missouri SEA plans to continue with TIERS and to use the current feedback form next year, even though this is no longer required under ECIA. Other SEAs will undoubtedly also choose to maintain their current evaluation systems.

# Use of New Technology in Title I Evaluation and Program Management

During the six years that the Title I evaluation Technical Assistance Centers have been in existence, they have tried to keep abreast, and make their clients aware, of new technological innovations that can make the tasks and the products of evaluation easier to handle, more accurate, and easier to communicate. Advances in computer technology have reduced the burder of hand recordkeeping and data analysis while increasing precision. At the same time, advances in the areas of educational television and teleconferencing have increased our capacity to communicate complicated material in a timely and efficient manner.

Advances in microcomputer technology have resulted in more efficient ways to enter and store data, to analyze data and to generate reports. For example, a district in south Louisiana had developed their own criterion-referenced test. They were scoring this test by hand and using the results to select students for their Title I program. The test required several weeks to score, the scoring procedure was prone to error, and the slow turn-around failed to provide the classroom teachers with timely diagnostic information.



The district purchased a microcomputer and an inexpensive marksense reader. Using a program developed by the TACs, the district was
able to read the answer sheets for all students and to store their
test responses on a magnetic diskette. The teachers received a complete
printout of their students' test performance, including the items missed
and the domains passed and failed. They received these data two days
after the test was administered.

Non-standardized achievement test data are also being stored on this microcomputer, and the data analyses required for Title I reporting are performed by another TAC-developed program. This means that errors in converting percentiles to NCEs as well as other computational errors have been significantly reduced.

SEAs have also found that microcomputers can be of significant help in reducing their burden of hand-checking LEA reports. Vermont decided to use a microcomputer to perform the Title I analysis for all districts in the State. Working with the TAC, they were able to have the LEAs simply submit basic unanalyzed data, perform the analysis in-house, and return individual school results to each district as well as to summarize those results for their report to ED.

Another State, Rhode Island, was interested in using the micro-computer as a means of quality control. One of the most common errors in reporting Title I data to States is in converting test scores to NCEs. The SEA asked the TAC to develop a program that could estimate NCEs directly from standard scores. This then enabled the SEA to detect those LEA-reported NCE scores that were obviously in error.

On a larger scale, the State of Alaska, through a State Refinements contract and with some TAC assistance, has been developing software for all of their schools. Data can be entered and stored at a local level and then transmitted via satellite to Juneau, where the SEA's large computer then is used to generate the State report on Title I as well as to provide local districts with feedback concerning the success of their program. This link also provides for immediate communication of data on students throughout the State, and allows for the transmittal of "electronic mail" to remote districts. The system provides a means for increasing quality control as well as decreasing the time required for data entry and analysis.

Workshops are a primary mode of information presentation throughout the TAC system, and technologies such as teleconferencing, public broadcasting and videotaping have been utilized by TACs to deliver information in a workshop setting. For instance, Colorado, a large State that is sparsely populated, has a problem in conducting workshops in remote areas. A teleconference workshop method has been successfully implemented, with the assistance of the TACs.

The method combines normal phone lines with special teleconference machines that allow for the use of microphones and speakers for large audiences. A three-way network was established between the TAC in Portland, the State Education Department in Denver, and Regional Service Centers throughout the State. The basic workshop format



consisted of a topic presentation by the TAC followed by a discussion involving all three agencies. Audio information was exchanged through an open channel, allowing spontaneous interaction. To date, 22 workshops have been conducted since the fall of 1980, with audiences ranging from eight to 35 per workshop.

Visco technology has been used in Georgia and Texas to distribute workshop presentations. The Educational Television System in Georgia used its network to broadcast a live workshop in 1981 that reached 139 school districts across the State. A panel of TAC and State Education Department personnel first demonstrated how to fill out the evaluation report and then answered specific questions on the air via a toll-free telephone. This broadcast precluded the need for a series of onsite workshops by effectively delivering the information in a single session.

Video is used in Texas as a major component in workshop packages designed to "stand alone." The packages contain a presenters' guide, handouts, and simultion exercises in addition to the videotaped presentation. They are available to LEA staff through the Regional Service Centers. Topis of these workshops are usually at a "general awareness level," requiring little or no audience interaction. The purpose of this mode of presentation is to address a general, recurring need without spending excessive resources in staff time and travel.

### <u>Identifying Exemplary Projects</u>

Title I funds have supported the development and implementation of exemplary basic skills programs in all areas of the country. Overall, 52 Title I programs have been approved for exemplary status by the Joint Dissemination Review Panel (JDRP), a panel composed of 22 members of the Department of Education (ED) which reviews evidence of effectiveness for educational programs and is empowered to designate such programs as "exemplary."

Over the years, the proportion of applicant Title I projects which have been approved for exemplary status har steadily increased. This growing success rate can, to some extent, be attributed to the increased coordination of support mechanisms available to Title I programs seeking JDRP approval. At this time, most local projects which desire to apply for exemplary status receive assistance from their State Title I office, from ED's Title I program office, and from a variety of printed support materials, including the JDRP Resource Guide for ESEA Title I Programs in Basic Skills, JDRP Ideabook, Helpful Hints for Preparing and Submitting ESEA Title I Regular and Migrant Education Projects to the Joint Dissemination Review Panel, and Educational Programs That Work.

Nebraska is developing a strategy for Title I program improvement with special emphasis on instruction. They will use a modified version of the old ESEA Title III-IVD (Implementation, Validation, Dissemination) process. Title I projects interested in being reviewed and considered for exemplary project status can request an on-site visit by three independent evaluators, each locking at a different aspect of the program, e.g., administration, curriculum, or evaluation evidence.



Once a project has exemplary states, other Title I projects wishing to improve their programs can be referred to them for assistance.

In many States, a concerted effort has been undertaken to assist Title I projects in their JDRP application. In Iowa, for example, the State Title I office and their TAC have established a set of procedures which integrate State and TAC services for the identification of exemplary local program sites, the organization of the sites' impact evaluation data, and the compilation and review of the 10-page program descriptions for JDRP submission. Other SEAs have worked with the TACs to establish State procedures, modeled after the national JDRP process, for validating exemplary Title I programs. South Carolina, Nebrask2, and Massachusetts, in particular, have developed noteworthy State validation systems with the assistance of their respective TAC. Projects identified as exemplary through these State systems have generally been found to be likely candidates for national JDRP validation.

The dissemination of Title I programs identified as exemplary has been widespread. Typical of JDRP-approved Title I programs which have received funding from the National Diffusion Network (NDN) as Developer/Demonstrator projects is the Buckingham County, Virginia, Computer Assisted Diagnostic Prescriptive Program in Reading and Mathematics. This program has been adopted (or adapted) in 214 classrooms in 69 schools across the country since its validation in 1979. The program developer conducted 23 awareness workshops in 14 States and mailed out over 400 information packages about Buckingham County's exemplary program in the 1980-81 school year alone.

In all, 26 Title I programs have received NDN funds to support dissemination. These programs range in scope from early childhood (e.g., the Preschool Improvement of Reading -- PRIOR -- in Fort Collins, Colorado) to secondary school programs (e.g., Project CATCHUP in Newport 8each, California). The dissemination of these exemplary Title I programs to numerous project sites across the country has made an important contribution to improving the quality and effectiveness of Title I instruction.

### Title I Summer School Evaluations

The evidence on whether there is a drop-off in student achievement over the summer months, when schools are not in session, is inconclusive. There was enough concern about spring-to-fall achievement test score declines, however, for the Congress to encourage, in the Education Amendments of 1978, giving "due consideration to the inclusion of components designed to sustain the achievement of children beyond the school year in which the program is conducted, through such means as summer programs" (Section 124(k)). The Amendments added that the evaluations of Title I programs will include "objective measurements of educational achievement in basic skills over at least a twelve-month period in order to determine whether regular school year programs have sustained effects over the summer. (Section 124 (g)(2)). Many LEAs responded to their own concerns and those of the Congress by offering Title I summer programs, and they turned to the SEAs and the TACs to help them evaluate the impact of those programs.



The short-term nature and limited focus of summer programs creates special problems for the evaluator, especially in measuring changes in basic skills. Evaluation designs developed for use with regular term Title I programs may be inappropriate for use with summer programs, or they may be usable only after considerable adaptation. Summer programs may have limited time devoted to instruction, may be highly individualized, may stress nonacactmic objectives, may use informal student selection procedures, and may include non-Title I coursework. These characteristics pose evaluation problems that have led the TACs to recommend that three evaluation designs be considered: a norm-referenced design, a criterion-referenced design, and a comparison group design. The TACs have worked with LEAs to select the best design for the local situation.

An intensive study of the Title I summer school program in the Columbia, Missouri, Public Schools showed that participation involving two hours per day of classroom activities during a 34-day session had an impact on reading achievement levels, as measured three months later. The evaluation design utilized a comparison of summer school participant test scores with national norms and with scores of regular term Title I students who did not participate during the summer. Title I summer school participants showed no gain in reading achievement over the summer, but Title I students not participating showed an appreciable loss. It appeared that summer school permitted the previous year's Title I gains to be sustained over the summer.

The St. Louis, Missouri, Public Schools offered a six-week Title I program in 48 schools. Each site was well staffed and class size was limited to 10 pupils, with instruction provided four hours per day, five days a week. Program implementation was studied by means of observations of classes and interviews were conducted with teachers and students. Overall, the classes were found to be well-organized and task-oriented, with a generally positive climate. Achievement of students was studied through a comparison of their performance in the following fall with that of a cohort of comparable students who did not attend summer school. Although the main analyses showed no significant differences between the summer school and comparison students, supplemental analyses revealed a significant impact on students who had been retained in the first grade.

Since some summer school evaluations show no overall differences between summer school participants and nonparticipants, even though teacher observations indicate dramatic improvement in some students, a 17-district cooperative in Columbus, Nebraska, utilized a more sophisticated evaluation design to examine the impact of their Title I summer program. The study compared Title I students who attended summer school to Title I students who did not. The data available for comparison included teacher ratings of each student's potential to benefit from summer school, achievement test scores, and background information on students. The achievement test scores showed few differences between the two groups and pointed out that standardized tests are usually not sensitive to short-term intensive instruction.



A study of the impact of Title I migrant summer programs in four migrant centers in Nebraska revealed that a full-day program lasting for Jix weeks can produce achievement gains as large as the regular school year program. Analyses of the number of hours of instruction received by summer school and regular school year migrant students showed that the two groups spent about equal amounts of time on Title I tasks.

Salt Lake City, Utah, has been emphasizing programs to get Title I students more involved in reading. Their Title I summer program was developed by the Parent Advisory Council and involved mailing out reading books to third graders in half of the Title I schools. An initial meeting with students and their parents explained the program and provided the first book. Additional books were then mailed out once a week for 11 weeks. The evaluation design included interviews with Title I third graders and their parents (including participants and nonparticipants in the program) and achievement testing. The test scores showed a small positive effect of the program compared to national norms, while nonparticipants showed small losses over the summer. The interviews showed that the program was very successful in interesting students and parents in reading.

Due to these differing results, it is not clear just what effect summer school programs tend to have. At best, their effects are moderate. But it is clear that under some circumstances gains can be achieved over the summer months. Exactly what set of circumstances produce gains is still to be determined.

## Sustained Effects

The 1978 Education Amendments introduced a new evaluation requirement for ESEA Title I: a third testing point to determine whether achievement gains observed at the end of Title I program participation were sustained for a longer period. The requirement was considered necessary because many students were showing large increases when their achievement was assessed using a fall-spring cycle but were not maintaining similar gains when they were tested several months after the Title I program had ended. Sustained effects are important to consider in this report because: (1) this is the first year of the requirement, (2) the requirement has been retained in Chapter 1, and (3) many SEAs and LEAs have reacted positively to the requirement, as a way to assess the true, long-term effects of their programs.

In part because the sustained effects evaluation is not required to be sent to ED or the SEA, many SEAs initially took the requirement lightly. However, most SEAs did incorporate the sustained effects requirement into their LEA Title I application requirements and made a concerted effort to communicate the implications of the requirements to the LEAs. Virginia, for instance, has conducted regional workshops, and has required that the sustained effects evaluation plans be reviewed by the SEA and be on file at the SEA. A few SEAs have not provided technical assistance, but have required that the LEAs sign assurances that a sustained effects evaluation is being undertaken.



In their attempts to implement the new sustained effects requirement, SEAs and LEAs have utilized the evaluation chapter of the Title I Policy Manual, which details various options for assessing sustained effects. In addition, the TACs developed a packet containing answers to questions questions often asked about sustained effects, and showing seven additional ways to implement the requirement. Further, a TAC workshop designed around the packet includes a sound/slide presentation, transparencies depicting options, and evalution planning aids.

Development of these support materials was necessary because the sustained effects requirement is substantially different from the standard Title I pre/post evaluation requirement. This latter type of evaluation is designed to permit aggregation of evaluation data at the national and State levels, and thus all SEAs and LEAs must implement a number of requirements in the same fashion. On the other hand, the sustained effects evaluation is intended for local use, and hence LEAs have wide latitude in meeting the requirement. Within certain practical and technical constraints, LEAs can tailor their sustained effects evaluations to answer particular questions they may have about the effects of local Title I instructional strategies, staffing configuration, or grades served, among others. Thus, while the sustained effects requirement is much less restrictive for LEAs (and SEAs), at the same time it has required relatively greater planning on the part of LEAs to design appropriate methods to answer particular questions that may be pertinent at the local level.

Overall, LEAs' reaction to the sustained effects requirement is most encouraging. At first, most LEAs were hesitant to implement additional evaluation activities. Further, the flexibility of the sustained effects requirement was troublesome: LEAs had become comfortable with "being told what to do" in implementing their Title I evaluations. However, after LEA personnel became convinced that the sustained effects evaluation was intended to permit answers to questions of interest to the local personnel, they became very intent on asking "the right question," and obtaining quality information in a timely fashion. In fact, LEA personnel have more frequently expressed concerns about the quality of the sustained effects evaluation data than about the pre/post evaluation data.

A particularly interesting finding from a sustained effects evaluation was developed in Woonsocket, Rhode Island, where the LEA conducted a longitudinal evaluation of their remedial reading program. The LEA found that Title I not only helped students during the year of participation, but for as long as three years after they left the program. Further, in part because of their sustained effects activities, Woonsocket is one of many LEAs which is beginning to exhibit an attitude of ownership concerning the overall evaluation process. As this development suggests, the sustained effects requirement is having an important effect on how many LEAs think about their evaluations.

Ritchie County, West Virginia, had been using a county-wide assessment test administered in March as its only means for selecting Title I participants for the following year. Those students already in Title I who scored above the 40th percentile on this test were graduated out at the end of the year. However, teachers rated some



Title I students who had scored above this cut-off as still needing Title I services. A sustained effects study showed that the students who were identified as needing further services had lower sustained gains than did the other "graduates." The results of the study thus supported a revised student selection policy which systematically incorporated teacher ratings.

In Franklin County, Virginia, the sustained effects study provided information on which to base a decision regarding whether or not to continue providing Title I in grade 6. Students receiving Title I in grade 6 continued to show an increase in their NCE scores, demonstrating the effectiveness of the grade 6 program. For this reason, the LEA decided to continue LEA instruction for these children.

The Clark County School District in Nevada conducted a study to determine if reading and mathematics achievement gains made during the school year were sustained over a longer period of time. The fall 1979 pretest scores were compared with the fall 1980 and spring 1981 scores. It was found that gains in mathematics and reading were sustained over the subsequent school year.

Powers (1979) compared Title I student gains on a fall-to-spring and fall-to-fall testing schedule in a large school district in Arizona. Seventh and ninth grade Title I students were tested, and neither of the groups showed absolute losses in achievement on the California Test of Basic Skills. In relative terms (compared to national norms), the ninth grade group showed a decline over the summer. The seventh grade group, however, showed a slight increase over the summer.

Hawaii conducted sustained effects studies looking at fall, spring, and fall test scores for students who continued in Title I programs. Data were reported separately for students who attended and who did not attend summer school. The pattern of results was consistent across districts, with students showing lower gains on fali-to-fall measurements than on fall-to-spring measurements. In one of the two districts with summer programs the students did not show this pattern; in the other, the effect was less than for the students who did not attend summer school.

### Summary

Nearly eight years have passed since the Education Amendments of 1974 were enacted, in which Section 151 provided new and relatively stringent evaluation requirements and defined a far greater accountability for Title I programs than had previously existed. We hope that we have documented, fully and fairly, what has transpired during those eight years -- both in terms of developing, implementing and apolying the results of those evaluations and in terms of using those results nationally to examine the effectiveness of the Title I program.

SEAs and LEAs are now at an important juncture as they consider how their compensatory educational programs will change as Chapter 1 comes into effect. To the extent that these decisions are based on what they have learned by systematically examining the operations and effects of



their Title I programs, then the 1974 objectives inherent in passing Section 151 will have been achieved. To the extent that SEAs and LEAs continue to apply the evaluation principles they have learned through implementing their Title I evaluations, Chapter 1 programs will benefit -- not only in terms of the quality of those programs, but in terms of having ready information concerning the effects of Chapter 1 that are certain to be asked for in subsequent legislative and oversight sessions of Congress.



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