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ABSTRACT

This report concludes a series of interim reports presenting findings from over 35 research projects on compensatory education programs. It completes the analysis of the study areas of funds allocation, service delivery, student development, and program administration, and provides both follow-up findings and additional information on Title I operations. Chapter I addresses the feasibility and effects of changing the current formula of within-district allocation procedures, one comparison being between poverty-based and achievement-based allocation strategies. Chapter II compares the training and experience of regular and compensatory education teachers and examines the degree to which Title I funds are used for training purposes. In Chapter III, test data are examined in order to determine whether the apparent effectiveness of the compensatory education instruction remains constant over a full year. A new area of report findings, the role of the Parent Advisory Councils, is explored in Chapter IV. Regulations governing the councils, the ways in which States and districts implement these regulations, and the actual operation of the councils as seen by parent participants are analyzed. In the final chapter, the local administration of the Title I, especially district and school planning and evaluation activities, is described. Statistical tables are included throughout the report. (Author/KR)

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COMPENSATORY EDUCATION STUDY

Final Report to Congress
from the National Institute of Education

September 1978

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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The National Institute of Education
U.S. Department of Health, Education, and Welfare
Washington, D.C. 20208

PREFACE

This volume presents the final report of the National Institute of Education (NIE) Compensatory Education Study, requested by Congress in the 1974 Elementary and Secondary Education Amendments. It concludes a series of documents, termed "interim reports," presenting information from the over 35 research projects making up the whole Compensatory Education Study.

This report reflects the efforts of the many individual staff members and contractors who have worked together over the last 4 years to design and implement the NIE Compensatory Education Study. The leadership of Paul Hill and Iris Rotberg, initial Study Director and Associate Director, is especially acknowledged. In the present volume, special credit goes to Ann Milne for authoring Chapter I on the third year of the demonstration studies; to Peirce Hammond for authoring Chapters II and III on teacher training and the Instructional Dimensions Study follow-up; to Gil Hoffman for Chapter IV on Parent Advisory Councils; and to Margot Nyitray for writing Chapter V on local administration of Title I. Special recognition is given Richard Moss for his contributions to editing and clarifying each of the chapters. Thanks is also due to NIE support staff, including Janet Taylor, Joyce Harris, Karen McKee, Evangeline Ring, Catherine Blacknall, and Odean White.

The research presented in this volume is based on studies conducted by Abt Associates, Inc., National Opinion Research Center, Policy Research Corporation, Kirschner Associates, Education Turnkey Systems, the Syracuse Research Corporation, Booz, Allen & Hamilton, and the Lawyers' Committee for Civil Rights Under Law.

The final phases of the research studies, interpretation of findings, and development of this report were overseen by Joy Frechtling, NIE Compensatory Education Study Director.

Finally, the advice and comments of many friends inside and outside of NIE-- Michael Timpane, Todd Endo, Berlin Kelly, George Mayeske, and Velma James--is gratefully acknowledged.

Joy Frechtling, Director
Compensatory Education Study

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INTRODUCTION

The Education Amendments of 1974 (Public Law 93-380) instructed the National Institute of Education (NIE) to conduct a study of the purposes and effectiveness of compensatory education programs.

Specifically, Section 821 instructed the Institute to conduct a study incorporating:

- An examination of the fundamental purposes and effectiveness of compensatory education programs
- An analysis of the ways of identifying children in greatest need of compensatory education
- An exploration of alternative ways of meeting these children's needs, including the use of written educational plans
- An examination of the feasibility, costs, and consequences of alternative ways of distributing Federal compensatory education funds
- Not more than 20 experimental programs for the purpose of examining the issues above

The relevant sections of the 1974 statute authorizing the study are reproduced in Appendix A.

Section 821 also directed the presidentially appointed National Advisory Council on the Education of Disadvantaged Children to advise the Institute on the design and execution of the study.

Finally, the law, as amended by Public Law 94-482, required NIE to submit interim reports to the President and Congress on December 31, 1976, and on September 30, 1977, and to submit a final report in September 1978.

In response to this request, NIE implemented a study of compensatory education programs, focusing on Title I of the Elementary and Secondary Education Act of 1965. In accordance with the law as stated above, NIE has submitted to Congress two sets of interim reports. This document is the Institute's final report on study findings.

The 1977 interim reports presented detailed findings from four major study areas:

- Funds allocation
- Service delivery
- Student development
- Program administration

The six reports covered a wide range of questions, with special attention paid to policy issues raised during the 1974 legislative debates or expected to be raised in the 1978 debates. This, the final volume, completes the NIE analyses, providing both follow-up findings and additional information on Title I operations.

FUNDS ALLOCATION

In 1977, NIE reported on the funds allocation process from two perspectives. First, the current formula was examined and its effects were described (NIE, 1977e). Specifically, with respect to the current formula, NIE reported that:

- The Title I formula accomplishes the purposes intended by the framers of the statute. As the number of formula-eligible children in a county increases, the average Title I allocation rises.
- Title I has greater distributive effects than either state aid programs or other Federal aid examined as a whole.
- The largest proportion of Title I money is directed to the two areas with the most formula-eligible children: large central cities and rural sections outside metropolitan areas.
- Due to their very high concentrations of low-income children, Southern counties receive more money for each school-age child than do counties in other regions.
- Census, Aid to Families with Dependent Children, and school lunch information are the sources most commonly used to determine school eligibility, although 10 different sources of information were cited by districts.
- As a result of this use of multiple indices, 68% of schools are deemed eligible; 94% of these eligible schools are served, since targeting is practically a nonexistent step.
- District criteria for distributing Title I resources among target schools vary widely.

Second, studies examined the feasibility and effects of changing the current formula from allocation by poverty to allocation by achievement (NIE, 1977f). Analyses of the feasibility of using test data to allocate funds revealed that:

- At present, no adequate source or combination of sources of achievement data exists on which to base allocation of funds to the 50 States or within States to school districts.
- A program that could provide such estimates at the state level (leaving within-state allocations to be based on the States' own test data) would cost approximately \$7.2 million over a 3-year period. A national testing system to obtain achievement data for funds allocation directly to each school district in the country would cost at least \$53 million over a 3-year period.
- A change from poverty to achievement eligibility criteria appears likely to have a significant effect on Title I funding for many States, but would not affect the relative amount of money received by each of the four regions.

Demonstration projects in 13 school districts examined the effects of changes in within-district allocation procedures on compensatory education services offered and on the characteristics of students who received them (NIE, 1976c). These projects showed that:

- Districts that changed allocation procedures increased the number of schools served.
- The number of children served also increased, with the largest increase being in the number of low-achieving children.
- There were also changes in the characteristics of students served; the proportion of low-achieving children increased, the proportion of poor children decreased, and the proportion of minority children decreased slightly.

- In order to serve additional children, the districts reduced the instructional time provided for each child. They did not, however, make fundamental changes in their compensatory education strategies; the nature of Title I services--the size of the instructional group and the qualifications of the teaching staff--did not change.

Chapter I of this volume presents new data on the 3d year of the demonstration studies and explores whether the changes observed from the first to the second year remained stable across the 2-year study period. In addition, using data simulations, the effects on school and student eligibility of several poverty- and achievement-based allocation strategies are compared.

SERVICE DELIVERY

The 1977 report on service delivery (NIE, 1977b) provided a detailed description of the use of Title I funds with regard to the services they purchase and the students who are served. The findings showed that:

- All local educational agencies (LEAs) use compensatory education funds to provide instructional services, while about half use them to provide some auxiliary noninstructional services.
- Compensatory instructional services clearly emphasize the basic skills of reading and mathematics.
- Compensatory instruction appears to be of high quality, as measured by class size, time for instruction, teacher qualifications, and use of sound instructional techniques.

- Compensatory instruction is typically delivered in a pullout situation where students are taken out of their regular classroom for their supplemental programs.
- Services are generally targeted on public elementary school students, with 5.9 million participants coming from grades K-8. Title I serves 121,513 students at the secondary school level and 16,218 students in private schools.

The present volume presents expanded data on compensatory education teachers and their training. Chapter II compares the training and experience of regular and compensatory education teachers and examines the degree to which Title I funds are used for training purposes.

EFFECTS OF SERVICES ON STUDENTS

In 1977, NIE presented the results of its major study of the effects of services on students, the Instructional Dimensions Study (IDS) (NIE, 1977d). This study examined the achievement test scores of 1st- and 3d-grade compensatory education students receiving special instruction in the basic skills. Analyses showed that:

- In general, the results were encouraging about the effectiveness of compensatory education instructional programs. First graders made average gains of 12 months or 12 percentile points in reading and 11 months or 14 percentile points in mathematics. Third graders made average gains of 7 months or 9 percentile points in reading and 12 months or 17 percentile points in mathematics.
- When the achievement gains of compensatory education students were examined according to the setting in which they received

compensatory instruction, pullout or mainstream,¹ the findings favored the mainstream setting in three out of four cases, with no difference in the fourth case.²

- Students in individualized programs made substantial gains in achievement. In general, however, their gains were not higher than those of students in less individualized classrooms.

In Chapter III, the results of follow-up testing of a subsample of IDS participants are presented. Fall test data are examined to determine whether the apparent effectiveness of the compensatory education instruction remains constant over a full year. Of special interest is whether "summer drop-off" (loss of school year gains) is found for this special sample of students.

ADMINISTRATION

In 1977, NIE presented its report on the administration of Title I (NIE, 1977a). This report focused on the legal framework of the Title I program (Title I statute, official rules established by the Office of Education (OE), and formal letters of advice to States and LEAs) and the administrative actions of the Federal and state governments. Analyses showed:

- There are strengths and weaknesses in the legal framework. The funds allocation requirements were judged to be necessary to guarantee that Title I funds are used for the special purposes

¹Pullout instruction is defined as supplemental instruction that is delivered to students outside the regular classroom. Mainstream instruction is supplemental instruction within the regular classroom.

²These findings differ from those originally published (NIE, 1977d) and replace those reported earlier.

Congress intended. The program development requirements, however, although a reasonable effort to establish good planning and review procedures for local programs, were not found to be necessary.

- The legal framework overall was judged to be both internally consistent and consistent with the Title I statute. However, the language of the framework is not clear enough to meet the needs of the state and local officials who implement the program.
- Analyses of the Federal role in monitoring and enforcing the legal framework indicate that OE does not apply consistent standards in identifying and correcting certain violations. Specifically, internal conflicts about the Federal role have led to less monitoring and enforcement of the provisions regarding the requirement that Title I funds supplement the regular educational experiences of participating children.
- States are unclear about their administrative responsibilities, and as a result have adopted widely different policies.
- Analyses of state-funded compensatory education programs indicate that they usually complement Title I either by extending compensatory education services to more children or by providing additional services to children in Title I programs.

The present volume presents findings in two areas not discussed in previous NIE reports. First, based on data gathered from both the administrative and services studies, the role of the Parent Advisory Councils is explored in Chapter IV. The regulations governing the councils, the ways in which States and districts implement these regulations, and the actual operation of the councils as seen by parent participants are analyzed.

Second, in Chapter V the local administration of the Title I program, especially district and school planning and evaluation activities, is described. Special attention is given to comparing general district administrative procedures from a nationally representative set of districts with those reported for highly effective districts in the Instructional Dimensions Study.

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CHAPTER I. DEMONSTRATION STUDIES

SUMMARY

This chapter is based on the results of the second implementation year in 13 demonstration school districts that have used unique funds allocation procedures in their Title I programs. The focus is on the extent to which the districts were able to maintain or replicate the changes seen when the new procedures were first implemented (see Demonstration Studies of Funds Allocation Within Districts, Washington, D.C.: National Institute of Education, September 1977). The chapter covers five areas, four of which parallel and update the earlier report: (1) changes in number of schools and students served by Title I; (2) changes in the characteristics of students served by Title I; (3) changes in the number of disadvantaged students covered by Title I services; (4) simulations of the effects of achievement-based allocation procedures not actually attempted by the districts (not covered in the earlier report); and (5) changes in the services received by Title I students.

Number of Schools and Students Served

Second-year analyses show that the demonstration districts maintained in 1977-78 the substantial increase over baseline in the numbers of elementary schools and students served by Title I. As in 1976-77, they supported this increase in two ways. First, they increased Title I expenditures at the elementary level with monies derived from increased Title I allocation (increases not created by participation in the demonstration), by continuing to use up carryover funds at a greater rate than before the demonstration and by reducing noninstructional or nonelementary instructional components. Second, they supplemented the Title I teaching staff with staff paid for by other sources, and they restructured the elementary program by slightly increasing number of class periods or pupil/staff ratios.

Characteristics of Students Served

The relative proportions of low-achieving, poor, and minority students in the Title I population generally remained stable over the 2 implementation years. The slight decrease in poor children in the Title I-served group in 1976-77 was again found in 1977-78. This is consistent with continued nonuse of poverty criteria for school selection. The proportion of minority children in the Title I population was also slightly lower and variable, replicating the changes found in 1976-77. However, while there was an increase in the proportions of low achievers in the Title I population in 1976-77, the findings for 1977-78 showed smaller changes overall and more variability among districts.

Coverage of Disadvantaged Students

Because the demonstration districts generally increased the numbers of children served by Title I under implementation, the absolute numbers of low-achieving, poor, and minority students served were higher in each implementation year than in baseline. There were slight decreases in coverage of these disadvantaged students in 1977-78, generally in districts that served fewer students overall in 1977-78 than in 1976-77.

Simulations of Alternative Allocation Procedures

Since no district selected an exact parallel to the usual poverty-based procedure, variations on this alternative were simulated using district-supplied school-level poverty and achievement data. The simulations examined the effects of serving all schools with proportions of low achievers above the district average proportion, as well as the effects of retaining poverty measures for school eligibility but targeting some subset of poverty-eligible schools for service based on achievement vs poverty rankings.

The simulations show that serving all schools with above-average proportions of low achievers would generally produce larger pools of low-achieving students

available for services than would the parallel poverty-based procedures. In more than half of these districts, the achievement-based procedure would also select larger pools of poor students.

This advantage in large part accrues from the ability of the achievement-based procedure to select more schools than the parallel procedure based on poverty. However, even if the numbers of selected schools are held constant for each method, achievement-based eligibility often provides slightly larger pools of low achievers, while poverty-based eligibility always selects larger pools of poor students.

Under the second alternative simulated, in which school eligibility was determined by poverty and subsets of schools were then targeted by either poverty or achievement ranks, there was little difference in the sizes of the low-achieving or poor student pools. This was particularly true as the number of targeted schools decreased; if very few schools are selected, the schools are the most disadvantaged by either criterion.

Services Received by Title I Students

Finally, the actual allocation procedures selected by the 13 districts were studied for their effects on the quantity and quality of Title I services provided to each child. In 1976-77, the children in these districts spent on the average somewhat less time in compensatory instruction than during the baseline year. However, some of that lost time was recouped in 1977-78. In general, the quality of the compensatory instruction remained stable across all 3 years, with no change in the proportion of that time spent with instructional specialists, and only slight losses in 1977-78 in the proportion of that time spent in small instructional groups. In all 3 years, Title I children enjoyed a substantial advantage over non-Title I children in their total language arts experience (compensatory plus regular) in terms of both intensity and quality.

Generally, the demonstration districts were able to change to achievement-based allocation without doing harm either to the general types of students

originally served or to the nature of the Title I services. Proportions of poor students in the served population decreased only slightly, while proportions of low achievers increased to some extent. Moreover, program expansion to more students meant services to greater absolute numbers of poor, low-achieving, and minority students. Finally, the districts maintained this expansion with no substantial change in the intensity or quality of the services received by Title I students.

However, two things should be kept in mind in interpreting these generally positive results. First, districts could have expanded services to an equal extent in the original poverty-eligible schools, as numbers of disadvantaged students enrolled in those schools were previously not served. Second, the districts' ability to maintain the integrity of expanded programs over a longer time period is problematic. While districts may have become more cost efficient in some ways, much of the program expansion depended on increased allocations, which may not always occur, and an increased rate of carryover usage, which is a self-limiting phenomenon.

INTRODUCTION

Demonstration projects were conducted in 13 school districts to determine the practical consequences of the choice between poverty or achievement measures for allocating Title I funds to schools. The districts received special approval from the Commissioner of Education to use unique funds allocation procedures. This approval, and the projects themselves, were based on specific provisions of the Congressional mandate for NIE's study.¹ The mandate permitted NIE to establish working models of change in the Title I funds allocation process which Congress considered during deliberations on the Education Amendments of 1974.

¹ Sections 821(a)(5) and 150 of Public Law 93-380, which authorized these studies, are reproduced in Appendix A.

Districts conducting demonstration projects changed from the official poverty-based procedures for allocating their Title I funds, and used a number of alternative criteria and procedures. As the participating districts changed their funds allocation procedures, their progress was monitored by NIE in order to determine how the changes in the funds allocation process affected the actual operation of the Title I program. NIE designed a 3-year study to investigate the effects of the changes. The demonstration districts operated their Title I programs using official allocation procedures in the first year (1975-76) to provide baseline data, and then operated under their new allocation procedures in the next 2 years (1976-77 and 1977-78).

NIE's research had three basic objectives: (1) to document the ways in which the flow of Title I funds to schools and students changed as a result of new funds allocation procedures; (2) to determine the effects of changes in funds allocation on the characteristics of students eligible for Title I services and those actually served; and (3) to determine whether the quality and intensity of services received by Title I students was affected.

This is NIE's final report on the demonstration projects. An earlier report² presented the findings for the first year of implementation contrasted with the baseline year. This report summarizes those changes and focuses on further changes (or lack of change) in the final year of implementation.

This introductory section briefly describes the actual changes in funds allocation procedures chosen by the 13 districts (for further details see the earlier report³). Descriptions of changed procedures are accurate for both implementation years, since no district altered their general approach between 1976-77 and 1977-78.

²Demonstration Studies of Funds Allocation Within Districts. Washington, D.C.: National Institute of Education, September 1977.

³ibid.

District Selection

To initiate the demonstration projects, NIE invited all States and territories to submit proposals for changes in the Title I funds allocation process from one or two of their districts. States and territories forwarded more than 20 district proposals (the maximum specified by the study statute), and NIE selected 16 on the basis of criteria such as relevance to the questions under consideration, the districts' ability to manage and administer the new procedures, and geographical representation. Consistent with the statute, only proposals that had the support of local Parent Advisory Councils were considered. At the end of the planning year (1975-76), three districts withdrew from the study. Thus 13 districts went on to implement the allocation changes in 1976-77 and 1977-78.

Districts were offered the opportunity to make two types of changes simultaneously. First, they could use new methods, including achievement criteria, to determine eligibility for Title I resources. Second, they could change concentration, i.e., increase or decrease the number of schools and/or students served by Title I. While NIE would support some administrative costs of conducting the demonstration in the districts, it was made clear that the size of the Title I grant to the district--the program resources available--would not be increased by virtue of the districts' participation.

The districts participating in the demonstration study are not a statistically random sample of the nation's local educational agencies (LEAs). However, the demographic characteristics of the 13 districts are similar to the range of district characteristics described by NIE's National Survey of Compensatory Education.⁴

⁴Geographically, the demonstration districts are widely distributed and cover a wide range of sizes, with the exception of very small districts (enrollment below 4,359). They are generally similar to the 100 national survey districts in terms of demographic variables including family structure, income levels, educational attainment, occupational structure, ethnic/language composition, mobility, and age distribution. The Title I programs offered by the participating districts before the demonstration began were also similar to the average of the 100 national survey districts in that they tended to focus their Title I funds on basic skills, especially language arts and reading.

It is important to emphasize that these districts volunteered for the demonstration study; they are not representative of all LEAs. NIE does not have an estimate of how many other districts would have been interested in implementing the offered alternatives. Hence, caution should be exercised in generalizing from the results of the demonstration study.

Eligibility Changes

Under standard Title I regulations governing school eligibility, only attendance areas with a number or proportion of poor children above the district average are eligible for Title I services. Within the schools, students are deemed eligible for services on the basis of educational need, regardless of family income. All districts participating in the NIE demonstration study changed their eligibility criteria for schools or students or both.

School Eligibility.--Throughout this report, the districts are grouped in general accordance with the type of school eligibility option selected. Four patterns of change emerged:

- Direct allocation. Six districts elected to serve all low-achieving students (variously defined by different districts) regardless of the school they attended. Therefore the school was bypassed in determining eligibility, and all schools within a given grade span were eligible for, and received, services. These districts were: Adams County #12, Colorado; Harrison County, West Virginia; Mesa, Arizona; Newport, Rhode Island; Racine, Wisconsin; and Santa Fe, New Mexico.
- Ranking schools by achievement. Two districts ranked schools solely on the basis of achievement, with all schools below a specified cutoff level considered eligible for Title I services. As a result, some schools that were served in the baseline year did not receive any services during implementation, while other schools

received services for the first time during implementation. These districts were: Charlotte, North Carolina (all elementary schools with 35% or more of the students performing below the 30th percentile); and Winston-Salem, North Carolina (all elementary schools with 40% or more of the students performing below the 35th percentile).

- Ranking schools primarily by poverty. Three districts ranked schools by achievement and/or poverty criteria. These districts were: Boston, Massachusetts (all schools qualifying by poverty were served; nonqualifying schools were ranked by achievement, and several were served based on their achievement rank); Houston, Texas (schools were ranked on achievement and a number were served on that basis, but schools previously qualifying by poverty were served); and Berkeley County, West Virginia (schools were ranked exclusively by poverty).
- Making primarily intraschool changes. Two districts attempted to serve all of their students in half of their schools. These districts were: Alum Rock, California, and Yonkers, New York. (School eligibility in Yonkers continued to be based on poverty; Alum Rock served all schools in the district.)

Student Eligibility.--During the baseline year, the demonstration districts, like other districts in the country, used achievement criteria to judge students as eligible to receive Title I services and generally gave priority to the lowest achieving children. In the 2 implementation years, 10 of the districts continued to follow the same general procedure, and 3 districts used new student eligibility procedures. In Alum Rock and Yonkers, all or nearly all students in certain Title I schools, rather than only the lowest achieving students, were eligible to receive services. Newport redefined "educational need" to include an estimate of the student's learning potential; students with the highest discrepancy between potential and achievement (and with achievement below the 50th percentile) received services first.

Concentration Changes

The basic regulation governing the distribution of Title I resources states that districts should concentrate their funds to ensure that a project is of "sufficient size, scope, and quality" to meet the needs of the children to be served. All of the demonstration districts served more schools in the second and third years, and most of them served more students.

In some districts, the increase in the number of schools served was matched by an increase in the number of students receiving services, so that approximately the same number of students per school were served. Unless funding was increased, this should have lowered per-pupil expenditures. Other districts serving more schools attempted to maintain the per-pupil expenditure level by serving fewer pupils in each school.

Research Design

To determine the effects of the allocation changes in the demonstration districts, a sample of schools and students was selected in each district. Sample schools included four general types: (1) those receiving Title I services in all 3 years; (2) those receiving services during both implementation years, but not during the baseline year; (3) those receiving services only during the baseline year; and (4) those never receiving services.

Within these schools, all students in grades 3 and 4 were used for the characteristics data, and two students (one Title I and one non-Title I, where available) in each 3d- and 4th-grade class were used for data on services; these data were collected from the teachers. Other information on general district and program characteristics were collected from district administrators and school principals.

The major question addressed by the analysis was whether the characteristics of Title I students or the services received by them changed over the 3 years of the study. Direct comparison of Title I students in each district across years was

supplemented by a comparison on non-Title I students over the same years. This second contrast was used to determine whether the differences observed among the Title I children over time were due to the demonstration, or whether they were changes that occurred for the district as a whole.⁵

The remainder of this report is divided into five sections. The first section discusses the actual concentration changes--changes in number of schools and students served, and changes in expenditures. The second describes the changes in characteristics of students served by Title I. The third discusses the resulting changes in the districts' coverage of their disadvantaged students. The fourth section, using district-supplied school-level poverty and achievement data, simulates the effects of alternate allocation procedures other than those actually implemented by the districts.⁶ The last section covers the changes in the quantity and quality of services received by Title I children in the demonstration districts.

EXPANSION OF PROGRAMS IN THE DEMONSTRATION DISTRICTS

During implementation, the demonstration districts generally elected to serve more schools and more students than during the baseline year. This section discusses the specific changes in numbers of schools and students served, and the changes in Title I expenditures. The focus is primarily on the elementary school program, since most of the districts changed their procedures at that level only.

⁵In their own reports on the demonstration study, Abt Associates, Inc., uses a more conservative test of interaction. Also, differences between NIE and Abt reports in table figures are due to different rounding conventions. For further detail on the research design, sampling strategy, and method of analysis, see Abt Associates, Inc., Technical Reports, especially J. Vanecko, F. Archambault, and N. Ames, Research on Demonstration ESEA Title I Compensatory Education Projects: Implementation Designs and Research Plan, Volumes I and II, October 1977.

⁶While the other sections update the earlier (1977) report by presenting results of the final implementation year, this section presents data on a topic not covered previously.

Expansion of Schools and Students

Table 1 presents percent changes in the actual number of public elementary schools served by Title I across years; for example, Adams County served three schools during baseline and expanded to 16 during implementation, for an increase of 433%.⁷ In each implementation year, all but one district served more schools than during baseline. This was a natural concomitant of the allocation criterion in the direct allocation districts, and to some extent in the achievement-ranking districts; it was a matter of choice in the others. The changes between the 2 implementation years are minor and are not demonstration related, with the exception of Charlotte. When Charlotte first ranked schools by their achievement criterion (a school was deemed eligible if 35% of students were performing below the 30th percentile), 57 schools were eligible for 1976-77, as opposed to 49 schools eligible by poverty in 1975-76. Reranking by the same criterion for 1977-78 resulted in only 37 eligible schools. Had the demonstration extended to 1978-79, the same achievement criterion would have qualified only 18 schools. It is not clear whether this diminishing eligibility of schools was an artifact of the particular achievement criterion used⁸ or whether this is in fact an example of Title I services being effective enough to make a school ineligible by educational need.

Table 2 shows the comparable percent changes in number of elementary students served by Title I across years.⁹ Overall, the districts increased the numbers served by about 71% over baseline in each implementation year. However,

⁷ Table B-1 in Appendix B shows, for each year, the number of elementary schools in the district, the number served by Title I, and the percentage served by Title I.

⁸ This is discussed further in "Simulated Eligibility and Targeting Options," which presents simulated results of other achievement-based school selection procedures.

⁹ Numbers of elementary students served in each year are presented in Table B-2, Appendix B.

TABLE 1

PROPORTIONAL CHANGES IN THE NUMBER OF PUBLIC ELEMENTARY
SCHOOLS SERVED BY TITLE I

	Percent Change 1976-77 vs 1975-76 (2-1)	Percent Change 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	433	433	0
Harrison County	20	12	-8*
Mesa	79	86	7*
Newport	200	200	0
Racine	106	106	0
Santa Fe	45	45	0
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	16	-24	-40**
Winston-Salem	85	77	-8*
Districts that rank schools primarily by poverty			
Berkeley County	10	10	0
Boston	14	9	-5*
Houston	7	6	-1*
Districts making primarily intra-school changes			
Alum Rock	100	100	0
Yonkers	0	11	11*
Average	86	82	-4

*School openings or closings, not related to demonstration.

**Change due to demonstration-related reranking.

TABLE 2

PROPORTIONAL CHANGES IN THE NUMBER OF PUBLIC ELEMENTARY
STUDENTS SERVED BY TITLE I

	Percent Change 1976-77 vs 1975-76 (2-1)	Percent Change 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	240	234	-6
Harrison County	29	25	-4
Mesa	29	52	23
Newport	154	146	-8
Racine	104	94	-10
Santa Fe	56	64	8
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	-8	-6	2
Winston-Salem	83	83	0
Districts that rank schools primarily by poverty			
Berkeley County	76	68	-8
Boston	4	-7	-11
Houston	-9	5	14
Districts making primarily intra-school changes			
Alum Rock	141	133	-8
Yonkers	20	27	7
Average	71	71	0

the changes across districts within a single implementation year are quite variable. Generally, the direct allocation districts showed larger increases, due in part to the proportionally greater number of schools to be served. The changes in number of students served between the 2 implementation years were generally stable, with only four districts showing changes of 10% or more.

Support of Program Expansion

Final cost and expenditure data are not yet available for school year 1977-78, the second implementation year. However, preliminary estimates suggest that these districts sustained program delivery to expanded numbers of students in this year through the same mechanisms used in the first implementation year. The details of those changes in costs and expenditures were reported to Congress in February 1978¹⁰ and are summarized here.

Program expansion at the elementary school level in the first implementation year was supported through five general approaches. The first three involve actual increases in Title I funds per se available for elementary programs. These were:

- Increases in Title I allocations to districts. While the demonstration itself did not create new funding, 11 of the 13 Title I districts had larger allocations in 1976-77 than in 1975-76 (a result of changes in poverty counts, redistribution, and/or the increased appropriation). The average increase in these districts in 1976-77 was 5%, the bulk of which was spent on the elementary programs. In 1977-78, Title I allocations in these districts were 18% higher than in the baseline year, extra money that again was available for the elementary programs.

¹⁰See J. S. Huseby, R. Ames, N. Ames, and J. J. Vanecko, Working Paper: Analysis of Resources Used to Increase Title I Elementary Instructional Services Under the Title I Funds Allocation Demonstration, Abt Associates, Inc., February 17, 1978.

- Changes in carryover usage. In 1976-77, these districts generally increased the rate at which they spent funds carried over from the previous year. Thus, the rate of depletion of carryover was greater in 1976-77 than in the baseline year. However, districts generally planned to have sufficient carryover into 1977-78 that the original program expansion would not be jeopardized in the second implementation year.
- Organizational changes within the Title I program. Many districts made additional funds available to the elementary instructional program by decreasing or eliminating noninstructional elements and/or nonelementary instructional services (preschool or secondary). These districts continued the practice into the second implementation year.

These three factors increased the number of Title I dollars available to the elementary instructional program, and together they accounted for approximately half of the increase in elementary instructional services. While it is difficult to ascribe exact dollar figures, two other factors seem to account for the balance of the increase:

- Increased use of non-Title I resources. Use of resources (teachers, labs, equipment, etc.) provided by other Federal, state, or local programs contributed directly to Title I elementary expansion in only three districts in 1976-77 and four in 1977-78. However, the availability of these other program resources had an indirect effect in other districts. For example, the availability of ESAA funds at the secondary level in Charlotte allowed the district to confine its Title I program to the elementary level.
- Changes in program delivery characteristics. Some districts utilized staff more fully by increasing the proportion of teachers' direct instructional time or by increasing the number of class

periods or the pupil/staff ratio. Although these changes were too small to materially affect the quality of services received by individual children, when multiplied across a district they apparently enabled some districts to serve substantially more children.

Again, preliminary figures from 1977-78 seem to show these same factors in operation in the second implementation year. However, it is not known whether districts could continue to support program expansion indefinitely through these means. For example, it is highly probable that carryover into school year 1978-79 is well below carryover into the 2 implementation years.¹¹

CHANGES IN THE CHARACTERISTICS OF TITLE I STUDENTS

Changes in the eligibility criteria and in the number of schools and students served could be expected to alter the characteristics of the served students. Therefore, NIE examined the changes in the proportions of students served by Title I who were low achieving, poor, or from minority groups.¹² Changes among the non-Title I students were measured as well, to assure that changes among the Title I students were related to the demonstration and were not changes occurring in the district as a whole. To do so, information on student characteristics was collected from the homeroom teachers for every student in grades 3 and 4 in the sample schools. The characteristics were defined as follows:

¹¹Final cost figures for 1977-78, including carryover into 1978-79, will be available from Abt Associates, Inc., in December 1978.

¹²Essentially, this analysis deals with changes within the Title I-served population. The proportions are thus a ratio of the number of children with a given disadvantage who are served by Title I to all children served by Title I.

- Percent low achieving: Proportion of Title I students whose reading achievement was 1 year or more below grade level.¹³
- Percent poor: Proportion of Title I students who received free or reduced-price lunch.
- Percent minority: Proportion of Title I students who were black, Spanish American, Asian or Pacific Islander, and American Indian or Alaskan Native.

In September 1977, NIE reported on the changes in characteristics in the first implementation year (1976-77) measured against the baseline year.¹⁴ Generally, slight decreases in the proportions of poor children, slight but variable decreases in proportions of minority children, and slight increases in proportions of low achievers in the Title I population were found. These shifts appeared reasonable in light of the eligibility and concentration changes made by districts. Specifically, as districts shifted from poverty criteria to achievement criteria for school selection, and as they served more schools, they moved to a cluster of schools in which fewer poor children were enrolled. Low achievers, on the other hand, were more evenly distributed among the districts' schools.¹⁵ Additionally, where the proportions of low achievers increased, it was often also true that fewer students per school were served during the demonstration than previously. This may have enhanced these districts' ability to select primarily low-achieving students for services.

¹³This standard definition was imposed for purposes of comparability across districts. The actual cutoffs used by these districts to select children for services range from the 18th to the 50th percentile.

¹⁴Demonstration Studies of Funds Allocation Within Districts. Washington, D.C.: National Institute of Education, September 1977.

¹⁵See Table B-6, Appendix B.

The changes in characteristics during implementation are presented below. The major focus is on the districts' ability to maintain or replicate observed first-year changes in the second implementation year.¹⁶

Poor Children

Table 3 presents the changes in proportion of Title I students who received free or reduced-price lunch.¹⁷ In each implementation year, six districts show significant decreases from baseline in the proportion of poor among the served population; five of the six show decreases in both years. The figures in column 3 show in addition that there was generally no significant change between the 2 implementation years. Only one district has made a significant decrease across the two implementation years. Thus, the eligibility changes made by the districts resulted in lower proportions of poor students in the Title I population in both implementation years.

Minority Children

Table 4¹⁸ demonstrates that the proportion of minority students in the Title I group is again variable in the second implementation year, with decreases primarily in the same districts as during the first implementation year. As seen in column 3, only one district has made a significant change across the 2 implementation years in the proportion of minority students served. Thus, changes in minority proportions, like changes in poverty proportions, are very consistent across the 2 implementation years.

¹⁶This contrast, done by subtracting the values from 1976-77 from those for 1977-78 (year 3 - year 2), is identical to subtracting baseline from each implementation year and then subtracting the first difference from the second: $(3 - 2) = (3 - 1) - (2 - 1)$. Thus it is a measure of change in change.

¹⁷Proportions from which the change figures are derived are presented in Table B-3, Appendix B.

¹⁸Proportions from which change figures were derived are shown in Table B-4, Appendix B.

TABLE 3
 CHANGES IN PERCENT OF TITLE I STUDENTS
 WHO RECEIVE FREE OR REDUCED-PRICE LUNCHES

	Change in Percent 1976-77 vs. 1975-76 (2-1)	Change in Percent 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	-3	-5	-2
Harrison County	-7*	-9*	-2
Mesa	-13*	-11*	2
Newport	-15	-20*	-5
Racine	-2	-7	-5
Santa Fe	-11*	-16*	-5
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	-12*	-10*	2
Winston-Salem	7*	1	-6*
Districts that rank schools primarily by poverty			
Berkeley County	0	4	4
Boston	1	5**	4**
Houston	2	3	1
Districts making primarily intraschool changes			
Alum Rock	-11*	-12*	-1
Yonkers	-13*	-2	11**
Average	-6	-6	0

*Significant at $P \leq .05$.

**Significant at $P \leq .05$, but accompanied by change in the non-Title I group.

TABLE 4

CHANGES IN PERCENT OF TITLE I STUDENTS WHO ARE MINORITY GROUP MEMBERS

	Change in Percent 1976-77 vs 1975-76 (2-1)	Change in Percent 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	7	8	1
Harrison County	-2	-2	0
Mesa	-5	-1	4
Newport	3	1	-2
Racine	0	1	1
Santa Fe	-4	-7	-3
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	-7*	-7*	0
Winston-Salem	8*	5*	-3
Districts that rank schools primarily by poverty			
Berkeley County	-3	-7*	-4*
Boston	0	-1	-1
Houston	-1	-1	0
Districts making primarily intra-school changes			
Alum Rock	-9**	-8**	1
Yonkers	-19*	-19*	0
Average	-3	-3	0

*Significant at P \leq .05.

**Significant at P \leq .05, but accompanied by change in the non-Title I group.

Low-Achieving Children

As seen in the final column of Table 5,¹⁹ there have been a number of significant changes between the 2 implementation years in proportions of low achievers in the Title I-served group. The general trend is toward a smaller proportion of such low achievers in 1977-78 than in 1976-77, although still slightly above baseline. However, there is wide variability across districts in the observed changes. Two of the direct allocation districts have made significant increases in low achievers over the first implementation year (one overcoming an initial decrease), and one district has maintained its initial significant increase. However, three districts that attained significant increases in the first implementation year were unable to maintain them in the second year, and one district shows a significant new decrease.

In general, the second year of implementation demonstrates that the percent of low achievers in the Title I population is more variable and less predictable from school selection criteria than are the proportions of poor or minority students.²⁰ It is possible that this greater variability is attributable to the operation of educational need at two levels in these districts--for school selection and for student selection. The percent of low achievers in the Title I population is a direct result of both of these processes. In contrast, the percent of poor or of minority students should depend only on school selection, since individual children are not selected for services based on family income or minority status. Since the districts did not alter the schools served in the second implementation year, but continued to serve a cluster of schools that generally had proportionally fewer poor enrolled than did the baseline schools,²¹ it is logical that the proportion of Title I students

¹⁹Proportions from which change figures were derived are given in Table B-5, Appendix B.

²⁰Correlations between the two change measures (each implementation year minus baseline) for each characteristic are as follows: poverty, $r_{\Delta} = .80$; minority, $r_{\Delta} = .95$; low achievers, $r_{\Delta} = .72$.

²¹See Table B-6, Appendix B.

TABLE 5
 CHANGES IN PERCENT OF TITLE I STUDENTS
 WHO READ 1 YEAR OR MORE BELOW GRADE LEVEL

	Change in Percent 1976-77 vs. 1975-76 (2-1)	Change in Percent 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	-9	8	17*
Harrison County	1	-10**	-11*
Mesa	18*	22*	4
Newport	13	23*	10*
Racine	-2	-13*	-11*
Santa Fe	8*	-1	-9**
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	-4**	-5*	-1
Winston-Salem	16*	14*	-2
Districts that rank schools primarily by poverty			
Berkeley County	-12**	-14*	-2
Boston	-1	0	1
Houston	0	-1	-1
Districts making primarily intra-school changes			
Alum Rock	5*	0	-5*
Yonkers	11*	1	-10**
Average	4	2	-2

*Significant at $P \leq .05$.

**Significant at $p \leq .05$, but accompanied by change in the non-Title I group.

who are poor would remain both consistent and lower in the second implementation year. The same logic would explain the relative stability in the proportion of minority students, since individual children are selected because of educational need, not minority status.

COVERAGE OF THE DISADVANTAGED

The previous discussion dealt with changes in the characteristics of the children served by Title I--changes in the percent of those children within the Title I-served population who are low achievers, poor, or minority. The present discussion deals with changes in the districts' coverage of their disadvantaged--changes in the percent of the district's low-achieving, poor, or minority students who receive Title I services.²²

A district's ability to increase the coverage of its disadvantaged students depends on three factors: the number of such students available for services, the number of students actually served, and the district's ability to target only the disadvantaged.

As noted above in "Expansion of Programs in the Demonstration Districts," under the demonstration all districts expanded to more schools, which greatly increased the proportion of the disadvantaged who were in Title I schools and therefore available for services (see Tables B-7, B-8, and B-9, Appendix B). With the exception of Charlotte, there was essentially no change in the schools served between the first and second implementation years. Thus, the available pool of eligible students remained high in the second year.

²²The proportions in this analysis are a ratio of the number of children with a given disadvantage served by Title I to the number of all such children in the district. The estimates are appropriately weighted by school sampling ratios and by degree of nonresponse.

The discussion of expansion of programs (see above) also noted that the number of students actually served increased by 71% over baseline in each implementation year. However, there was individual district variation across years, with some districts serving fewer students in the second year and some serving more.

Finally, in the preceding section it was noted that the districts' ability to target low achieving students had diminished slightly in the second implementation year.

Given no change in the pools of eligible students and only slight decreases in targeting accuracy, we would expect coverage of the disadvantaged to be slightly less during the second implementation year primarily in those districts serving fewer students in that year.

Tables 6, 7, and 8 show results of changes in coverage for each type of disadvantage.²³ Overall, coverage of low-achieving, poor, and minority students is slightly lower in the second implementation year than in the first, although still above baseline. The changes in coverage can be compared on a site-by-site basis with changes in numbers of children served in the second implementation year (column 3, Table 2). Generally, the decreases in coverage in any given district are consistent with a decrease between the years in number of students served by the district.

In general, these districts continued to serve substantially larger proportions of their disadvantaged than they did before the demonstration. However, as noted in the previous report, many of the districts could have made equal increases in the numbers of disadvantaged served by simply serving more students, and targeting more efficiently, in the original baseline schools. Comparison of the number of

²³ Percents from which changes were computed are shown in Tables B-10, B-11, and B-12, Appendix B.

TABLE 6

CHANGES IN PERCENT OF DISTRICTS' LOW-ACHIEVING*
CHILDREN COVERED BY TITLE I

	Change in Percent 1976-77 vs 1975-76 (2-1)	Change in Percent 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	22	22	0
Harrison County	16	18	2
Mesa	9	9	0
Newport	24	22	-2
Racine	30	26	-4
Santa Fe	15	26	9
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	10	3	-7
Winston-Salem	12	5	-7
Districts that rank schools primarily by poverty			
Berkeley County	19	4	-15
Boston	12	-1	-13
Houston	-1	5	6
Districts making primarily intra-school changes			
Alum Rock	72	70	-2
Yonkers	-7	-3	4
Average	18	16	-2

*Reading 1 year or more below grade level.

TABLE 7

CHANGES IN PERCENT OF DISTRICTS' POOR*
CHILDREN COVERED BY TITLE I

	Change in Percent 1976-77 vs 1975-76 (2-1)	Change in Percent 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	11	9	-2
Harrison County	6	11	5
Mesa	-8	-4	4
Newport	7	6	-1
Racine	17	12	-5
Santa Fe	6	12	6
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	5	0	-5
Winston-Salem	8	3	-5
Districts that rank schools primarily by poverty			
Berkeley County	16	9	-7
Boston	9	1	-8
Houston	-2	1	3
Districts making primarily intra-school changes			
Alum Rock	67	58	-9
Yonkers	-3	-8	-5
Average	10	8	-2

*Free or reduced-price lunch recipients.

TABLE 8

CHANGES IN PERCENT OF DISTRICTS' MINORITY
CHILDREN COVERED BY TITLE I

	Change in Percent 1976-77 vs 1975-76 (2-1)	Change in Percent 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools			
Adams County #12	13	12	-1
Harrison County	5	-2	-7
Mesa	-6	-3	3
Newport	12	8	-4
Racine	17	16	-1
Santa Fe	6	9	3
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	7	1	-6
Winston-Salem	8	3	-5
Districts that rank schools primarily by poverty			
Berkeley County	13	-8	-21
Boston	8	3	-5
Houston	0	4	4
Districts making primarily intra-school changes			
Alum Rock	67	59	-8
Yonkers	-7	-15	-8
Average	11	7	-4

disadvantaged available in the original pools (column 1 of Tables B-7, B-8, and B-9, Appendix B) with the proportions served in the first year (column 1 of Tables B-10, B-11, and B-12, Appendix B) demonstrates that in many cases there were numbers of the disadvantaged left unserved in those original schools equal to or greater than the increase achieved by expanding to new schools (columns 2 and 3 of Tables B-10, B-11, and B-12, Appendix B).

SIMULATED ELIGIBILITY AND TARGETING OPTIONS

Because the demonstration districts altered the number of schools and students served while changing school eligibility rules, it is often difficult to distinguish the relative effects of the two types of changes. Moreover, while the districts selected an imaginative array of school eligibility options, no district selected one that completely parallels the standard poverty procedure, that is, eligibility of all schools with concentrations of low-achievers greater than the district average. Thus, whether achievement-based eligibility or targeting of schools conveys any advantages over poverty-based procedures has not yet been completely answered.

Therefore the analyses of actual outcomes presented in the two preceding sections have been supplemented with analyses of simulated eligibility and targeting procedures. These simulations examine the results of either poverty or achievement allocation only as they affect the available pools of eligible students--the proportions of the districts' poor or low-achieving students who would be in Title I schools and available for services. No attempt was made to go beyond that step to simulate alternative student selection options. In general, there has been no Congressional interest in altering current student selection rules--selection based on low achievement, with those most in need receiving first priority. Moreover, it is difficult to hypothesize the actual selection rate (number of students) that districts might use, or the degree of accuracy in student targeting they might be able to achieve. Thus, the simulations simply demonstrate the proportions of the districts' low-achieving or poor students who would be available for services--the size of the eligible pool.

The simulations were based on data provided by the districts, using their own definitions of poverty and low achievement.²⁴ These data consisted of both numbers and percents of poor and low-achieving students for each elementary school in the district. The numbers and percents were used both to determine the ranks of the schools and to estimate the cumulative percent of poor or low-achieving students in these schools up to any specified cutoff. Most of the analyses are based on data for the 1976-77 school year; school-level achievement data were not available for 1975-76. Simulations were done on data from 11 districts, since comparable figures were not available for Newport and Boston.

An almost unlimited set of simulations could have been computed, based on the possible combinations of school eligibility and/or targeting by poverty and/or achievement. The following discussion presents only a limited set based on issues which have arisen in Congressional deliberations.

The first set of simulations contrasts school eligibility by poverty versus by achievement, with the schools ranked by percent of poor or low-achieving students. In this set, two targeting constraints are contrasted:

- All schools above the district average percent poor or average percent low achieving are eligible and will be targeted. Thus the number of schools selected by achievement may vary from that selected by poverty.
- The number of eligible schools selected by achievement must equal the number selected by poverty. The limiting number for

²⁴The consistent estimates (free lunch and 1 year below grade level) used to this point were collected only in sample schools; these simulations required school-by-school information for every school. While the estimates of pools of disadvantaged are thus not comparable across districts, the comparisons of the effects of poverty vs achievement ranking are made within districts and are based on the data that the districts themselves would have available to make eligibility or targeting decisions.

each criterion is set at the number of schools served in the baseline year by each district.

The second set of simulations discussed below establishes the eligible schools as those above the district average percent poverty and contrasts achievement with poverty as a method of targeting schools within that eligible set. This is an option discussed in deliberations of H.R. 15 earlier this year.

School Eligibility, Percent Poor vs Percent Low Achieving

All Schools Eligible Above District Average.—As noted earlier, no demonstration district elected to try an allocation model whereby all schools with a greater percent (or number) of low-achieving children than the district average percent (or number) would be eligible.²⁵ Such an option would appear to be the most accurate parallel of the procedures currently allowed under poverty-based eligibility; one could also predict that this procedure would be the most likely to appear in any regulation written to codify achievement-based eligibility. For these reasons, and because of lack of actual experience with this option in the districts, it was selected as the first simulation. Analyses were done for number of low achievers (or poor) per school as well as for percent. Only those based on percent are presented here, as this was the procedure most used by these districts in the baseline year. The results for the analysis using number closely parallel those for the analysis using percent.

Table 9 demonstrates the effects of selecting all schools with a percent of low achievers equal to or higher than the district average, contrasted with selecting all schools with a percent of poor equal to or higher than the district

²⁵Houston's original plans incorporated this option, but administrators found their resources too limited to serve all additional eligible schools. They elected to serve a smaller number of newly eligible schools and to "hold harmless" all schools previously served under poverty.

average.²⁶ Columns 2 and 3 show the number of schools selected by each option. In 9 of 11 cases, achievement eligibility selects more schools than does poverty eligibility, despite the use of different achievement and poverty indicators and cutoffs across these districts. If districts wished to maximize the number of eligible schools, it would be to their advantage to use an achievement rather than a poverty criterion.

Columns 4 and 5 show the percent of the districts' low achievers who are enrolled in the schools selected by each criterion. In all 11 districts, the eligible pool--the percent of the low achievers available for services--is larger under achievement eligibility than under poverty eligibility. While the differences are not always large, in five districts they exceed 10%, and in two of these districts they are at least 20%. Thus, if districts were to serve all of their eligible schools, rather than targeting some fewer number,²⁷ they would maximize the available pool of low achieving students by achievement-based, rather than poverty-based, school eligibility.

Moreover, in 7 of these 11 districts, achievement-based eligibility provides a larger available pool of poor students than does poverty-based eligibility (columns 6 and 7). Thus, in some selected districts the opportunity to serve poor children would be enhanced by a shift from poverty to achievement as the school eligibility criterion.

The immediate question raised by these results is whether all of the advantage accruing to achievement-based eligibility resides in its selection of more schools, and thus larger pools overall. Two further analyses help to clarify this.

²⁶ Districts are grouped according to the allocation option selected for the demonstration. However, it should be remembered that their actual allocation strategy is irrelevant for these analyses.

²⁷ NIE's national survey determined that 81.4% of Title I school districts do in fact target all of their eligible schools. See Evaluating Compensatory Education. Washington, D.C.: National Institute of Education, December 30, 1976.

TABLE 9

SIMULATED EFFECTS OF SELECTING ALL ELEMENTARY SCHOOLS AT OR
ABOVE DISTRICT AVERAGE PERCENT LOW ACHIEVERS OR
DISTRICT AVERAGE PERCENT POOR*

	No. of Schools in District (1)	No. of Schools Selected by:		Percent of District Low Achievers Attending Schools Selected by:		Percent of District Poor Attending Schools Selected by:		
		Achievement (2)	Poverty (3)	Achievement (4)	Poverty (5)	Achievement (6)	Poverty (7)	
Districts that serve low-achieving students in all elementary schools								
Adams County #12	16	10	8	77	55	72	77	
Harrison County	29	14	14	48	46	48	58	
Mesa	25	10	9	50	45	62	58	
Racine	28	15	10	55	41	49	47	
Santa Fe	16	8	7	57	55	59	72	
Districts that rank schools by achievement and serve fewer than all elementaries								
Charlotte	75	37	39	61	49	54	59	
Winston-Salem	24	13	11	72	57	73	63	
Districts that rank schools primarily by poverty								
Berkeley County	13	7	5	50	30	65	54	
Houston	163	85	74	78	70	85	83	
Districts making primarily intraschool change								
Alum Roc	18	10	8	56	43	61	58	
Yonkers	25	10	9	77	69	88	84	

*Poverty and low achievement based on individual district definitions.

First, it can be determined whether the schools selected by achievement in the analysis above are simply the same schools selected by poverty, plus a few others. We note first from Table 9 that poverty, across districts, selects approximately 86% as many schools as does achievement; therefore there should be about an 86% overlap between the actual schools selected by each method if essentially the same schools are being selected by each method (with some extra schools selected by achievement.) However, the actual overlap, across districts, averages 74%. Thus, while the pools of students selected by the two criteria are largely from the same schools, there are obviously some schools (and thus some students) eligible by one criterion but not by the other.

The second approach to determining whether all benefits of achievement-based eligibility lie in selection of greater numbers of schools is to hold constant the number of schools selected by each criterion.

Fixed Number of Schools Eligible.--With the schools ranked separately by poverty and by achievement, one could select any point along the distributions that would provide equal numbers of schools under each criterion. In fact, the data were inspected for five different cutoffs: (1) using the same number of schools served by these districts in the baseline year; (2) selecting the same number of schools by poverty as the number above the mean on achievement; (3) selecting the same number of schools by achievement as the number above the mean on poverty; (4) using 50% of all schools; and (5) using 25% of all schools.

The findings presented in Table 10 are based on selecting the same number of schools that the districts served during the baseline year. This number may have some practical reality, in that the number of schools actually served by a district may be partly a function of actual resource constraints and accompanying concentration decisions, and not simply the byproduct of applying a given selection criterion.²⁸

²⁸ It should be noted that overall these districts served a lower proportion of their schools (48%) than districts nationwide (62%). (See Title I Funds Allocation: The Current Formula. Washington, D.C.: The National Institute of Education, September 1977.) Thus, this analysis is conducted across a smaller pool of schools than would be the case in other districts.

TABLE 10

SIMULATED EFFECTS OF SELECTING A CONSTANT
 NUMBER OF ELEMENTARY SCHOOLS BY ACHIEVEMENT OR POVERTY
 (number of schools equal to number
 served in baseline year, 1975-76)*

	No. of Schools in District (1)	No. of Schools Served in Baseline Year (2)	Percent of District Low Achievers Attending That Number of Schools		Percent of District Poor Attending That Number of Schools	
			Achievement** (3)	Poverty (4)	Achievement (5)	Poverty (6)
Districts that serve low-achieving students in all elementary schools						
Adams County #12	16	3	23	26	27	37
Harrison County	29	25	90	88	90	91
Mesa	25	13	62	62	71	76
Racine	28	14	50	50	43	57
Santa Fe	16	12	78	81	81	90
Districts that rank schools by achievement and serve fewer than all elementaries						
Charlotte	75	49	77	64	69	73
Winston-Salem	24	11	61	57	60	63
Districts that rank schools primarily by poverty						
Berkeley County	13	11	92	80	87	91
Houston	163	54	56	51	64	65
Districts making primarily intra-school change						
Alum Rock	18	9	51	48	57	63
Yonkers	25	9	70	69	78	84

*Poverty and low achievement based on individual district definitions.

**Selection criterion.

It is clear from columns 3 and 4 of Table 10 that achievement-based eligibility still selects slightly larger pools of low-achieving students even when the number of schools selected by achievement and poverty is held constant. Seven of 11 districts show larger pools of low achievers in achievement-selected schools, while two districts have equal pools of low achievers under the two criteria. However, the differences are not large; only two districts would have an advantage of more than 10%.

With the numbers of selected schools held constant, however, poverty-based school eligibility selects the largest pool of poor students in all 11 districts (columns 5 and 6). Thus, while students from the pool would presumably not be selected for services based on income, the probability that more poor students would be served could be higher in poverty-selected schools if they were also the lowest achieving students.

The results of the other four analyses of equal numbers of schools are essentially parallel. However, as the number of selected schools decreases, the size difference between pools of low-achievers and poor, by poverty vs achievement-based school selection, diminishes. This is presumably due to the fact that the overlap between the actual schools selected by each method becomes greater and greater as the number of schools selected diminishes. The very poor schools tend to be the very low-achieving schools.

School Eligibility by Poverty, Targeting by Poverty vs Achievement

Since, as noted earlier, 81.4% of Title I districts serve all of their eligible schools, 18.6% of these districts must make decisions about which of the eligible schools to target. Under standard Title I regulations, districts are required to serve schools in order of their rank on economic need. However, there are exceptions: districts may skip a higher ranked school if it displays substantially less educational deprivation than other schools selected for service.

Provisions in ESEA bills now being considered by Congress would apparently take this one step further and allow ranking of the poverty-eligible schools by either poverty or achievement in determining which fewer number of schools to target.

The next set of analyses simulates this option. Those schools determined as eligible by poverty (above the district average) from the first analysis reported above were reranked by achievement. The lowest 50%²⁹ of those eligible schools were then selected from the poverty ranking, and again from the new achievement ranking as alternate sets of targeted schools. Those selections were made based on the numbers of low achievers or poor, as well as the percents in each eligible school. Again, only those results based on percents are reported. The eligible pools of low-achieving or poor students were then contrasted for the two sets.

As seen in columns 4 and 5 of Table II, targeting by achievement at this level does not substantially enlarge the pools of low achievers. Six districts show slightly larger pools of low achievers when schools are targeted by achievement, four show larger pools when targeted by poverty, and one shows no difference. Targeting by poverty at this level does produce larger eligible pools of poor students (columns 6 and 7), but only slightly so.

This lack of difference can be explained partly by the relatively restricted number of schools. The criterion of targeting 50% of poverty-eligible schools effectively targets only 23% of all elementary schools, because the initial step of poverty eligibility made only 45% of all schools eligible. As noted earlier, a nationally representative sample of Title I districts stated that 68% of their schools were eligible. This was apparently the result of using more than one poverty index and using a combination of number poor and percent poor.

²⁹ The 18.6% of Title I districts that target among their eligible schools serve an average of 46% of the eligible schools. Thus targeting estimates of 50% closely approximate national behavior.

TABLE 11

SIMULATED EFFECTS OF TARGETING 50% OF POVERTY-ELIGIBLE ELEMENTARY SCHOOLS (ABOVE DISTRICT AVERAGE) BY PERCENT LOW ACHIEVING VS PERCENT POOR*

	No. of Schools in District (1)	No. of Schools Eligible by Poverty (2)**	No. Targeted (50% of Eligible) (3)***	Percent of District Low Achievers Attending Schools Targeted by:		Percent of District Poor Attending Schools Targeted by:	
				Achievement (4)	Poverty (5)	Achievement (6)	Poverty (7)
Districts that serve low-achieving students in all elementary schools							
Adams County #12	16	8	4	34	34	47	47
Harrison County	29	14	7	28	21	30	33
Mesa	25	9	5	25	24	30	38
Racine	28	10	5	19	15	20	20
Santa Fe	16	7	4	27	38	26	54
Districts that rank schools by achievement and serve fewer than 11 elementaries							
Charlotte	75	39	20	32	26	32	32
Winston-Salem	24	11	6	35	36	39	41
Districts that rank schools primarily by poverty							
Berkeley County	13	5	3	13	24	22	43
Houston	163	74	37	39	33	42	45
Districts making primarily intraschool changes							
Alum Rock	18	8	4	22	23	30	35
Yonkers	25	9	5	44	41	52	51

*Poverty and low achievement based on individual district definitions.

**From Table 9, column 3.

***Number rounded up to target whole schools.

Thus, this simulation deals with a rather low percent (23%) of all elementary schools in each district. At this level, one can assume that the schools represented are the most disadvantaged in a district by either criterion and that there is little to gain in discriminating among them.³⁰

Summary of Simulations

In general, determining school eligibility as all schools above the district average percent of low achievers produces larger available pools of low-achieving students than does the parallel determination by average percent poor. In a number of cases it also produces larger pools of available poor students. The larger pools result primarily from the larger number of schools selected under achievement-based eligibility. This, in turn, appears to be a function of the differing distributions of poor vs low-achieving students in a district's schools. (The effects of the shape of the distributions on the number of eligible schools is discussed in a technical note in Appendix C.) However, even if the number of schools is held constant for the two criteria, achievement-based school eligibility still produces larger pools of low achievers in many cases. Here, however, the largest pools of poor students are always selected by poverty.

Targeting within the poverty-eligible schools, on the other hand, is accomplished equally well by either poverty or achievement rankings of those schools. This would be especially true if districts were to target only 50% of the poverty-eligible schools, where fewer schools are made eligible by poverty to begin with.

Within the options tested by these simulations, a district would thus maximize the accessibility of its low achievers by judging schools eligible if they have per-

³⁰ As a check, we inspected the pools achieved by targeting 75% of the poverty-eligible schools rather than 50%. Here the differences are slightly larger, though still perhaps not practically meaningful. Of course, if one targets 100% of poverty-eligible schools by poverty vs by achievement, the pools of low achieving (or poor) selected by the two methods are identical.

cents or numbers of low achievers above the district average (rather than judging by the poverty-based parallel) and targeting all of those schools.

Of course, maximum access is achieved by making all schools eligible, an option selected by seven of the demonstration districts for the demonstration proper. It should also be noted that the variant on achievement ranking selected by Charlotte and Winston-Salem--all schools eligible that have a certain (arbitrary) percent of students above a certain (arbitrary) cutoff--produced more eligible schools than the option simulated above. However, at least in the case of Charlotte,³¹ that variant produced declining numbers of eligible schools each year: 57 eligible schools for 1976-77, 37 for 1977-78, and 18 hypothesized for 1978-79. This may be a function of the particular eligibility formula used (a school was deemed eligible if 35% of students tested below the 30th percentile). It is not entirely possible to predict the long-term effects of using district average percent poverty or low achievement. However, consistency estimates based on limited data from these 11 districts (3 years of poverty data and 2 of achievement data) show that the two indices are about equally stable over time.

CHANGES IN SERVICES

The demonstration districts served more schools and more students in each implementation year than in the baseline year, without a general increase in their Title I allocation. If the Title I program provided special services in the baseline year, there is every reason to expect that these services might be diminished, in either intensity or quality, as they were extended to more children. Therefore NIE measured both the quantity and the quality of the Title I services in each of the 3 years. The quantity of instruction was measured by the total amount of time (minutes per day) spent by an "average" Title I student in language arts instruction.³² Two indicators of instructional quality were used:

³¹ Winston-Salem changed achievement tests between the 2 implementation years.

³² While time in mathematics and other compensatory instruction was also measured, it is not presented due to the generally small size of these compensatory programs in the demonstration districts.

- Instructional group size, defined as the number of students within a class taught together for a particular activity
- Type of teacher, defined as the person responsible for the activity

These indicators were first used to determine whether the baseline Title I services were in fact "special." As reported in July 1977,³³ the Title I services in every district were different and more intensive than regular instructional services. They were characterized by more instruction given in smaller groups and by instructional specialists. Also, Title I students spent more time in language arts instruction when regular and compensatory instruction were combined than did non-Title I students, although it was clear that some of the time for compensatory instruction was taken away from time in regular instruction.

The results of the first implementation year³⁴ showed that the Title I students lost some time in compensatory language arts instruction. Overall there was a loss of about 5 minutes per day or 14% of the time received in the baseline year, but the quality of their compensatory instruction was basically unchanged. The loss in time was not as great as might have been expected, given the substantial increase in number of students. As noted in "Expansion of Programs in the Demonstration Districts," the districts were able to maintain the basic integrity of the Title I program by focusing expenditures at the elementary level, by administrative adjustments such as slightly larger classes, and by some "borrowing" of staff from other sources.

The analyses presented below show the changes in services between the 2 implementation years. During the second year, the data on services were collected

³³ Compensatory Education Services, Chapter IV. Washington, D.C.: National Institute of Education, July 1977.

³⁴ Demonstration Studies of Funds Allocation Within Districts. Washington, D.C.: National Institute of Education, September 1977.

in only nine districts³⁵; data are presented for eight districts because the baseline sample size in Newport was so small. The discussion below presents changes in time, group size, and teacher type for Title I students across the study. That is followed by a discussion of the relative advantage retained by Title I students vis-a-vis the non-Title I students. Finally, the manner in which the districts managed to generally maintain the nature of their compensatory programs while serving many more students is described briefly.

Quantity of Instruction

Table 12 presents the changes in the amount of time per day that Title I students spent in compensatory, regular, and total language arts instruction.³⁶ Because of the decreased number of districts and the interdistrict variability, the averages are not presented.

It is clear from column 2 of Table 12 that Title I students still receive less time in compensatory language arts instruction in the second implementation year than in the baseline year. However, the time loss is generally less severe in the second implementation year than in the first (column 3). Between the 2 implementation years, five districts have decreased the time lost in compensatory language arts, three of them significantly (one actually shows an increase in 1977-78 over baseline.) Only two districts show significant time losses between the 2 implementation years.

The table also shows that time spent by Title I children in regular language arts instruction is relatively unchanged across the 2 implementation years, and thus

³⁵With the exception of Houston, all districts that had not changed to allocation by achievement were eliminated from this expensive and time-consuming phase of data collection.

³⁶The data on minutes per day from which these changes were computed are presented in Table B-13, Appendix B.

TABLE 12

CHANGES IN TIME (MINUTES PER DAY) SPENT IN COMPENSATORY AND REGULAR LANGUAGE ARTS INSTRUCTION BY TITLE I STUDENTS IN EIGHT DEMONSTRATION DISTRICTS

	Compensatory			Regular			Total		
	Changes in Minutes, 1976-77 vs 1975-76 (2-1)	Changes in Minutes, 1977-78 vs 1975-76 (3-1)	Changes in Change (3-2) = (3-1)-(2-1)	Changes in Minutes, 1976-77 vs 1975-76 (2-1)	Changes in Minutes, 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)	Changes in Minutes, 1976-77 vs 1975-76 (2-1)	Changes in Minutes, 1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools									
Adams County #12	-1	-1	0	8	16	8	7	15	8
Harrison County	2	-2	-4*	-3	3	6	-1	1	2
Mesa	-15*	-8*	7*	20**	8	-12	5	0	-5
Racine	-9*	-7*	2	10	19**	9	1	12	11**
Santa Fe	-3	5	8*	-4	-1	3	-7	4	11
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	-8*	0	8*	-3	5	8	-11*	5	16**
Winston-Salem	0	-4*	-4*	12**	-2	-14*	12**	-6	-18**
District that ranks schools primarily by poverty									
Houston	-4	-3	1	23**	22**	-1	19*	19**	0

*Significant at P < .05.

**Significant at P < .05, but accompanied by change in the non-Title I group (tested for regular and total language arts only because of small amount of time spent by non-Title I students in compensatory instruction).

their total time in language arts instruction remains relatively stable. Time in regular language arts instruction (and thus in total language arts instruction) in both implementation years tends to be higher than in the baseline year. This in part reflects the fact that Title I students were pulled out of regular classes for shorter periods of time to receive compensatory instruction. However, a few districts in each year show overall increases in regular language arts instruction that may or may not have been related to the demonstration.

Quality of Instruction

Despite the loss in time spent in compensatory language arts instruction, Title I students in the first implementation year did not experience any decline in the overall quality of that instruction as measured by two indicators: size of instructional group and type of teacher.

Instructional Group Size.--The "instructional group," defined as the number of students within a class who are taught together for a given activity, is one measure of degree of individualization of instruction. The proportion of Title I students' compensatory language arts time spent in small (one to five students) or larger (six or more) groups was computed. For these eight districts, the changes in group size in the first implementation year were quite variable, with both increases and decreases (Table 13).³⁷ However, between the 2 implementation years, six of the eight districts show some loss in small-group time, with one of these losses being significant. Generally, then, there has been some slight loss of proportion of compensatory language arts time spent in small groups across the 2 implementation years.

Type of Teacher.--In the baseline year, Title I students in the 12 districts spent 66% of their compensatory language arts time being instructed by

³⁷Proportions from which the changes were computed are presented in Table B-14, Appendix B. For the 12 districts analyzed in years 1 and 2, the average proportion of compensatory instruction in small groups was 65% in the baseline year and 60% in the first implementation year.

'specialists'³⁸ as opposed to classroom teachers or paraprofessionals. Among the eight districts reported here, there were few significant changes in the type of teacher responsible for compensatory language arts instruction in either implementation year (Table 14)³⁹. Only one district shows a significant change across the 2 implementation years, to increased proportions of time with instructional specialists.

Thus, the demonstration did not significantly change the general type of instructor used by these districts for compensatory education. Even in districts where there were significant changes in the proportions of time spent with various types of teachers, the general staffing patterns remained. Thus, districts such as Harrison and Mesa, which relied heavily on paraprofessionals before the demonstration, continued to do so. Districts like Charlotte, while showing significant changes within teacher type, still relied predominantly on instructional specialists. The basic staffing pattern used by each district is clear in Table B-15, Appendix B.

Title I Students' Advantages vis-a-vis Non-Title I Students

The results presented thus far show a slight decline in time spent in compensatory language arts instruction by Title I students in the first implementation year, which has in some cases been recouped in the second. The quality of that instruction has generally remained the same, with some slight losses in small-group instruction in the second implementation year. One would therefore expect that the total language arts experience of Title I students has retained its "special" character vis-a-vis the non-Title I students during the 2 years of the demonstration.

³⁸ In this study, the terms "instructional specialists" and "classroom teachers" refer primarily to teaching responsibilities and not necessarily to qualifications, experience, or employment status.

³⁹ Proportions from which these changes were computed are shown in Table B-15, Appendix B.

TABLE 13

CHANGES IN PROPORTION OF TIME SPENT BY TITLE I STUDENTS IN INSTRUCTIONAL GROUPS OF VARIOUS SIZES IN THEIR COMPENSATORY LANGUAGE ARTS CLASSES

	Change in Proportion of Compensatory Language Arts Time Spent in Groups of:					
	Individual (1) plus Small (2-5)			Medium (6-20) plus Large (20+)		
	1976-77 vs 75-76 (2-1)	1977-78 vs 75-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)	1976-77 vs 75-76 (2-1)	1977-78 vs 75-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools						
Adams County #12	25	32	7	-25	-32	-7
Harrison County	-4	1	5	4	-1	-5
Mesa	0	-1	-1	0	1	1
Racine	-1	-2	-1	1	2	1
Santa Fe	-1	-12	-11	1	12	11
Districts that rank schools by achievement and serve fewer than all elementaries						
Charlotte	-9	-19*	-10	9	19*	10
Winston-Salem	8	-7	-15*	-8	7	15*
District that ranks schools primarily by poverty						
Houston	2	-3	-5	-2	3	5

*Significant at $P \leq .05$.

TABLE 14

CHANGES IN PROPORTION OF TIME TITLE I STUDENTS SPENT WITH DIFFERENT TYPES OF TEACHERS IN COMPENSATORY LANGUAGE ARTS INSTRUCTION

	Changes in Proportion of Compensatory Language Arts Instruction Spent With:**								
	Instructional Specialist			Classroom Teacher			Paraprofessional***		
	1976-77 vs 1975-76 (2-1)	1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)	1976-77 vs 1975-76 (2-1)	1977-78 vs 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)	1976-77 vs 1975-76 (2-1)	1977-78 1975-76 (3-1)	Change in Change (3-2) = (3-1)-(2-1)
Districts that serve low-achieving students in all elementary schools									
Adams County #12	9	8	-1	6	8	2	-9*	-4	0
Harrison County	2	4	2	2	0	-2	-3	-3	0
Mesa	-5	-6	-1	-1	0	1	6	6	0
Racine	-1	6	7	2	5	3	-1	-12	-11
Santa Fe	-3	-4	-1	8	13	5	-7	-13	-6
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	-7	3	10	13*	7*	-6	-6*	-8*	-2
Winston-Salem	-12	-7	5	10*	7	-3	5	5	0
District that ranks schools primarily by poverty									
Houston	-4	-6	-2	-1	0	1	0	3	3

*Significant at P < .05.

**Changes in proportion of time with one teacher type are not balanced by changes in the other two because time without adult attention is omitted from the table.

***Paraprofessionals include student teachers, paid aides or assistants, parent/adult volunteers, other adults and older students. May include some staff who are certified to teach.

Table 15 displays the relative advantage held by Title I students in total language arts instruction (regular plus compensatory) in each of the 3 years. It presents the additional minutes per day spent by Title I students in total language arts instruction, in that instruction-received in small groups, and in that instruction-received from instructional specialists.⁴⁰ Table 16 presents the changes across the study in these variables.

While it is clear from Table 16 that there have been some decreases in the Title I advantage during the 2 implementation years, it is equally clear from Table 15 that that advantage remains substantial. Title I students in every one of these eight districts received extra time in total language arts instruction, and they received this instruction in smaller groups or from more specialized staff.

Support of Expanded Services

As discussed in "Expansion of Programs in the Demonstration Districts," these districts have used a variety of methods to essentially maintain the intensity and quality of services per student during the 2 years of implementation. Three of these factors--increase in allocations, increase in use of carryover funds, and reduction in noninstructional or nonelementary expenditures--have made more Title I funds available to the elementary instructional program. There has also been some donation of services to Title I from other fund sources. Finally, there has been some restructuring of the elementary instructional program itself, resulting in more class periods and larger classes. These changes enabled districts to serve more children without substantially diminishing the quantity or quality of services for any single child.

Moreover, in addition to these factors, it is possible that these districts have in fact become more cost efficient. The demonstration provided the districts with

⁴⁰ Additional minutes per day per child are derived by subtracting average time for non-Title I students from average time for Title I students receiving compensatory language arts instruction in each district.

TABLE 15

TITLE I VS NON-TITLE I STUDENTS' INSTRUCTIONAL EXPERIENCE
(REGULAR PLUS COMPENSATORY LANGUAGE ARTS)

	Additional Min/Day			Additional Min/Day in Groups of 1-5 Students			Additional Min/Day with Instructional Specialists		
	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78
Districts that serve low-achieving students in all elementary schools									
Adams County #12	16	12	23	23	20	36	22	24	28
Harrison County	17	16	17	11	10	28	27	28	26
Mesa	22	13	3	31	27	26	10	5	5
Racine	15	9	16	40	14	20	3	2	4
Santa Fe	23	12	24	34	37	35	22	21	29
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	20	10	10	26	15	14	30	19	28
Winston-Salem	15	21	5	18	22	16	30	27	28
District that ranks schools primarily by poverty									
Houston	11	24	17	10	14	14	29	29	29

TABLE 16

CHANGE IN TITLE I VS NON-TITLE STUDENTS' INSTRUCTIONAL EXPERIENCE
(REGULAR PLUS COMPENSATORY LANGUAGE ARTS)

	Change in Additional Min/Day		Change in Change (3-2) = (3-1)-(2-1)	Change in Additional Min/Day in Groups of 1-5 Students		Change in Change (3-2) = (3-1)-(2-1)	Change in Additional Min/Day with Instructional Specialists		Change in Change (3-2) = (3-1)-(2-1)
	1976-77 vs 1975-76 (2-1)	1977-78 vs 1975-76 (3-1)		1976-77 vs 1975-76 (2-1)	1977-78 vs 1975-76 (3-1)		1976-77 vs 1975-76 (2-1)	1977-78 vs 1975-76 (3-1)	
Districts that serve low-achieving students in all elementary schools									
Adams County #12	-4	7	11	-3	13	16	2	6	4
Harrison County	-1	0	1	-1	17	18	1	-1	-2
Mesa	-11	-19	-8	-4	-5	-1	-5	-5	0
Racine	-6	1	7	-26	-20	6	-1	1	2
Santa Fe	-16	1	17	3	1	-2	-1	7	8
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	-10	-10	0	-11	-12	-1	-11	-2	9
Winston-Salem	6	-10	-16	4	-2	-6	-3	-2	1
District that ranks schools primarily by poverty									
Houston	13	6	-7	4	4	0	0	0	0

the opportunity to reevaluate their Title I programs and to redistribute Title I resources. It is difficult to judge to what extent such efficiency might be a function of the demonstration itself and the scrutiny these programs have received as a result of the research, or of the nature of the demonstration and the extent to which the waiver of normal regulations has allowed more efficient use of resources.

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CHAPTER II. TEACHER TRAINING

SUMMARY

This chapter examines the training and qualifications of compensatory education teachers. The data examined were collected in 1975-76 by the NIE Survey of Compensatory Education, a representative survey of Title I school districts. Four questions are addressed: (1) To what extent do school districts offer special training programs to their compensatory education teachers? (2) What types of training do districts offer? (3) How do districts select compensatory education teachers? (4) What are the qualifications of compensatory education teachers?

The findings indicate that while 73% of Title I districts do offer teacher-training programs for their teachers, only 28% of these districts use Title I funds for such programs. The total expenditure for training represents a very small percentage of the Title I budget: in fiscal year 1975, LEAs spent less than 0.5% of the total Title I budget on these programs.

The training that districts do offer is typically informal, relying on short-term programs rather than on more formal academic approaches. About 90% of the districts use three preferred strategies: consultations with specialists, staff meetings, and workshops. The focus of these training sessions varies widely, although district personnel agree that sessions related to instructional content are the most important.

Survey information suggests that compensatory education teachers represent a special population among teachers and are often selected by districts because they bring particularly relevant qualifications to their assignment. In 61% of the Title I districts, academic training in compensatory education was named as a key

factor in selecting teachers for participation in the Title I program. Some 35% of the districts also considered experience in working with educationally disadvantaged children. Seniority was not typically a factor in selecting these teachers, as only 8% of the districts used seniority as a selection criteria.

Finally, compensatory education teachers tended to have higher levels of educational attainment and more recent training experience than homeroom teachers. Both specialists and general compensatory education teachers were twice as likely to have a master's degree than the homeroom teachers. In addition, compensatory education teachers were three times as likely as the homeroom teachers to have had training within the 6-month period prior to the interview.

INTRODUCTION

When Title I was enacted in 1965, educators and legislators acknowledged that the American educational system had largely failed poor and minority children. It had become apparent that a disproportionate number of these children were not receiving an adequate education. Inadequate teacher training was popularly cited as a cause of the system's failure. At the time of the enactment of Title I, the training that teachers generally received, both as preparation for their profession and as inservice support for them as working professionals, was focused on the needs and abilities of the "average" child. Excepting training for subject area specialists, teachers received little direct help for instructing children whose achievement scores were very low. In addition, some felt that teachers generally were not prepared to work with children from a variety of social and cultural backgrounds or from backgrounds differing from their own.

The ways districts chose to assign teachers to differing populations of students may also have adversely affected the educational opportunities for the educationally disadvantaged. School districts often assigned experienced personnel with sophisticated teaching skills to work with high-achieving children. Because of this procedure, many observers believed that the least prepared teachers served those students with the greatest educational needs.

The advent of Title I provided an opportunity for school districts to overcome some of these problems. With funds supplied by Title I, local educational agencies (LEAs) could provide training for compensatory education teachers. At their initiative, LEAs could also hire and assign teachers on the basis of special training or experience in working with children eligible for compensatory education.

The degree to which districts have exercised options has not received much attention. Early evaluations and descriptions of the Title I program do not provide detailed information on teacher training or assignment practices. However, the data that were available prior to NIE's recent studies suggest that relatively little Title I money was spent on training by LEAs. For example, according to The Condition of Education (National Center for Education Statistics, 1976), in the 1972-73 school year, some \$18.5 million or 1% of Title I funds was spent on teacher training. Nonetheless, this \$18.5 million accounts for 28% of all Federal monies spent to provide teacher training in fiscal year 1973.

There may be a relationship between the relatively modest use of Title I funds for training purposes and the statutory and regulatory language. Title I regulations did not initially contain specific information about who might be trained with these funds. In fact, the 1965 Title I legislation does not mention teacher training. It does, however, specifically note that training for teachers' aides must include the participation of the teacher with whom they will work. The 1969 regulations allowed "such expenditures as are reasonably necessary for carrying out approved projects." In 1976, the regulations were revised to make the intent of the law clearer. For example, Section 116.36(b) permits training funded by Title I for Title I staff member and for

... non-Title I staff specialist who will be dealing solely with children to be served by the Title I projects, regular classroom teachers of such children.

In order to augment and update information on teacher training, NIE examined the training and qualifications of compensatory education teachers in

part of the NIE National Survey of Compensatory Education. (For a complete description of the survey, see NIE, 1976, 1977 and Appendix D.) This report presents the findings from that study and addresses the following questions:

- (1) To what extent do school districts offer special training programs to their compensatory education teachers?
- (2) What types of training do districts offer?
- (3) How do districts select compensatory education teachers?
- (4) What are the qualifications of compensatory education teachers?

TRAINING AND QUALIFICATIONS OF COMPENSATORY EDUCATION TEACHERS

District Programs for Special Training

Data collected in the NIE National Survey indicate that as of 1975-76, Title I funds were still not used extensively to provide special training programs for compensatory education teachers. Some 28% of the Title I districts spent Title I funds for training programs. Expenditures ranged from \$161 to \$130 thousand, with a median expenditure of \$600. Nationally, some \$8.3 million or 0.5% of the fiscal year 1976 Title I allocation was used for inservice teacher training.¹ Closer analysis of these expenditures further reveals that larger districts are more likely than smaller ones to offer inservice programs; similarly, districts with state compensatory education programs are more likely than districts without such programs to offer these training opportunities.²

¹Note that the figures cited earlier from The Condition of Education (NCES, 1976) are for all types of training and not just for inservice training. Thus, while both sets of figures show relatively small amounts of Title I funding for training, they are not strictly comparable.

²See Appendix E for analyses of expenditures and programs by districts.

However, the relatively limited use of Title I money does not accurately reflect the extent of special training programs for compensatory education teachers. Survey data also show that, overall, 73% of the school districts that received Title I funds offered special inservice or preservice training to their compensatory education teachers in 1975-76. Thus, nearly three-fourths of all districts offered such programs, although they were not likely to draw upon Title I resources to pay for them.

Types of Training Offered by Districts

Programs varied according to the content and setting in which training was delivered. The national survey collected information regarding the range of instructional contents, such as instructional techniques, the use of community resources, and the philosophy of compensatory education. It also gathered information on the use of situations such as workshops, demonstrations, and university courses for presentation of the instruction.

Table 17 provides information about the relative importance district personnel attribute to various training content areas. These content areas can further be combined into five broad categories: instructional content, instructional support, theoretical and background topics, planning and evaluation, and special topics. Examination of the table shows that while district personnel consider instructional content the most important area, they also find many other areas somewhat important. Only instruction in a foreign language was viewed as not at all important.

Table 18 presents data on various training methods used by the districts. Districts seemingly prefer informal strategies relying on short-term programs instead of more formal academic approaches. About 90% of the districts use each of these three preferred approaches: consultations with specialists, staff meetings, and workshops. Between 50% and 60% of the districts use other approaches, including demonstrations or visits to the classroom, visits and observations of other teachers, and materials mailed to teachers for study. Of the remaining methods, only classes

conducted by the district are used with any significant frequency; college courses are not used frequently.

Criteria and Process for Selecting Teachers

Information gathered by the national survey shows that compensatory education teachers represent a special population among all teachers and are often selected by districts because they bring particularly relevant qualifications to their assignment. In 61% of the Title I districts, academic training in compensatory education was named as a key factor in selecting teachers for participation in a Title I program. Some 32% of the districts also considered experience in working with educationally disadvantaged children. Seniority was not typically a factor in selecting these teachers; only 8% of the districts used seniority as a selection factor. However, numerous other criteria, such as training in a subject area, attitude toward compensatory education students, personal traits, and supervisory opinions, were considered by 62% of the districts. Thus, it appears that districts select teachers who have particular academic qualifications, although they also employ a number of other criteria.

The selection of teachers for compensatory education assignments usually involves a number of people. In 82% of the Title I districts, district personnel selected teachers. NIE research shows some overlap in the selection procedure, since 62% of the districts reported the involvement of principals in the process. About one-third of the districts (33%) selected at least some Title I teachers from among those who had volunteered. About one-sixth (18%) of the districts employed other selection procedures, including selection by parents.³

³ Examination of selection criteria and selection processes as each relates to training content and training method used in district programs revealed few major differences. Those which did emerge were often open to several interpretations or were difficult to interpret. The data and some discussion of them are included in Appendix F.

TABLE 17

DISTRICT RATINGS OF THE IMPORTANCE OF VARIOUS
TRAINING METHODS

<u>Training Content Area</u>	<u>Rating</u>	<u>Total</u>
Introduction of new instructional techniques	Very important	49.8%
	Somewhat important	50.2
	Not at all important	0
Introduction of new content material	Very important	45.5
	Somewhat important	46.9
	Not at all important	7.6
Utilization of instructional equipment and material	Very important	36.3
	Somewhat important	56.4
	Not at all important	7.3
Measurement, evaluation, and reporting	Very important	59.0
	Somewhat important	37.5
	Not at all important	3.5
Philosophy of compensatory education	Very important	34.0
	Somewhat important	48.1
	Not at all important	17.9
Educationally disadvantaged children	Very important	42.5
	Somewhat important	43.8
	Not at all important	13.8
Types of learning disabilities	Very important	42.6
	Somewhat important	42.2
	Not at all important	15.2
Project planning and design	Very important	21.2
	Somewhat important	63.6
	Not at all important	15.2
Utilization of supportive services	Very important	7.6
	Somewhat important	54.4
	Not at all important	38.1
Utilization of other resources in the community	Very important	12.8
	Somewhat important	50.0
	Not at all important	37.2
Instruction in a foreign language	Very important	5.0
	Somewhat important	1.5
	Not at all important	93.5

TABLE 18

PERCENT OF DISTRICTS THAT USE
VARIOUS TRAINING METHODS

<u>Training</u>	<u>Total</u>
Visits or demonstrations in the classroom	59.6
Visiting, observing other teachers in their classrooms	56.7
Workshops	89.7
Consultations with specialists not in the classroom	96.7
Materials mailed to the teacher for his/her own use	54.1
Videotapes of model teaching episodes	16.1
Videotapes of teacher in teaching episodes	5.0
Staff meetings	90.2
Courses for college credit	19.5
Special classes	31.5

Compensatory Education Teachers' Qualifications

Additional perspective is afforded by examining the qualifications that compensatory education teachers actually have. This rounds out the picture, because teachers often pursue training programs on their own. Furthermore, knowing what training programs a district offers its teachers does not provide a complete picture of the extent of training teachers have in fact received.

Three types of teaching qualifications were examined:

- (1) Highest degree level
- (2) Recent training
- (3) Teaching experience

The qualifications of three groups of teachers, i.e., compensatory education teachers, specialists, and homeroom teachers of compensatory education students, were compared. Compensatory education teachers were defined as teachers who taught children in special compensatory education programs. Of compensatory education teachers, 71% provided instruction only to students in compensatory education programs and were called full-time compensatory education teachers. Specialists were defined as teachers who provided compensatory education instruction in only one area.⁴ Over 62% of the compensatory education teachers were classified as specialists. Homeroom teachers were defined as teachers who had responsibility for taking attendance and who had at least one compensatory education student in the classroom. Most of the homeroom teachers did not give instruction in special compensatory education programs.

⁴Reading specialists make up almost 46% of this group, mathematics specialists comprise 18% of it, language arts specialists account for about 14%, and the remaining 22% are specialists in other areas.

Degree Level.--Table 19 indicates that compensatory education teachers generally have reached a higher level of formal educational attainment than homeroom teachers. Some 96% of the compensatory education teachers have more than a bachelor's degree, and the median⁵ compensatory education teacher has a master's degree. Additionally, over 30% of these teachers have earned 30 credit hours beyond a master's degree.

In contrast, the homeroom teachers typically show a lower level of educational attainment. Nearly one-third of them (32%) have a bachelor's degree or less. The median homeroom teacher has a bachelor's degree plus 30 credit hours and has not yet completed his or her master's degree. Less than 5% of these teachers have earned 30 credit hours beyond a master's degree.

Analysis of the distribution of formal qualifications also indicates that the specialists have generally reached the same level of educational attainment as the other compensatory education teachers. Furthermore, there are no significant differences in attainment between full-time and part-time teaching staff among compensatory education instructors.

TABLE 19
PERCENT OF CE TEACHERS WITH VARIOUS
DEGREE LEVELS

Type of Teacher	Bachelor's or Less	Bachelor's Plus	Master's	Master's Plus
CE teacher	3.7	29.3	36.5	30.4
Specialist	3.9	28.8	35.3	32.2
Homeroom teacher of CE students	32.4	39.6	22.5	4.7

⁵The average compensatory education teacher--half of all compensatory education teachers have as much or more of a given characteristic, and half have as much or less of it.

Recent Training.--In Table 20, the percent of compensatory education teachers and specialists receiving training is compared with that of homeroom teachers. Almost two-thirds (64%) of the compensatory education teachers received training, while only one-fifth (21%) of the homeroom teachers received such training. The average duration of the training was about 25 hours for compensatory education teachers and 23 hours for homeroom teachers. Subsequent analyses of the data also indicated that full-time teachers were more likely to receive training than part-time teachers.

The extensiveness of training varied somewhat according to subject matter specialty. Mathematics instructors were most likely to engage in a training program: nearly three-fourths did so. In contrast, specialists in areas other than reading, mathematics, and language arts did not participate in training with such great frequency; however, about one-half of these specialists received some training.

TABLE 20

PERCENT OF TEACHERS RECEIVING AND NOT RECEIVING TRAINING BETWEEN JUNE 15, 1975, AND JANUARY 1, 1976, AND MEAN HOURS OF TRAINING RECEIVED THROUGH THOSE FUNDS

<u>Type of Teacher</u>	<u>Percent Receiving Training</u>	<u>Percent Not Receiving Training</u>	<u>Mean Hours for Those Receiving Training</u>
CE teacher	64.3	35.7	25.3
Specialist	64.4	35.6	25.5
Homeroom teacher of CE students	20.5	79.5	22.7

District training programs appear to serve teachers with differing levels of experience and with differing levels of educational attainment. For example, 24% of compensatory education teachers receiving training have 0-3 years of teaching experience, and 29% have 12-42 years of experience. Since the data indicated that

the extent of teaching experience does not predict whether or not a compensatory education teacher will participate in an inservice program, it can be concluded that district training programs are not focusing exclusively on teachers with limited teaching experience.

Teaching Experience.--Table 21 illustrates that the overall mean level of teaching experience is generally similar for compensatory education teachers, for specialists, and for homeroom teachers. In general, the teachers have had about 10 years of experience. These figures are similar to those published by the National Education Association indicating that the mean level of teaching experience of elementary school teachers in 1975-76 was 11 years (National Education Association Research, 1977, Table 7, Part I, p. 78).

Additional analyses of the duration of experience within the subject matter specialties illustrated a wider range of variation. Among specialists in reading and mathematics, the mean level of experience was 4 years. In contrast, language arts specialists reported 7 years of experience, while teachers in other areas reported 3 years.

TABLE 21
MEAN YEARS OF TOTAL TEACHING EXPERIENCE
OF VARIOUS GROUPS OF CE TEACHERS

<u>Type of Teacher</u>	<u>Mean Years of Experience</u>
CE teacher	10.2
Specialist	10.3
Homeroom teacher of CE students	10.5

CONCLUSIONS

District teacher-training programs for compensatory education teachers exist in about 73% of the Title I districts. Largely, these programs are funded by sources

other than Title I; in fact, only 28% of the districts use Title I funds for such programs. The total expenditure for training represents a very small percentage of the Title I budget; in fiscal year 1975, LEAs spent less than 0.5% of the total Title I budget on these programs. The larger LEAs and those with state compensatory programs were more likely to have such programs.

The relatively limited use of Title I monies to support such programs at the district level may be plausibly explained by the historical ambiguity of the legal framework. Information about who might be trained with Title I funds was initially incomplete, and many districts may have chosen to limit Title I funding of these programs rather than risk audit exceptions. Similarly, concerns about supplanting violations may account for the conservative and cautious use of Title I funds for teacher-training purposes. Additionally, many Title I-eligible children cannot be served directly even when all available Title I funds are applied. Some districts may be reluctant to use a portion of their Title I monies for purposes which serve their children indirectly since that would mean serving still fewer children directly.

Compensatory education teachers have been selected through a variety of procedures, although LEAs typically select Title I teachers through a decisionmaking process involving district personnel or principals. Among other processes, NIE researchers found that about one-third of the districts selected from volunteers and that about one-sixth involved other people, such as parents, in the selection process. In selecting teachers to deliver compensatory education instruction, training in this area is given special importance. The teacher-training programs most typically deal with instructional content, although LEAs are also attentive to issues of instructional support, planning and evaluation, and philosophical topics. LEAs use a variety of training methods, but prefer such short-term strategies as staff meetings, workshops, and consultations to more formal approaches such as university, credit-bearing courses.

The preference for informal training rather than more formal courses most probably reflects the budget situation and the traditional approaches of school districts. Since a significant number of compensatory education teachers have

achieved high levels of post-baccalaureate education, it is possible that the academic and formal educational needs of compensatory education teachers are being met by university programs.

Compensatory education teachers tended to show higher levels of educational attainment than did homeroom teachers. Both specialists and general compensatory education teachers were twice as likely to have a master's degree as the homeroom teachers. In addition, compensatory education teachers were three times as likely as the homeroom teacher to have had training within the 6-month period prior to the interview.

The picture that emerges of the preparation and training of compensatory education teachers is encouraging. On the whole, districts provided special services to compensatory education students by employing teachers who tended to be highly qualified and experienced. Typically, these teachers were more likely to be selected on the basis of special academic preparation than any other single criterion; also, relatively few of these teachers were selected solely on the basis of seniority. Thus, NIE's research illustrates that low-achieving students are not being instructed by the least qualified personnel. It also shows that districts are not using the "soft-money of Title I" to save the jobs of inexperienced or poorly qualified teachers. Instead, it illustrates that districts recruit and select well-qualified teachers and provide them with numerous opportunities for professional development.

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CHAPTER III. THE INSTRUCTIONAL DIMENSIONS FOLLOW-UP

SUMMARY

This chapter presents additional findings from the Instructional Dimensions Study (IDS), NIE's major study of the effects of services on compensatory education students. Data reported to Congress in 1977 showed that compensatory education students can make significant achievement gains over a school year period. This follow-up study extends these analyses and focuses on the achievement gains of the subsample of students tested over a 2-month period. The study addresses whether or not the compensatory education students show a loss of learning over the summer months and compares summer change for compensatory and noncompensatory education students.

The results show that compensatory education students can maintain impressive gains over the calendar year. The findings indicate that compensatory education students in the IDS subsample show quite similar performance on achievement tests administered before and after the summer period and do not forget what they have learned during the school year. Furthermore, comparison of test scores for compensatory and noncompensatory education students shows that changes in achievement over the summer are quite similar. In addition, preliminary examination of the effects of summer school participation on learning indicate that summer programs do not offer a panacea for the problems faced by low achievers.

INTRODUCTION

In September of 1977, NIE reported to the Congress the results of the Instructional Dimensions Study (IDS). The IDS assessed the relationship between selected instructional practices¹ and gains in reading and mathematics achievement during

¹See Appendix G for a description of this study and its findings.

the school year. The programs examined were purposely selected for certain instructional features and cannot be considered a representative sample of Title I reading and mathematics services. The results of this examination of over 400 selected 1st- and 3d-grade classrooms in 14 school districts were extremely encouraging. Over a 7-month period, compensatory education students gained at a much higher rate than reported in earlier research. The IDS provided evidence for the success of selected compensatory education programs at both grade levels and in both reading and mathematics.

However, since the IDS examined achievement score improvement over a school year, questions can be raised regarding whether it presents the most accurate picture of the effects of compensatory instruction. Recent analyses of compensatory education programs suggest that school year evaluations of achievement performance may be inadequate and misleading. As an alternative, calendar year assessment has been suggested.

School year evaluations have been questioned because analyses indicate that gains are not always maintained when performance is measured over a 12-month interval, and that consequently an overly optimistic picture frequently is presented by the shorter term evaluation. For example, Thomas and Pelavin (1976) found that encouraging results from state evaluations of Title I programs conducted on a fall-to-spring basis were inconsistent with findings from statewide testing programs covering the fall-to-fall period, which showed far less progress. Longitudinal studies reported by David and Pelavin (1977) confirmed this finding for three out of four studies. From these contrasting findings of school year and calendar year studies, evaluators have suggested that calendar year assessment of progress is important and that the success of programs is more appropriately measured over such a time period.

In addition, these comparisons suggest that special attention must be paid to the educational achievements and experiences of compensatory education students over the summer months. A variety of analyses (Hayes and Grether, 1969; Heyns,

1976; Murnane, 1975) suggest that summer presents a critical period for low-achieving compensatory education students and that their performance may undergo a severe decline during this period. Apparent losses in learning have, in fact, been suggested to blunt or even erase school year progress (David and Pelavin, 1977). Two kinds of loss have been reported, although clear distinctions between the two have not always been made. The first can be labeled a "relative loss," and occurs when the gains made over the summer by compensatory education students are less than those made by their higher achieving peers, resulting in a relative decline in achievement status of compensatory education students. The second kind of loss, "absolute loss," occurs as a result of an actual forgetting of previously acquired knowledge, skills, and concepts during the summer months. Where an absolute loss has taken place, the achievement test scores of compensatory education students are lower in the fall than they were in the previous spring. As a result of these findings, recent studies of compensatory education programs have paid increasing attention to changes in performance over the summer in order to better determine the nature of reported achievement loss and how to remedy it.

THE FOLLOW-UP STUDY

To determine whether the gains of compensatory education students in the IDS sample would remain large over the 12-month period, the IDS was extended to provide a fall-to-fall measure of Title I program impact in selected IDS schools. Retesting at the end of summer also allowed direct measurement of changes in spring-to-fall performance and further exploration of summer loss.² In addition, since it has been speculated that summer programs might help students sustain school year gains, the follow-up was also designed to provide tentative information

²It must be noted that the spring-to-fall period is not strictly a summer period because it includes 6 to 8 weeks at the end of the first school year after post-testing and 1 or 2 weeks at the start of the second school year before follow-up testing. This is, however, consistent with the definitions used in earlier summer studies.

about the effects of such programs on summer and school year gains.³ The IDS follow-up study focused on these three questions:

- (1) Will the significant gains reported for the school year program be maintained?
- (2) If there is a summer drop-off, should it be characterized as an absolute or a relative loss?
- (3) Do summer school programs have a positive effect on maintaining the rate of learning?

For the IDS follow-up, a subsample of classrooms was selected. This subsample was representative of the original sample with respect to use of individualized instruction and proportion of low-income families. Approximately 3,000 students from 27 schools in 7 of the 14 original districts were included. Comparison of pretest, posttest, and school year gain scores showed the subsample to be representative of the IDS sample in achievement as well. (See Appendix H for additional details about the subsample.) The sample also included both low- and high-achieving students so that the question of whether any summer loss was absolute or relative could be addressed.

RESEARCH METHODS AND DATA COLLECTION

Students who had valid IDS pretest and posttest scores for reading or math were retested in September or early October 1977.⁴ Procedures for testing were

³In 1975-76, about 14.5% of the Title I districts provided summer school programs in reading, language arts, or mathematics.

⁴Fifty-one to 54 weeks after pretesting and 19 to 24 weeks after posttesting. First graders were tested using Level B, Form S of the Comprehensive Test of Basic Skills (CTBS) on all three occasions. Third graders were tested using Level I, Form S as a pretest and Level I, Form T as a posttest and a follow-up test. Students with three valid reading test scores were included in the reading analysis irrespective of their math status and vice versa.

the same as those used in the original study (see Peterson, 1977, for a description of the procedures). At that time, information was also collected on whether students in the subsample were enrolled in summer reading or math programs.

STUDY RESULTS

The results of the study show that compensatory education students can maintain impressive gains over the calendar year. This corroborates and extends the initial findings of the IDS study. In addition, the results raise questions about the generality of summer loss for compensatory education students. In the present study, loss in absolute terms was not found. Furthermore, relative loss was neither consistent nor substantial. Finally, the data show that the summer programs offered by the districts studied did not increase the achievement of compensatory education students.

Table 22 shows that on a 12-month basis, the gains of compensatory education students remain impressive and that in absolute terms there is no summer drop-off for IDS compensatory education participants.⁵ In grade 1 reading and grade 3 math, there is no mean change over the summer. In grade 1 math there is an average gain of 2 Expanded Standard Score points or 1 grade-equivalent month. In grade 3 reading, there is an average gain of 9 Expanded Standard Score points or 2 grade-equivalent months.

Further analyses focusing on individual students, as opposed to group averages, show that the general picture of sustained achievement remains valid.

⁵The results are presented in both Expanded Standard Scores, which place each potential score on each test level and test form on one overall, equal-interval scale and thereby allows the different levels and forms to be compared, and grade-equivalent scores, which are technically less reliable but allow comparisons to be made across tests and are easier to understand since they evaluate student performance in terms of grade level.

Most individual students gain or remain at the same achievement level between spring and summer.⁶

In relative terms, however, the picture is less clear. Table 23 presents these findings and compares the performance of compensatory education students who scored below the national norm (50th percentile) in fall 1976 with that of non-compensatory education students who performed at or above the national norm. The data indicate that low achievers do lose some ground to higher achievers over the summer period. However, the size of the differences varies considerably by grade level and subject matter, and only for 1st-grade reading is the difference statistically significant.

Furthermore, comparison of compensatory education and higher achieving noncompensatory education students shows that low achievers maintained their position relative to higher achievers on a calendar year basis. This is largely because compensatory education students in the IDS actually showed a higher rate of gain during the school year. This finding is somewhat surprising and has not been typical of previous analyses.

PARTICIPATION IN SUMMER INSTRUCTIONAL PROGRAMS

Summer instructional programs in reading or math were conducted in five of the seven participating districts in 1977. Only a small percentage of subsample students participated in these programs: 13% in 1st-grade reading; 22% in 1st-grade math; 4% in 3d-grade reading; and 8% in 3d-grade math. Duration of the

⁶See Appendix I. David and Pelavin (1977) found that students with particularly large gains during the school year often show relatively large losses over the summer. The IDS data show no relationship between size of school year gains and summer gains for individual students. In addition, the IDS data show that students who made large school year gains usually also made large calendar year gains. From this we conclude that large school year gainers are not particularly likely to lose achievement during the summer.

TABLE 22

MEAN ACHIEVEMENT GAIN SCORES FOR CE STUDENTS IN
THE IDS FOLLOW-UP STUDY

<u>Study Group</u>	<u>n</u>	<u>Type of Score</u>	<u>Fall-to-Spring Gain</u>	<u>Spring-to-Fall Gain</u>	<u>Fall-to-Fall Gain</u>
Grade 1 reading	395	Expanded Standard	64	0	64
		Grade equivalent	1.2	0.0	1.2
Grade 1 math	143	Expanded Standard	37	2	39
		Grade equivalent	1.0	0.1	1.1
Grade 3 reading	565	Expanded Standard	43	9	52
		Grade equivalent	0.7	0.2	0.9
Grade 3 math	314	Expanded Standard	64	0	64
		Grade equivalent	1.2	0.0	1.2

TABLE 23

MEAN ACHIEVEMENT GAIN SCORES OF NON-CE STUDENTS WHOSE PRETEST SCORES WERE AT OR ABOVE NATIONAL NORMS AND OF CE STUDENTS WHOSE PRETEST SCORES WERE BELOW NATIONAL NORMS

<u>Study Group</u>	<u>Relationship to National Norm</u>	<u>n</u>	<u>Fall-to-Spring Gain</u>	<u>Spring-to-Fall Gain</u>	<u>Fall-to-Fall Gain</u>
Grade 1 reading	At or above (non-CE)	296	56* 0.5**	10*** 0.1	66 0.6
	Below (CE)	344	69 1.2	0*** 0.0	69 1.2
Grade 1 math	At or above (non-CE)	435	39 0.5	6 0.1	45 0.6
	Below (CE)	97	43 1.1	2 0.1	45 1.2
Grade 3 reading	At or above (non-CE)	305	36 1.0	21 0.6	57 1.6
	Below (CE)	512	44 0.5	8 0.3	52 0.8
Grade 3 math	At or above (non-CE)	178	62 1.6	7 0.2	69 1.8
	Below (CE)	306	64 1.2	-1 -0.1	63 1.1

*Expanded Standard Scores.

**Grade-equivalent scores.

***Difference in gain significant ($P < .01$).

summer programs ranged from 20 to 40 hours per student, with a mean of about 31 hours for both reading and math at both 1st- and 3d-grade levels. Programs generally were given 5 days a week for 4 to 9 weeks.

The data presented in Table 24 indicate that most students participating in summer programs do not show significant improvement over those who do not participate; however, 1st-grade reading students apparently gain from the summer program. Since the number of participants was small, the selection criteria were not explicit, and the differences are not very substantial, the effects of summer programs remain ambiguous. The results do, however, point out that a summer program is not a simple panacea and may not always be helpful to compensatory education students.

DISCUSSION

This follow-up study supports and extends the principal finding of the IDS: compensatory education students can make substantial school year gains and sustain them during the summer months. Over a 12-month period, the students made over a year's growth in three out of four groups; in the fourth group, nine-tenths of a year's growth was found. Specific measures of learning during the summer months indicate that for most students, forgetting is not a major problem.

By examining changes in test scores between the end of the school year and the beginning of the subsequent fall semester, it was determined that IDS students maintained or slightly improved their test score performance; that is, there was generally no absolute loss. While this new research finding contrasts with data reported in most previous studies, where compensatory education students showed a decline in performance after the summer, it is supported by more recent work. In the Sustaining Effects Study (SES), a large national evaluation of Title I effectiveness, compensatory education students maintained their scores during spring-to-fall intervals on the CTBS tests in reading and mathematics (Hoepfner, 1978). Taken together, the IDS and the SES show that compensatory education students generally

TABLE 24

MEAN ACHIEVEMENT GAIN SCORES FOR STUDENTS WHO DID AND DID NOT PARTICIPATE
IN SUMMER INSTRUCTIONAL PROGRAMS

<u>Study Group</u>	<u>Summer School</u>	<u>n</u>	<u>Fall-to-Spring Gain</u>	<u>Spring-to-Fall Gain</u>	<u>Fall-to-Fall Gain</u>
Grade 1 reading	Participating	52	43* 0.9**	5 0.1	48 1.0
	Not participating	343	67*** 1.6	0 0.0	67*** 1.6
Grade 1 math	Participating	32	32 0.9	0 0.0	32 0.9
	Not participating	111	38 1.0	3 0.1	41 1.1
Grade 3 reading	Participating	21	43 0.6	-3 -0.1	40 0.5
	Not participating	554	43 0.7	9 0.2	52 0.9
Grade 3 math	Participating	26	69 1.3	-8 -0.1	61 1.2
	Not participating	288	63 1.1	0 0.0	63 1.1

*Expanded Standard Scores.

**Grade-equivalent scores.

***Gain score significantly higher when tested by a t-test ($P < .01$).

do not slip back during the summer. In addition, any loss relative to higher achievers is modest at most.

Summer programs generally do not appear to have a positive effect on maintaining the rate of learning of the school year. The number of participants is rather small, however, and the results are only suggestive. The principal conclusion suggested is that summer programs as such are not necessarily helpful to compensatory education students in academic terms. In order to examine the potential usefulness of such programs more closely, more information is needed about them. Such information would include:

- (1) How participants are selected
- (2) Which of those students selected actually attend
- (3) How programs are structured
- (4) How the instruction offered in summer programs compares with students' school year programs and how the two are coordinated

Although it is not possible to determine exactly why the IDS findings differ from the earlier ones regarding summer loss, some speculations are possible. First, the present studies are generally methodologically superior to earlier ones and have a sounder data base. Both the IDS and SES were designed to examine test performance longitudinally, traced the same students over the three test intervals, and obtained their own test data under carefully controlled testing situations. The earlier studies relied on locally administered tests, included smaller samples of students, and were limited by the problems of using data in whatever form it could be provided by other sources.

Second, the present studies used the CTBS as the achievement test for reading and mathematics. In earlier studies where loss was found, other achievement tests were generally used. It is reasonable to question whether differences in tests

themselves contribute to the presence or absence of loss. Some support for this suggestion comes from analyses showing that tests differ in both content and format (Popp and Lieberman, 1977) and incorporate quite different assumptions about the distribution of growth over the summer period (Stenner et al., 1978).⁷ It is possible, therefore, that whether or not there appears to be loss in learning over the summer depends on the particular achievement test used.

Third, previous analyses of summer performance used data collected several years ago. The IDS and SES analyzed data from the 1976-77 school year. It is possible that over time programs have, in fact, improved and that the conditions which led to summer loss have been corrected. Recent evaluations indicate that school year services seem more effective. It is also reasonable to suggest that they may, in addition, be more lasting.

⁷For example, analyses indicate that it is possible for a student who makes the same absolute test scores in the spring and again in the following fall to appear to lose on one test and to stay the same on another when the scores are translated to a relative measure such as percentiles.

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CHAPTER IV. TITLE I PARENT ADVISORY COUNCILS

SUMMARY

This chapter describes the role and activities of Parent Advisory Councils (PACs) in ESEA Title I programs. Drawing on data collected in several of the projects conducted by the NIE Study of Compensatory Education, the chapter examines two major issues: the clarity of the PAC role and its responsibilities, and the consistency of practices among PACs, as well as toward PACs, on the part of state and local officials. Information is provided in six areas: (1) the composition of PACs and how members are selected; (2) the frequency and substance of PAC meetings; (3) the role of PACs as viewed by parents, local educational agencies, and state educational agencies; (4) the roles PAC members play in Title I planning and other areas of involvement; (5) the kinds and extent of training provided the PAC members; and (6) the relationship of PACs to the evaluation process.

Analyses indicate that there is considerable local variation in interpretation of the role of PACs and that their operational characteristics vary widely. While PACs are generally defined as having an "advisory" role, the findings indicate that the term "advisory" includes the whole range of possible parental roles, from instructional involvement to administrative decisionmaking.

In each of the areas of operations examined, differences in practices were reported. Furthermore, administrative studies also indicated that state and local officials varied greatly in how they related to PACs and in the degree to which attempts were made to aid and support them in the Title I program. In addition PAC members themselves appear confused about their functions and show little consistent understanding of duties and responsibilities.

INTRODUCTION

This chapter describes the roles and activities of Parent Advisory Councils (PACs) in ESEA Title I programs. It draws upon and integrates data from several NIE studies. Data gathered from the NIE National Survey of Compensatory Education provide overall descriptive information about the functions of PACs at the school and district levels.¹ Additionally, findings from studies of state and local administration (Goettel and Kaplan, 1977; see Appendix J), from the Legal Standards Project (Silverstein and Schember, 1977; see Appendix K), and from the demonstration study (Vanecko et al., 1977; see Appendix L) provide supplemental information about PACs and the administrative roles of state and district staff.

Parent involvement has generally taken one of two forms in federally supported education programs: parents may play a direct role in the education process by acting as teachers or as learning aides, or they act in an advisory or decisionmaking capacity to the agency providing services. Most research studies have focused on the first role, noting that parents may be quite effective partners in their children's education. While many of these studies focused on preschool programs, some studies also analyzed such early elementary programs as Follow Through and similarly found positive effects.² Few studies, however, have directly examined the possible role of the parent as an advisor and decisionmaker. The

¹The National Survey of Compensatory Education asked a sample group of PAC chairpersons for information about the PACs in their districts. The survey is described in Appendix D.

²Brofenbrenner notes studies suggesting that the involvement of parents is effective, specifically with regard to the development of early relationships, interests, and language. Additionally, he cites research conducted by SRI which points out that Follow Through parents show marked changes in their own attitudes towards their children's education. Follow Through programs allow parents to participate both as teachers and as decisionmakers; these federally sponsored programs are designed to consolidate the successes of children in Head Start (Brofenbrenner, 1974; Schaefer, 1970; Schaefer and Aaronson, 1972; SRI, 1971a, 1971b).

extant research that analyzes parent involvement in Title I is generally sketchy and does not clearly address the ways PACs function or their effectiveness in these functions. This chapter will expand previous information on PACs as advisors and decisionmakers and provide preliminary answers to these questions: What do PACs do? How can their functioning be improved?

NIE studies provide information in six areas: (1) the composition of PACs and how members are selected; (2) the frequency and substance of PAC meetings; (3) the role of PACs as viewed by parents, local educational agencies (LEAs), and state educational agencies (SEAs); (4) the roles PAC members play in Title I planning and other areas of program involvement; (5) the kinds and extent of training provided to PAC members; and (6) the relationship of PACs to the evaluation process.

In examining each of these areas, analyses focus on two issues: the clarity of the PAC role and its responsibilities, and the consistency of practices among PACs as well as toward PACs on the part of state and local officials. Before discussing these areas, however, it is useful to present a brief description of the history and development of PAC requirements.

DEVELOPMENT OF FEDERAL PAC REQUIREMENTS

The Federal Government's interest in parent involvement stemmed from its desire to involve parents more directly and actively in the education of their children. The social climate of the sixties raised the issue of community control; it perhaps made administrators and officials more sensitive to the concept that citizens should have the opportunity to influence the administration of the programs that are designed to benefit them. For example, the Office of Economic Opportunity (OEO) established community action agencies to provide an administrative vehicle for involving people in federally sponsored programs at the local level. One of OEO's education programs, Project Head Start, required the participation of parents in the delivery of comprehensive childhood services. In some respects, the requirements for PACs in Title I built on the general social mood and on the successes of local involvement in these other programs.

Federal officials began urging LEAs to involve parents and other interested community people in Title I during the earliest days of the program. In 1968, the U.S. Office of Education issued Program Guide No. 46, which officially recommended the establishment of Parent Advisory Councils. In 1970, the General Education Provisions Act was amended to give the Commissioner of Education discretionary authority to require the involvement of parents in federally financed programs. In October of 1971, the Title I guidelines were amended to require the establishment of PACs for local projects.

The 1974 amendments for Title I not only reinforced this policy but enhanced the role of parents in Title I by establishing minimum standards for parent involvement in local Title I program administration. The 1974 Title I amendments also required LEAs to establish PACs not only at the district level, but also at the school level.

Section 116a.25 of the Title I Rules and Regulations (see Appendix M) notes that PACs are designed "to encourage parental involvement as a way of increasing the effectiveness of Title I programs." A PAC may be defined as an advisory board composed of a majority of parents whose children participate in a Title I program. A PAC may be designated as "school," "district," or "intermediate," depending on the level at which it functions.

Each LEA is required to demonstrate that it has established a district advisory council as well as an advisory council for each school. Intermediate councils are allowed for groups of schools within its school district. A majority of PAC members must be parents of Title I children and must be selected by parents in the area designated for Title I services. The LEA must also provide the PACs with materials such as the annual evaluation report.

NIE STUDY FINDINGS

Membership of PACs

The regulations are fairly explicit regarding the composition of PACs. Specifically, Section 116a.25 states that a majority of the members of a PAC must be

parents of children who participate in the Title I program and that these members must be selected by parents in the Title I project area. The regulations do not, however, address the composition of the minority membership and have not addressed the issue of minority members' voting status (Silverstein and Schember, 1977). This is important, since requirements concerning minority membership can influence the effective operations of a PAC and can determine the extent to which the parents' ideas and desires are appropriately considered.

Even with regard to majority group membership, however, there are indications that problems exist. Research from case studies in 32 school districts suggests that the spirit of the 51% rule may be violated when principals tend to dominate or excessively influence the choice of members. In many instances, principals or other staff members may nominate or appoint the Title I parents who serve on the PACs. Information collected from the National Survey of Compensatory Education provides a broader indication of the procedures through which parents become members of a PAC.

Of the PAC chairpersons interviewed, 59% reported that current members of their PACs were not elected, and 41% reported that members were elected. Of those reporting that PAC members were elected, most reported that election was by the parents of children in the Title I program. When asked whether any of the current members were appointed, approximately 52% responded "yes" and 48% responded "no." While there seems to be variability in how parents have become PAC members, those who were elected (rather than appointed) seem to represent parents of pupils participating in the program.

School districts vary in the ways they relate employment within the school system to PAC membership. In some districts, school employees are allowed to be members of the PAC; in other districts, employed parents may be PAC members, but they must not exercise voting rights; still other districts do not exclude eligible parents from PAC membership solely on the basis of their employment with the school system. Clearly, this is an area with considerable variability, and the fact that the regulations do not address this issue facilitates such variability. Table 25 gives a detailed picture of some of the patterns of employment and PAC membership:

TABLE 25
SCHOOL-RELATED POSITIONS HELD BY PAC MEMBERS

	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
District superintendent of education	1.0%	85.7%	13.3%
In any other district-level position	6.9	77.9	15.2
Principal or assistant principal in this (school/district)	1.0	92.7	6.3
Teacher in this (school/district)	8.8	84.7	6.5
Teacher's aide in this (school/district)	25.5	65.5	9.0
School-based medical person in this district	3.2	91.1	5.7
School-based social worker in this district	3.3	90.0	6.7

Analyses also looked at how long persons served as PAC members and whether there was an established period of participation. This area was considered important because turnover in membership can affect the stability of the PAC and its effectiveness in providing the LEA with advice. The length of PAC members' tenure is not specified in the regulatory framework. National survey data indicate that little has been done to supplement the framework in this area, since no specific term of service was indicated by 58% of the PAC chairpersons surveyed. The length of time persons spend as PAC members was reported as highly variable.

Meetings

An indicator of PAC activity may be the frequency of meetings. While research has not identified an optimal incidence of meetings, it is plausible that frequent meetings are more likely to present parents with opportunities to affect the administration of Title I programs. The frequency of meetings is especially important if an agenda of real consequence is discussed and if the LEAs are aware of the tenor of these discussions. According to the national survey, 62% of the PACs meet less than once a month; 37% of the PAC chairpersons report that their

PACs meet about once a month. No data are currently available from the NIE studies of the actual content of these meetings.³

Varying Interpretations of the Role of PACs

The ways PAC members, the LEAs, and the SEAs view the role of PACs is determined by the Federal and state regulatory structures and by an informal negotiating process.⁴ While the advisory function of the PACs is noted in the regulations, there is considerable flexibility permitted in the ways in which SEAs can interpret the term "advisory"; therefore, the SEA can play an important role in shaping the PAC role by drafting its own regulations and guidelines. Analyses suggest that this SEA function can, in fact, explain some of the variability of PAC roles (Silverstein and Schember, 1977). Additionally, the methods the SEA uses to enforce regulations and ensure compliance with the PAC requirement can influence the ways the PAC views its role.

Evidence that PAC involvement varies among districts is provided by district case studies (Goettel and Kaplan, 1977). A synthesis of research in 32 districts finds that district PACs may have one of these three roles:

- (1) As a support for school officials and Title I program operations
- (2) As a vehicle of improving the parent's capacity as a parent

³ It is, however, interesting to note that some States specifically require that minutes be taken at these meetings, which then must be attached to the Title I application.

⁴ Although research is only suggestive, there is some corroborative evidence highlighting the importance of the negotiating process between the LEAs and the PACs. Recent analyses of PAC activity and the lack of specific requirements in the law led Vanecko et al. (1977) to conclude that LEAs and PACs must mutually define the role of the PAC. They also noted that a paid parent coordinator can play a valuable role in increasing the involvement of PAC memberships and serving as a liaison between the home and the school.

- (3) As a way to involve parents in Title I planning, budgetary reviews, needs assessment, evaluation, and monitoring activities

The variation among these three distinct roles can be linked to differences in SEA guidance and attitudes held by state and local officials.

The NIE survey data show that PAC members themselves also have varied opinions about their primary roles and report participating in a wide range of school-related activities. When PAC chairpersons were questioned about the general purpose of PACs and the types of involvement in compensatory education, results indicated that 55% of the chairpersons view PACs as a means of involving parents in their children's education and 42% view the PAC's role as advisory to the district. Questions about involvement in specific activities also indicated that PAC members play varied roles. The results illustrated in Table 26 indicate the various ways in which PACs are involved in Title I.

Planning

Title I regulations require the involvement of PACs in the "planning, development, operation, and evaluation of programs under Title I." PAC involvement in the planning cycle may lay a critical foundation for the PAC's subsequent involvement in other program areas and concerns. For this reason, a measure of how frequently PAC members attend district planning meetings other than the regular PAC meetings provides some indication of their awareness of the overall district program. Attending such meetings may also allow members to influence this aspect of local Title I administration.

National survey data indicate that 52.5% of the PACs were not involved in these planned meetings. Of those chairpersons polled, 23.1% responded that their PAC members were involved; 24.4% did not know. Those PACs that were involved in planning meetings felt that their role was advisory in almost 90% of the cases. When asked what was discussed at these meetings, PAC members reported that the meetings covered a wide range of topics. Most frequently mentioned, however, were needs assessment and evaluation. Table 27 illustrates which areas were discussed at these meetings and how frequently they were discussed.

TABLE 26
PAC INVOLVEMENT IN VARIOUS COMPENSATORY
EDUCATION FUNCTIONS

	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Participated as paid aides in the classrooms?	12.4%	73.8%	13.7%
Participated as volunteer aides in the classroom?	31.2	55.1	13.7
Observed classroom activities?	68.8	21.7	9.5
Been involved in field trips?	25.6	63.5	10.9
Attended PAC meetings?	87.9	7.9	4.2
Participated in meetings, other than PAC meetings, to plan the compensatory education program in this district?	35.7	52.2	12.1
Participated in training sessions or seminars?	28.6	59.1	12.3
Organized training sessions or seminars for parents who are not members of PAC?	15.6	78.3	6.1
Evaluated the compensatory education program or programs in this (school/district)?	50.4	39.8	9.8
Participated in parent/teacher conferences?	68.8	30.9	.2
Participated in parent/principal conferences?	49.1	41.3	9.5
Organized conferences between parents and school personnel?	14.1	72.0	13.9
Sent informative letters to Title I parents?	55.0	44.1	.9
Worked jointly with teachers to define students' learning goals?	44.0	44.0	12.1

TABLE 27
AREAS DISCUSSED AT DISTRICT-LEVEL MEETINGS

	<u>Often</u>	<u>Some- times</u>	<u>Never</u>	<u>Don't Know</u>
Needs assessment	51.9%	27.5%	-	20.5%
Goal setting	33.1	31.5	.4	35.1
Evaluation	48.2	30.3	-	21.5
Teacher techniques and approaches	27.4	33.7	3.6	35.4
Budget considerations	18.3	28.1	18.3	35.4
Parent participation	29.5	49.0	-	21.5
Coordination between regular classroom teachers of CE students and CE teachers who also work with these same students	32.5	29.6	.5	37.3
Pre- or inservice CE training	20.9	22.7	19.1	37.3
Instructional planning	13.3	62.9	2.9	20.9

The national survey also collected data on whether PAC chairpersons were satisfied with the planning process. Of those questioned, 71.3% were very satisfied and 28.4% were somewhat satisfied.

Training

Adequate training for PAC members is critical in a program as complex as Title I. NIE research has documented the consistency of the legal framework but noted its lack of clarity. Many state and local administrators have also observed that the Title I administrative processes are exceedingly complex. Under these circumstances, PAC involvement is more likely to be effective if PAC members receive some form of training. For example, training may involve the dissemination of Title I rules and regulations along with explanations. According to the regulations, PACs are to receive copies of the district's Title I application and copies of both state and local evaluation reports. Other aspects of training could include a general orientation to the philosophy of compensatory education and how it relates to the regular school program.

The national survey gathered information detailing some of the training procedures. Twenty-nine percent of the districts offer training sessions, while 59% do not. Of those chairpersons polled, 12% did not know whether or not their districts provided training sessions. In 16% of the districts, parents who were not PAC members participated in the training, according to the PAC chairpersons. A very significant majority of PAC chairpersons felt that aspects of the training are either very or somewhat important. Sixty-eight percent responded in these two categories; 3% did not feel that aspects were at all important, and 30% said they did not know whether their training was important.

Case study research augments and partially explains some of these survey findings. Inadequate dissemination of materials may explain the low level of information given to parents in a typical LEA. Some evidence suggests that only those training materials that are legally required are distributed frequently. In many instances, the legal language of the Title I regulations presents an obstacle for laypersons. Some States have developed handbooks for PACs, but the extent to which these handbooks overcome the obstacles has not been determined. In general, school officials have not found effective ways to provide parents with technical assistance in performing their role as PAC members. However, in some States, the SEA has added a requirement for training at the local level (Goettel and Kaplan, 1977; Silverstein and Schember, 1977).

Evaluations

Title I evaluations provide PAC members with the kinds of information they can use to decide whether Title I programs adequately serve their children and may also lead parents to make recommendations for improvement of some aspects of Title I programs. Data collected as part of the national survey indicate that PAC members are somewhat knowledgeable about the results of Title I program evaluations, although the extent to which they actually participate is unknown. More specifically, 67% of the chairpersons knew that the district conducted an evaluation of the Title I program, but 76.5% did not know whether the State also

conducted an evaluation. A majority of the PACs received written copies of the evaluation report. Of the chairpersons polled, 55.3% reported receiving such reports, 33.6% did not receive them, and 10.9% did not know. Ninety-nine percent of the PACs automatically received these reports. PAC chairpersons were generally aware that evaluation reports provide information about instructional as well as other aspects of Title I services. They generally understood that these reports present descriptions of student progress by grade, school, and district.

DISCUSSION

It is apparent from these analyses that there is considerable confusion about the role of PACs and that their operational characteristics vary widely.

Neither the PAC members themselves nor the state and local staff who administer the Title I program have a clear and consistent idea of PAC responsibilities and requirements. The term "advisory" has been interpreted in a wide variety of ways to include the whole range of possible parental roles, from instructional involvement to administrative decisionmaking.

In each of the areas of actual functioning examined in the national survey, considerable variation was reported in practices. Further, NIE administrative studies also indicated that state and local officials varied in how they related to PACs and in the degree to which attempts were made to aid and support them in the Title I program.

Analyses of the Title I legal framework (Silverstein and Schember, 1977) suggest that this confusion is at least in part a function of the nature of the rules and regulations governing PAC operation. The current Federal regulations do not define the specific activities in which PACs are to be involved, but rather provide only general guidance. The regulations are written primarily from a perspective of what LEAs "shall do" or "provide," and even here there is considerable flexibility. Since States have only infrequently taken the lead in further clarifying PAC

activities and responsibilities, PAC functions in the Title I program remain confused and highly variable.

In order to clarify the regulations, it is important that a consensus first be reached on what, in fact, Title I PACs are intended to do. PAC members are not the only group confused about their roles: even at the Federal level a variety of beliefs about parent involvement coexist, and a clear policy had not emerged. PACs can assume the role of decisionmakers, advisors, instructional participants, concerned parents, and community liaison personnel. Exactly what is intended by the framers and supporters of the program requires considerable clarification.

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CHAPTER V. LOCAL ADMINISTRATION OF TITLE I

SUMMARY

This chapter presents a general description of how local school districts perform their administrative responsibilities under Title I. It focuses on those management factors important to the success of compensatory programs in improving student development. These factors were identified from a review of previous research and from the observations of successful compensatory education teachers expressed at a special conference convened as a follow-up to the Instructional Dimensions Study. The nationally descriptive information was collected as part of the 1975-76 NIE National Survey of Compensatory Education.

Data from the national survey indicate that most districts plan for Title I activities by convening meetings in the late spring and the summer preceding the school year. During these meetings, such topics as needs assessment, evaluations, budget, and parent participation are discussed. Although three-fourths of the districts make provisions for principal and teacher involvement in planning, a very low percent of all Title I principals and compensatory education teachers actually attend planning meetings. Even districts with stable and well-planned programs, however, may not include teachers in the planning process. Instead, district plans are developed which broadly define the Title I program goals, management schemes, and general curricula.

Within this general structure of district plans, school-level planning is an important way of providing for flexibility in program design. Approximately 70% of Title I schools hold planning meetings. These meetings almost always involve compensatory education teachers, and they often involve the homeroom teachers of

compensatory education students as well. Such a procedure allows for and encourages the coordination of Title I programs with the regular instructional program.

Principals can play an important leadership role in Title I programs. The survey information indicates that Title I principals are involved in planning and are very often aware of ongoing compensatory activities. Yet teachers do not feel that principals exercise excessively strong control over individual classroom procedures. Thus, within the classroom, teachers generally feel free to adapt the program to meet the needs of individual students. Only a limited percent of compensatory education teachers feel they have little or no flexibility in developing the instructional program for their own classes.

Evaluation activities are intended to meet both national and local needs. However, the findings indicate that it may be difficult to accomplish these two separate functions with a single evaluation procedure. The results of state and district evaluations are not broadly disseminated to principals or to teachers. Further, when teachers do receive these evaluations, they question their usefulness as a tool for program change and generally feel that standardized tests provide little information of relevance to classroom instruction.

INTRODUCTION

Previous reports of the NIE Compensatory Education Study examined how Federal and state governments administer Title I and described the services actually delivered by local school districts. This chapter looks at local practices in administering these services.

Within the overall framework of the direction provided by Federal and state administration, local school districts have wide latitude in designing and implementing Title I programs. Local personnel are responsible for many administrative activities, including planning, implementing, and evaluating the

services delivered to students under Title I. Because local administrative responsibilities are so extensive, more knowledge of how Title I districts go about these activities is important in understanding the factors affecting the operation of Title I.

A description of these local administrative activities is also the first step in understanding the full implications of numerous current research studies. Recent research suggests that the success of instructional programs depends on choices made at the local level. The results of a wide variety of studies indicate that organizational and administrative factors may be critical to the effectiveness of programs aimed at improving children's achievement. In a major study of the main components of effective program implementation, researchers found that adaptive, flexible planning was crucial; that the involvement and support of all administrative levels was important; and that successful programs were those in which teachers were involved in meetings and decisions on implementation (Berman and McLaughlin, 1975).

Several other studies of the factors related to achievement gains have emphasized the importance of school-level management for program success. For example, considerable evidence indicates that leadership from the principal and his/her involvement in planning and organizing the instructional program are necessary for the program's effectiveness. These studies suggest that schools with high achievement levels are those in which the principal is actively involved in coordinating, planning, and setting priorities (Dykstra, 1968; Weber, 1971; Mayeske, 1976; New York State, 1974). School-level organizational factors such as the exchange of ideas among staff, the participation of teachers in the planning process, and coordination among teachers may also help to make programs effective.

NIE's major study of the effects of services on student development provides indirect support for the importance of administrative factors. The overall results of the Instructional Dimensions Study (IDS) indicated that compensatory education students in well-planned and well-implemented programs made large achievement

gains.¹ The gains may be due in part to the structure and organization of programs included in the sample. Although the classrooms in the IDS were not special demonstration projects, they may have been better planned, organized, or managed than is typical of programs serving similar students.

This chapter presents a general description of how Title I districts perform their administrative responsibilities. The quantitative data provide baseline information on the frequency of planning meetings, on who participates in the meetings, and on opportunities available for information exchange and coordination at the district and school levels. Such descriptive information is a first step in any attempt to understand the dynamics of the planning and implementation processes. The chapter also describes local evaluation procedures and considers the usefulness of evaluation results for local planning and program design. Interviews conducted with district administrators, Title I principals, and teachers as part of the NIE National Survey of Compensatory Education² provided the source of information for this description.

The second source of information drew upon teachers' observations on the characteristics of successful compensatory education programs. As a follow-up of the IDS, the Compensatory Education Study staff convened a conference of teachers from IDS schools where the teachers could reflect on their experience and also augment or explain the study findings. During the conference, teachers discussed the significance of various aspects of management and planning; this discussion provides some qualitative information on the relative importance of these procedures. Where relevant, this chapter notes the prevailing opinions expressed at the conference.³

¹Results of that study were reported in The Effects of Services on Student Development (NIE, September 1977).

²See Appendix D for a complete description of the survey design.

³A report on the conference will be available in October 1978.

LOCAL PLANNING AND IMPLEMENTATION

Scope of Local Administrative Effort

In Compensatory Education Services (July 1977), NIE provided a breakdown of national LEA Title I expenditures into three categories: instructional services (74.3%); noninstructional services (4.5%); and other (21.1%). The 21% of national LEA Title I expenditures assigned to "other" can be further divided as indicated in Table 28. Three of these categories (fixed charges, operation of plant, and capital outlay), which together account for 14% of expenditures, are costs associated with the delivery of Title I services. Approximately \$68 million (4%) of national LEA expenditures pay for local administration. If we include the miscellaneous category in administrative expenses, the maximum estimate of funds spent for administration at the local level is approximately \$119 million. The range of administrative expenditures for individual Title I districts is quite large: many districts do not charge any administrative expenses to Title I, whereas in others, such expenses can constitute up to 29% of the Title I budget.

In terms of administrative staff, the \$68 million in Title I funds paid the salaries for an estimated 2500 full-time equivalent (FTE) district administrative personnel.⁴ The range for individual districts is again quite large, from no district-level administrative personnel paid from Title I funds to over 100 FTE.

Expenditures for district administration and staff are related to the size of the school district. According to survey estimates, approximately 85% of Title I districts have fewer than 4359 students enrolled. Since many of these districts have only one or a few Title I schools, relatively low administrative expenses and staff levels can be expected. Large Title I school districts, on the other hand, are

⁴In many districts, individual staff members work part-time on Title I and have other duties as well. Using the FTE figure gives a better indication of the size of administrative staff.

much more likely to have large numbers of administrative personnel and to use a higher percentage of Title I funds for district administration. Table 29 illustrates this relationship.

The survey also collected some information on the backgrounds of the district-level personnel responsible for administering the Title I program.⁵ Of these district officials, 94.6% have had at least some full-time teaching experience. In most cases, however, their jobs immediately prior to this one were also administrative, either in the district office or as principals; only 26% went directly from teaching to district Title I administration. The survey information also indicates considerable stability of district Title I personnel: the average administrator had been in his/her current position for approximately 5 years and had worked in the district for an average of 10 years.

District Planning Activities and Participants

Data collected in the national survey allow us to describe the formal planning procedures followed by Title I school districts as well as who participates in district planning. In addition, the data provide information about the degree to which district management restricts or permits school-level flexibility in implementing program plans. These national practices can then be compared with the district planning procedures associated with successful programs.

Most Title I districts begin planning an average of 5 months (or around April) before the school year begins. Approximately 7% of the districts begin planning as much as a year or more before the fall semester. Among the districts holding formal planning meetings, the number of meetings varied widely, ranging from 1 meeting to over 50 and averaging 6.

⁵We might note that the survey data indicate that very few districts have a separate Title I department; usually it is part of some sort of special program office. The specific organizational structure varies considerably in local school districts.

TABLE 28
BREAKDOWN OF "OTHER" LEA EXPENDITURES

<u>Category</u>	<u>Expenditure, %</u>	<u>Description</u>
Administration	4	Costs of salaries and equipment used by LEA Title I coordinator and staff
Operation and maintenance of plant	2	Costs of school plant when only Title I programs are operating, e.g., during summer school
Fixed charges	11	Benefits to Title I teachers and administrators, including social security, insurance, and retirement
Capital outlay	1	Purchase of equipment for Title I
Miscellaneous	<u>3</u>	Debt service, school security, other expenses
Total	21	

TABLE 29
SCOPE OF ADMINISTRATIVE EFFORT AND
DISTRICT SIZE (ENROLLMENT)

	<u>Large</u>	<u>Medium</u>	<u>Small</u>
Average no. of FTE administrative staff	4.38	0.31	0.03
Percent of Title I expenditures for administration	3.8	3.5	2.6

In contrast to this average, IDS districts showed a higher number of planning meetings over a longer period of time; these districts began planning an average of 16 to 20 months ahead of the school year. During the year immediately preceding implementation of the program, they averaged eight or nine meetings. Since these districts were selected on the basis of having well-implemented programs, this more intensive planning effort might be expected.

The formal district planning process is limited in a significant number of districts. Approximately 16% of the Title I districts, including many with either one or a few schools, did not conduct any formal planning meetings. In these small districts, planning may take place at the school rather than the district level.

In the survey, district Title I administrators were also asked to rate the frequency with which different topics were discussed at their planning meetings. As Table 30 indicates, there were no clear-cut differences in the frequency with which most topics were discussed, with two exceptions: training was discussed often in only 27% of the districts, and the subject most frequently discussed was needs assessment; approximately 80% of Title I districts reported discussing this topic frequently, and the rest discussed it sometimes.

The exact content of these discussions of needs assessment requires clarification. From the perspective of the Title I regulations and interpretative statements, the needs assessment procedure is a formal process designed to furnish districts with the information they need for making decisions about the kind of Title I services they ought to provide. However, Silverstein and Schember (1977) noted that many States and districts do not fully understand the steps in this procedure since the regulations themselves are unclear. Under these circumstances, NIE infers that the frequent mention of needs assessment as a discussion subject probably does not refer to the formal process. Instead, it is likely that local officials consider informal staff discussions about the perceived needs of students for a certain type of service to fall into this survey category.

TABLE 30

TOPICS DISCUSSED AT DISTRICT PLANNING MEETINGS

Topic	% of School Districts		
	Often	Sometimes	Never
Needs assessment	79.2	20.8	0
Goal setting	56.4	43.6	0
Evaluation	54.4	45.6	0
Teaching techniques and approaches	44.3	53.7	2.0
Budget considerations	45.0	51.9	3.1
Parent participation	51.4	48.4	0.2
Coordination between regular classroom teachers of CE students and CE teachers who also work with these students	52.8	46.1	1.1
Pre- or inservice CE training	27.3	59.4	13.3
Instructional planning	52.5	36.6	10.9

The impression gathered from the IDS conference is that district planning remains at a very general level even in districts with quite successful programs. IDS district plans established broad goals and specified instructional management schemes and general curricula, but did not specify how teachers were to behave in their classrooms (Botel, 1978).

The breadth of staff participation in these planning meetings can indicate the posture of the district toward coordinated planning. In the majority of districts, a wide variety of staff, including principals and teachers, attend at least some district-level planning meetings. Table 31 indicates the percentage of Title I districts in which different types of people participated in some planning meetings. The fact that most districts include principals or teachers in the planning process does not, however, mean that all Title I principals or compensatory education teachers participate. In fact, the survey data indicate that only one or a few principals and teachers in any district are likely to participate in district-level planning. For example, Title I principals do not necessarily attend all district-level meetings, and 14.1% do not attend any. Only 20% of all compensatory education teachers and less than 10% of all homeroom teachers of compensatory education children attended any district-level planning meetings. Although IDS schools had stable and successful programs, very few IDS teachers were involved in district-level planning (Botel, 1978).

TABLE 31

PARTICIPATION AT DISTRICT PLANNING MEETINGS

<u>Attended Planning Meeting</u>	<u>% of Title I Districts</u>
CE teachers	75.9
Other CE staff	68.4
Non-CE teachers	61.8
Principals/asst. principals	93.6
District-level staff	81.4
Parents	74.2

Finally, the survey data provide some indication of whether these meetings result in Title I instructional program designs which are fixed or whether schools can adapt programs to their own situations once the school year has begun.

If we consider together responses categorized as "a great deal" and "some" in Table 32, it is apparent that district administrators believe that the schools have considerable flexibility in designing particular instructional programs. This is especially significant in the light of research and the IDS conference discussion which suggest that school-level management decisions have the most impact on program success.

TABLE 32
LATITUDE OF SCHOOLS TO ALTER
DESIGN OF TITLE I PROGRAMS

	% of Districts		
	<u>Reading</u>	<u>Math</u>	<u>Language Arts</u>
Great deal	32.7	46.7	38.0
Some	44.3	28.6	42.6
Very little	12.6	16.5	13.5
None	10.2	8.2	5.7

School-Level Administration

It is at the school and classroom level that decisions are made by those people in closest contact with compensatory education students. In the national survey, NIE collected information about year-ahead planning activities and about implementation within Title I schools. NIE then analyzed the extent of involvement of principals and teachers in implementation and the degree of coordination between regular classroom and compensatory education teachers. These factors have been identified as crucial to program success.

School-level planning appears to be quite frequent; approximately 70% of Title I schools held planning meetings for the following year's Title I program. The number of meetings varied widely, from 1 to over 60, and averaged 5.

Principals were asked to rate how frequently certain topics were discussed at these school planning meetings (Table 33). In contrast to district planning, the topic frequently discussed by the largest percentage of schools was coordination between regular and compensatory education teachers. A wide variety of other topics were also rated as frequently discussed. Instructional planning and teaching techniques were more likely to be discussed frequently at school planning meetings than in district meetings.

Approximately 80% of the principals attend at least some of these Title I planning meetings. In more than 90% of the schools, compensatory education teachers are frequently involved in these meetings; in a majority of the schools, regular teachers are also involved. Table 34 presents information on the percentage of Title I schools in which various types of people participate in planning.

The extensiveness of staff activity after planned programs are implemented provides another dimension of analysis. Almost all Title I schools (84.6%) held at least some staff meetings to discuss the workings of the current (rather than the projected) compensatory instruction program. In the 6 months prior to the survey, these schools averaged 5 meetings, although the range was from 1 to over 60. In most schools, these staff meetings were attended by both regular and compensatory education teachers; compensatory education teachers participated in 87.5% of the schools and regular teachers in 78%. Survey data from teacher interviews indicate that most of the compensatory education and homeroom teachers in a school are likely to attend these meetings.⁶

⁶Seventy-five percent of all compensatory education teachers attended these meetings, while 63% of all homeroom teachers did so.

TABLE 33

TOPICS DISCUSSED AT SCHOOL PLANNING MEETINGS

<u>Topic</u>	<u>Often</u>	<u>% of Schools Sometimes</u>	<u>Never</u>
Needs assessment	62.6	33.2	4.3
Goal setting	56.3	38.9	4.7
Evaluation	61.1	35.5	3.3
Teaching techniques and approaches	52.3	42.7	4.8
Budget considerations	32.6	43.5	23.7
Parent participation	34.9	53.5	11.5
Coordination between regular classroom teachers of CE students and CE teachers who also work with these students	70.2	23.8	5.9
Pre- or inservice CE training	24.4	56.5	19.1
Instructional planning	60.0	36.1	3.9

TABLE 34

PARTICIPATION AT SCHOOL
PLANNING MEETINGS

<u>Kind of Participant</u>	<u>% of Title I Schools</u>
School administrative staff	64.7
CE teacher	90.7
Non-CE teachers	56.3
Parents	65.3

The attendance of both regular classroom and compensatory education teachers at compensatory education staff meetings is one indication of the degree of coordination between the regular and compensatory programs as the school year progresses. In addition, teachers may make individual efforts to coordinate the two types of instruction. Eighty-three to 85% of all compensatory education teachers in reading, math, and language arts programs indicated that they made some individual effort to coordinate their compensatory instruction in these subjects with instruction by regular classroom teachers of their compensatory education students. This high degree of staff interaction is especially encouraging, since IDS teachers identified joint planning as a benchmark of successful programs (Amarel, 1978).⁷ Of course, information about the number of staff meetings and the high level of participation does not, in itself, indicate the quality of program implementation in Title I schools, but does suggest that there is substantial communication.

The degree to which teachers have flexibility in adapting plans to the circumstances in their own classrooms appears to be important. A major theme

⁷Coordination is likely to be especially important in pullout programs, where the classroom teacher is not present during the compensatory instruction. The majority of compensatory education students nationwide receive their compensatory education instruction in a pullout situation.

emerging from the IDS conference was the extent to which these successful teachers felt free to adapt programs to the needs of their students. In the view of these teachers, adaptive planning meant enough classroom autonomy to initiate changes and to modify and experiment within the framework of program guidelines (Botel, 1978).

The data collected by the survey suggest that compensatory education teachers generally do feel free to adapt the instructional program as they deem appropriate (Table 35). The percentage of compensatory education teachers who feel they are able to make such changes is encouraging, particularly in view of findings from the IDS conference which suggest that this flexibility is an important factor.

TABLE 35
TEACHERS' LATITUDE TO ALTER
PROGRAM DESIGN

<u>Degree of Latitude</u>	<u>% of CE Teachers</u>
Great deal	47.9
Some	38.3
Very little	9.5
None	4.3

Extant research in school organization as well as the IDS conference note that the active involvement and leadership of the principal has a strong impact on the quality of instruction (Botel, 1978). This leadership may be marked by the extent to which the principal is involved in planning, monitoring, and conferring with teachers. The survey data present some evidence about the involvement of principals in Title I program implementation; these data also provide some indication of the extent of the principals' awareness of program components and dimensions.

Principals were asked about the instructional activities and approaches of the compensatory education teachers in their schools, and their responses were then matched with answers to the same questions from these teachers. While precise estimates cannot be made, analysis of these data shows that Title I principals are generally well informed about the activities of compensatory instruction personnel; they are aware of the amount of time for instruction, of grouping practices, and of the general instructional techniques used by these teachers.

LOCAL EVALUATIONS

Evaluation has been a key component of the Title I program since its passage in 1965. The original Title I legislation included a three-tiered reporting system which included local evaluations, state reports, and an annual national report from OE to Congress. One purpose of local evaluations was to provide the basis for aggregated data on Title I's effectiveness nationally. In response to extensive debate about these national procedures, OE has attempted to require more uniform local evaluation procedures in the hope that aggregated data will more accurately reflect the true national situation.

Local evaluations were also intended to provide useful feedback to those who design and plan programs at the local level. But it is not clear that the same type of evaluation can be used for national evaluation and local program planning, since national reporting requires uniform, standardized results that can be aggregated across districts. However, teachers at the IDS conference indicated that this standardization makes the results less useful for them. The IDS teachers felt that the Title I testing programs in their districts were not valuable except as a mechanism for ranking students and that standardized tests did not, and could not, provide them with information that was useful in modifying or improving their approaches or techniques (Leinhardt, 1978).

The NIE National Survey collected some information about local Title I evaluations. First, some kind of formal evaluation, either state or locally organized, takes place in all but 2.4% of Title I districts. In addition,

approximately 12% of Title I schools conduct their own separate evaluation of their Title I program.⁸

Second, over 95% of those districts conducting evaluations rely primarily on standardized student achievement tests to measure the effects of Title I instruction on student development, with no test being consistently preferred. Local school personnel administer these tests in nearly all cases; less than 1% of the districts use outside evaluators.

Third, less than 50% of the Title I districts include measures of noncognitive development in their evaluations of Title I instructional services. To some extent, this absence undoubtedly reflects the problems with existing measures of affective outcomes. Of course, Title I programs may include noninstructional services, and other aspects of the instructional programs could be evaluated. Table 36 presents information on the extent to which certain other aspects of Title I programs are evaluated at the local level.

The survey also collected information on the procedures through which the results of these evaluations are used and disseminated. All district administrators in districts where evaluations are conducted receive the results, which are usually provided by school and by grade level as well as by individual students. However, the material and information from state and district evaluations usually does not circulate below the district level. Only 20% of Title I principals receive the written results of state evaluations, and only 26.7% receive the results of district evaluations. Survey data from interviews with compensatory education teachers reinforce the impression that the usefulness of these evaluations is limited below the district level.⁹ Approximately 30 to 34% of the compensatory education

⁸These school evaluations appear to be more informal. Less than half use standardized tests to assess student achievement.

⁹A recent study of Title I evaluations in 15 districts also suggests that evaluation results do not serve as a guide to program improvement, even at the district level (David, 1976)

teachers in reading, math, and language arts were not even aware of whether their districts conducted a formal evaluation of the Title I program. Approximately 40% of the compensatory education teachers in these areas received written results of the evaluations. Of these, 75 to 80% got the results in the form of individual student scores, which would presumably be the most useful format for feedback to teachers. Overall, approximately 65% of all compensatory education teachers either did not receive evaluation results or thought the results were not at all useful when asked to rate them.

Because OE is interested in increasing the uniformity of evaluation data to aid in national reporting, it may be unrealistic to expect that formal Title I evaluations will be very useful for local planning and implementation at the school and classroom levels. To serve as useful local feedback, another evaluation procedure may be needed, but whether local school districts can afford the time and effort to do both remains an open question.

TABLE 36

EVALUATION OF VARIOUS ASPECTS
OF TITLE I PROGRAMS

<u>Program Component</u>	<u>% of Districts Evaluating</u>
Effectiveness of supportive services	40.6
Teacher/pupil interaction	32.4
Teacher performance	16.2
Quality and availability of instructional materials	40.0
Use of aides and volunteers	56.3
Parent participation	68.3

124
135

DISCUSSION

How local school districts go about planning, implementing, and evaluating the services delivered to students under Title I is likely to have an impact on the success of these services in improving student development. Certainly the IDS conference of successful teachers reaffirmed other research results showing the importance of planning and implementation for the success of the programs.

Given this background, the descriptive information in this chapter provides an encouraging picture. While few Title I principals and teachers appear to be involved in district planning meetings, the data indicate that within the general structure of district plans, school-level planning allows flexibility in designing services to meet the needs of students. The extensiveness of school-level planning revealed by the national survey data is particularly important in view of the emphasis which the IDS teachers put on joint planning and coordination between regular and compensatory education teachers as a crucial factor in successful compensatory education programs. According to the national survey, school planning meetings almost always involve compensatory education teachers, and they often involve the homeroom teachers as well. In addition, most compensatory education teachers indicated they made efforts to coordinate their Title I program with the regular instructional program.

Considering the extent to which IDS teachers believed that active principal involvement was important in their programs, it is significant that the national survey results indicate that Title I principals generally play an active role in planning and are aware of the compensatory education practices of individual teachers. The national survey data also indicate that, within the classroom, teachers generally feel free to adapt the program to meet the needs of individual students. Only a limited percentage of the compensatory education teachers felt they had little or no flexibility in doing so.

Finally, the survey data reinforce the impression conveyed at the IDS conference that evaluations designed to provide uniform, standardized results at the

national level contribute little to successful local program planning. The results of state and district Title I evaluations are not broadly disseminated to principals or to teachers. The survey results indicate that when teachers do receive these evaluations, they find them of little use as a tool for program change.

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APPENDIX A. SECTIONS 821 AND
150 OF PUBLIC LAW 93-380

110



Public Law 93-380
93rd Congress, H. R. 69
August 21, 1974

An Act

To extend and amend the Elementary and Secondary Education Act of 1965, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Education Amendments of 1974".

PART B—EDUCATIONAL STUDIES AND SURVEYS

STUDY OF PURPOSES AND EFFECTIVENESS OF COMPENSATORY EDUCATION PROGRAMS

SEC. 921. (a) In addition to the other authorities, responsibilities and duties conferred upon the National Institute of Education (hereinafter referred to as the "Institute") by section 405 of the General Education Provisions Act and notwithstanding the second sentence of subsection (b) (1) of such section 405, the Institute shall undertake a thorough evaluation and study of compensatory education programs, including such programs conducted by States and such programs conducted under title I of the Elementary and Secondary Education Act of 1965. Such study shall include—

(1) an examination of the fundamental purposes of such programs, and the effectiveness of such programs in attaining such purposes;

(2) an analysis of means to identify accurately the children who have the greatest need for such programs, in keeping with the fundamental purposes thereof;

(3) an analysis of the effectiveness of methods and procedures for meeting the educational needs of children, including the use of individualized written educational plans for children, and programs for training the teachers of children;

(4) an exploration of alternative methods, including the use of procedures to assess educational disadvantage, for distributing funds under such programs to States, to State educational agencies, and to local educational agencies in an equitable and efficient manner, which will accurately reflect current conditions and insure that such funds reach the areas of greatest current need and are effectively used for such areas;

(5) not more than 20 experimental programs, which shall be reasonably geographically representative, to be administered by the Institute, in cases where the Institute determines that such experimental programs are necessary to carry out the purposes of clauses (1) through (4) and the Commissioner of Education is authorized, notwithstanding any provision of title I of the Elementary and Secondary Education Act of 1965, at the request of the Institute, to approve the use of grants which educational agencies are eligible to receive under such title I (in cases where the agency eligible for such grant agrees to such use) in order to carry out such experimental programs; and

(6) findings and recommendations, including recommendations for changes in such title I or for new legislation, with respect to the matters studied under clauses (1) through (5).

(b) The National Advisory Council on the Education of Disadvantaged Children shall advise the Institute with respect to the design and execution of such study. The Commissioner of Education shall obtain and transmit to the Institute such information as it shall request with respect to programs carried on under title I of the Act.

(c) The Institute shall make an interim report to the President and to the Congress not later than December 31, 1976, and shall make a final report thereto no later than nine months after the date of submission of such interim report, on the result of its study conducted under this section. Any other provision of law, rule, or regulation to the contrary notwithstanding, such reports shall not be submitted to any review outside of the Institute before their transmittal to the Congress, but the President and the Commissioner of Education may make to the Congress such recommendations with respect to the contents of the reports as each may deem appropriate.

(d) Sums made available pursuant to section 151(i) of the Elementary and Secondary Education Act of 1965 shall be available to carry out the provisions of this section.

(e)(1) The Institute shall submit to the Congress, within one hundred and twenty days after the date of the enactment of this Act, a plan for its study to be conducted under this section. The Institute shall have such plan delivered to both Houses on the same day and to each House while it is in session. The Institute shall not commence such study until the first day after the close of the first period of thirty calendar days of continuous session of Congress after the date of the delivery of such plan to the Congress.

(2) For purposes of paragraph (1)—

(A) continuity of session is broken only by an adjournment of Congress sine die; and

(B) the days on which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the thirty-day period.

“ALLOCATION OF FUNDS WITHIN THE SCHOOL DISTRICT OF A LOCAL EDUCATIONAL AGENCY

“SEC. 150. (a) For any fiscal year not more than 20 local educational agencies selected for the purpose of section 821(a)(5) of the Education Amendments of 1974 may elect, with the approval of the district-wide parent advisory council which is required to be established under section 141(a)(14) of this title, to allocate funds received from payments under this title on the basis of a method or combination of methods other than the method provided under section 141(a)(1)(A). Any method selected pursuant to this section shall be so designed and administered as to be free from racial or cultural discrimination.

“(b) Any local educational agency to which this section applies shall submit such reports to the Director of the National Institute of Education at such time and in such manner as the Director may reasonably require to carry out his responsibilities under section 821(a)(5) of the Education Amendments of 1974.

APPENDIX B. ADDITIONAL TABLES FOR
DEMONSTRATION STUDY

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TABLE B-1
NUMBER OF PUBLIC ELEMENTARY SCHOOLS SERVED BY TITLE I

	1975-76			1976-77			1977-78		
	No. of Schools	No. Served	Percent Served	No. of Schools	No. Served	Percent Served	No. of Schools	No. Served	Percent Served
Districts that serve low-achieving students in all elementary schools									
Adams County #12	16	3	19	16	16	100	16	16	100
Harrison County	30	25	83	30	30	100	28	28	100
Mesa	25	14	56	25	25	100	26	26	100
Newport	9	3	33	9	9	100	9	9	100
Racine	33	16	48	33	33	100	33	33	100
Santa Fe	16	11	69	16	16	100	16	16	100
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	73	49	67	75	57	76	75	37	49
Winston-Salem	37	13	35	37	24	65	37	23	62
Districts that rank schools primarily by poverty									
Berkeley County	13	10	77	14	11	79	14	11	79
Boston	117	65	56	108	74	69	167	71	34
Houston	169	54	32	169	58	34		57	
Districts making primarily intra-school changes									
Alum Rock	19	9	47	18	18	100	18	18	100
Yonkers	31	9	29	25	9	36	25	10	40

TABLE B-2

NUMBER OF PUBLIC ELEMENTARY STUDENTS
SERVED BY TITLE 1

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	174	591	582
Harrison County	1,409	1,823	1,766
Mesa	2,494	3,229	3,787
Newport	175	445	430
Racine	760	1,552	1,472
Santa Fe	735	1,149	1,205
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	6,440	5,924	6,038
Winston-Salem	1,812	3,310	3,309
Districts that rank schools primarily by poverty			
Berkeley County	630	1,106	1,059
Boston	10,130	10,572	9,538
Houston	19,518	17,854	20,568
Districts making primarily intra-school changes			
Alum Rock	3,962	9,560	9,217
Yonkers	2,375	2,855	3,006

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TABLE B-3

PERCENT OF TITLE I STUDENTS IN DEMONSTRATION DISTRICTS
WHO RECEIVE FREE OR REDUCED-PRICE LUNCHES

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	24	21	19
Harrison County	65	58	56
Mesa	43	32	34
Newport	77	62	57
Racine	44	42	37
Santa Fe	86	75	70
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	73	61	63
Winston-Salem	64	71	65
Districts that rank schools primarily by poverty			
Berkeley County	57	57	61
Boston	91	92	96
Houston	83	85	86
Districts making primarily intraschool changes			
Alum Rock	89	78	77
Yonkers	85	72	83
Average	68	62	62

TABLE B-4

PERCENT OF TITLE I STUDENTS IN DEMONSTRATION
DISTRICTS WHO ARE MINORITY GROUP MEMBERS

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	19	26	27
Harrison County	6	4	4
Mesa	29	24	28
Newport	21	24	22
Racine	43	43	44
Santa Fe	87	83	80
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	67	60	60
Winston-Salem	54	62	59
Districts that rank schools primarily by poverty			
Berkeley County	11	8	4
Boston	73	73	72
Houston	99	98	98
Districts making primarily intraschool changes			
Alum Rock	87	78	79
Yonkers	89	70	70
Average	53	50	50

TABLE B-5

PERCENT OF TITLE I STUDENTS IN DEMONSTRATION
DISTRICTS WHO READ 1 YEAR OR MORE
BELOW GRADE LEVEL

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	83	74	91
Harrison County	67	68	57
Mesa	44	62	66
Newport	53	66	76
Racine	60	58	47
Santa Fe	64	72	63
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	83	79	78
Winston-Salem	72	88	86
Districts that rank schools primarily by poverty			
Berkeley County	79	67	65
Boston	65	64	65
Houston	67	67	66
Districts making primarily intraschool changes			
Alum Rock	49	54	49
Yonkers	61	72	62
Average	65	59	67

TABLE B-6
 CHARACTERISTICS OF STUDENTS IN TITLE I SCHOOLS
 IN DEMONSTRATION DISTRICTS*

	<u>1975-76</u>	<u>Schools Served in Both Years</u>	<u>1976-77</u> <u>Schools Served in Year 2 Only</u>	<u>Average¹</u>
Percent reading 1 year or more below grade level	35	37	28	35
Percent receiving free or reduced-price lunch	54	55	37	49
Percent minority	44	44	36	41

*From Demonstration Studies of Funds Allocation Within Districts.

Washington, D.C.: National Institute of Education, September 1977.

**Average percent of students with given characteristics in each school type,
 weighted by the proportion of each school type in the sample.

TABLE B-7

PERCENT OF DISTRICTS' LOW-ACHIEVING*
CHILDREN ENROLLED IN TITLE I SCHOOLS

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	22	100	100
Harrison County	83	100	100
Mesa	58	100	100
Newport	37	100	100
Racine	37	100	100
Santa Fe	77	100	100
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	69	86	66
Winston-Salem	39	76	56
Districts that rank schools primarily by poverty			
Berkeley County	69	76	76
Boston	69	84	78
Houston	36	41	44
Districts making primarily intraschool changes			
Alum Rock	52	100	100
Yonkers	62	62	72
Average	55	87	84

*Reading 1 year or more below grade level.

TABLE B-8

PERCENT OF DISTRICTS' POOR* CHILDREN
ENROLLED IN TITLE I SCHOOLS

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	32	100	100
Harrison County	89	100	100
Mesa	65	100	100
Newport	37	100	100
Racine	51	100	100
Santa Fe	80	100	100
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	70	88	67
Winston-Salem	42	81	63
Districts that rank schools primarily by poverty			
Berkeley County	74	80	83
Boston	70	86	81
Houston	43	47	50
Districts making primarily intraschool changes			
Alum Rock	56	100	100
Yonkers	63	73	75
Average	59	89	86

*Free or reduced-price lunch recipients.

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TABLE B-9
 PERCENT OF DISTRICTS' MINORITY
 CHILDREN ENROLLED IN TITLE I SCHOOLS

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	15	100	100
Harrison County	90	100	100
Mesa	64	100	100
Newport	39	100	100
Racine	42	100	100
Santa Fe	73	100	100
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	65	86	63
Winston-Salem	38	77	49
Districts that rank schools primarily by poverty			
Berkeley County	91	89	90
Boston	65	82	81
Houston	35	42	46
Districts making primarily intraschool changes			
Alum Rock	53	100	100
Yonkers	75	81	78
Average	57	89	85

TABLE B-10

PERCENT OF DISTRICTS' LOW-ACHIEVING*
CHILDREN COVERED BY TITLE I

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	7	29	29
Harrison County	59	75	77
Mesa	38	47	47
Newport	20	44	42
Racine	14	44	40
Santa Fe	51	66	77
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	44	54	47
Winston-Salem	26	38	31
Districts that rank schools primarily by poverty			
Berkeley County	26	45	30
Boston	47	59	46
Houston	21	20	26
Districts making primarily intraschool changes			
Alum Rock	27	99	97
Yonkers	54	47	51
Average	33	51	49

*Reading 1 year or more below grade level.

TABLE B-11

PERCENT OF DISTRICTS' POOR* CHILDREN
COVERED BY TITLE I

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	3	14	12
Harrison County	36	42	47
Mesa	28	20	24
Newport	15	22	21
Racine	8	25	20
Santa Fe	30	36	42
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	35	40	35
Winston-Salem	23	31	25
Districts that rank schools primarily by poverty			
Berkeley County	19	35	28
Boston	31	40	32
Houston	21	19	22
Districts making primarily intraschool changes			
Alum Rock	29	96	87
Yonkers	53	50	45
Average	26	36	34

*Free or reduced-price lunch recipients.

TABLE B-12
 PERCENT OF DISTRICTS' MINORITY
 CHILDREN COVERED BY TITLE I

	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools			
Adams County #12	2	15	14
Harrison County	30	35	28
Mesa	27	21	24
Newport	10	22	18
Racine	7	24	21
Santa Fe	23	29	32
Districts that rank schools by achievement and serve fewer than all elementaries			
Charlotte	32	39	33
Winston-Salem	20	28	23
Districts that rank schools primarily by poverty			
Berkeley County	26	39	18
Boston	30	38	33
Houston	15	15	19
Districts making primarily intraschool changes			
Alum Rock	28	95	87
Yonkers	61	54	46
Average	24	35	30

TABLE B-13

TIME (MINUTES PER DAY) SPENT IN COMPENSATORY AND REGULAR LANGUAGE ARTS INSTRUCTION
BY TITLE I STUDENTS IN EIGHT DEMONSTRATION DISTRICTS

	<u>Compensatory</u>			<u>Regular</u>			<u>Total</u>		
	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools									
Adams County #12	28	27	27	109	117	125	137	144	152
Harrison County	28	30	26	120	117	123	148	147	149
Mesa	37	22	29	96	116	104	133	138	133
Racine	34	25	27	112	122	131	146	147	158
Santa Fe	27	24	32	111	107	110	138	131	142
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	35	27	35	97	94	102	132	121	137
Winston-Salem	41	41	37	112	124	110	153	165	147
District that ranks schools primarily by poverty									
Houston	38	34	35	122	145	144	160	179	179

TABLE B-14

PROPORTION OF TIME SPENT BY TITLE I STUDENTS IN INSTRUCTIONAL GROUPS OF VARIOUS SIZES IN THEIR COMPENSATORY LANGUAGE ARTS CLASSES

	<u>Proportion of Compensatory Language Arts Time Spent in Groups of</u>					
	<u>Individual (1) plus Small (2-5)</u>			<u>Individual (1) plus Large (20+)</u>		
	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>
Districts that serve low-achieving students in all elementary schools						
Adams County #12	37	62	69	63	38	31
Harrison County	40	36	41	60	64	59
Mesa	97	97	96	3	3	4
Racine	100	99	98	0	1	2
Santa Fe	83	82	71	17	18	29
Districts that rank schools by achievement and serve fewer than all elementaries						
Charlotte	66	57	47	34	43	53
Winston-Salem	54	62	47	46	38	53
District than ranks schools primarily by poverty						
Houston	33	35	30	67	65	70

TABLE B-15

PROPORTION OF TIME TITLE I STUDENTS SPEND WITH DIFFERENT TYPES OF TEACHERS
IN COMPENSATORY LANGUAGE ARTS INSTRUCTION

	Proportion of Compensatory Language Arts Instruction Spent With:*								
	Instructional Specialist			Classroom Teacher			Paraprofessional		
	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78	1975-76	1976-77	1977-
Districts that serve low-achieving students in all elementary schools									
Adams County #12	84	93	92	0	6	8	10	1	1
Harrison County	94	96	98	2	4	3	3	0	0
Mesa	22	17	16	1	0	2	77	83	83
Macine	11	10	17	0	2	5	88	87	76
Santa Fe	82	79	78	5	13	18	14	7	1
Districts that rank schools by achievement and serve fewer than all elementaries									
Charlotte	86	79	89	0	13	8	10	4	2
Winston-Salem	80	68	73	2	12	9	13	18	18
District that ranks schools primarily by poverty									
Houston	86	82	80	6	5	6	7	7	10

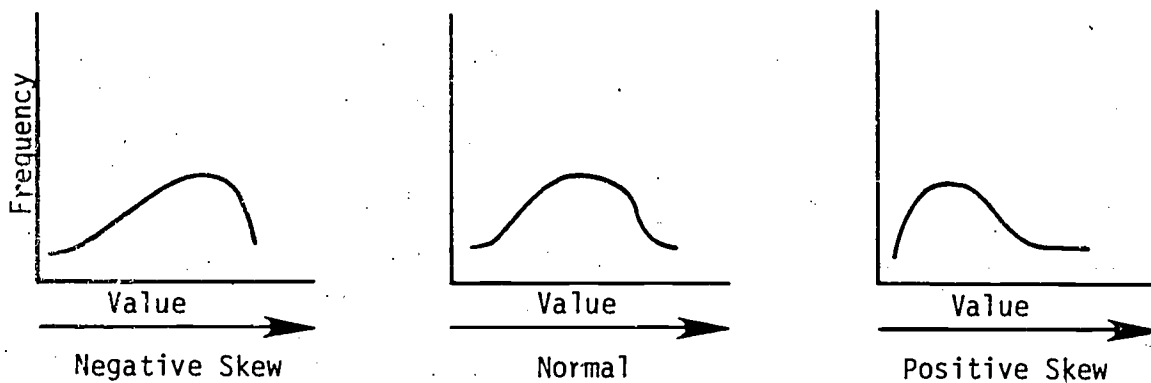
*Proportions of time do not add to 100% because time without adult attention is omitted.

APPENDIX C. TECHNICAL NOTE
ON SIMULATIONS

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As described in the penultimate section of Chapter I, a procedure which makes eligible all schools with percent low achievers above the district average tends to qualify more schools than the parallel poverty-based procedure. This appears to be a function of the shape of the school-level poverty and achievement distributions. Percent low achievers per school is essentially a more "normal" distribution with a few very low achieving schools, a few with high achievement, and many in between. Poverty, as measured at the school level, tends to be clustered in a few schools, with the balance being less poor.

One way of measuring the extent to which the shape of a given distribution deviates from the shape of a normal distribution is to compute the skewness coefficient for the distribution. A positive skewness coefficient denotes a distribution with a few very high values, stretching out the right-hand tail of the curve. A negative skewness coefficient denotes the opposite. Hypothetical normal and skewed distributions are sketched below.



The skewness coefficients for distributions of poor students and low-achieving students in the II demonstration districts for which data are available are presented below.

	<u>Poverty</u>	<u>Low Achievement</u>		<u>Poverty</u>	<u>Low Achievement</u>
Adams County	.46	-.53	Winston-Salem	.80	-.15
Harrison County	.24	.27	Berkeley County	1.14	-.26
Mesa	3.18	.76	Houston	.36	.10
Racine	1.40	.62	Alum Rock	.44	-1.09
Santa Fe	.68	.29	Yonkers	.76	.76
Charlotte	.90	.22			

As can be seen, the distributions of poverty among the schools in these districts tend to be more positively skewed than the distributions of low achievement. A distribution with positive skew will have its mean shifted slightly toward the extreme values in the right-hand tail of the curve; since there are fewer schools representing those extreme values, fewer schools will be above the mean and thus eligible.

An example, using distributions of percent poor and percent low achievers in Racine's elementary schools, is given in Figure C. The bar graphs for each distribution were derived by breaking the range of values for each variable into 10 equal intervals. The height of each bar denotes the number of schools in that interval (also noted in parentheses within each bar). The mean is noted by an arrow.

As shown in Table 9 of Chapter I, poverty qualified 10 schools in Racine, while achievement qualified 15. Figure C clearly shows the effect of the two distributions on the numbers of schools qualifying by each criterion in this district.

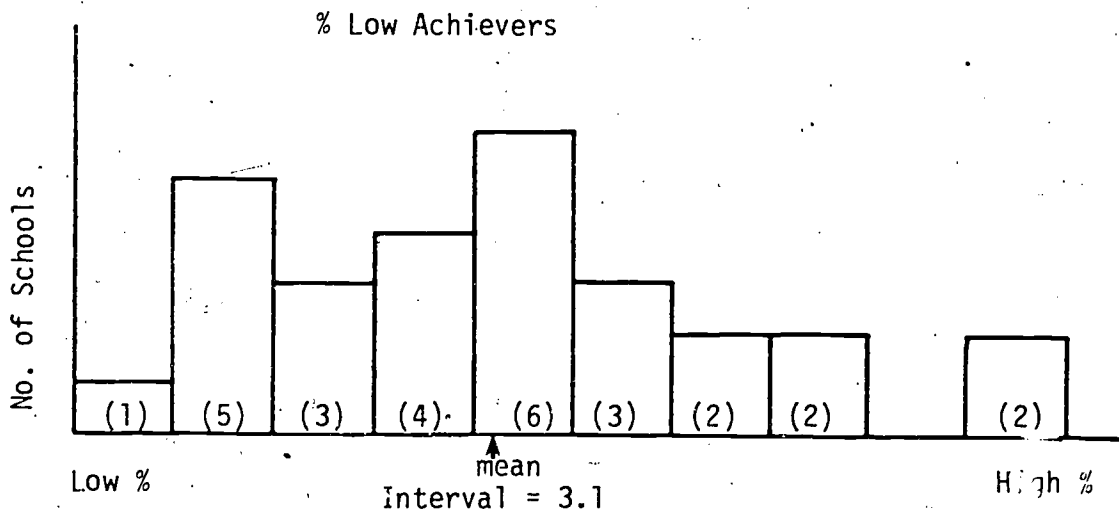
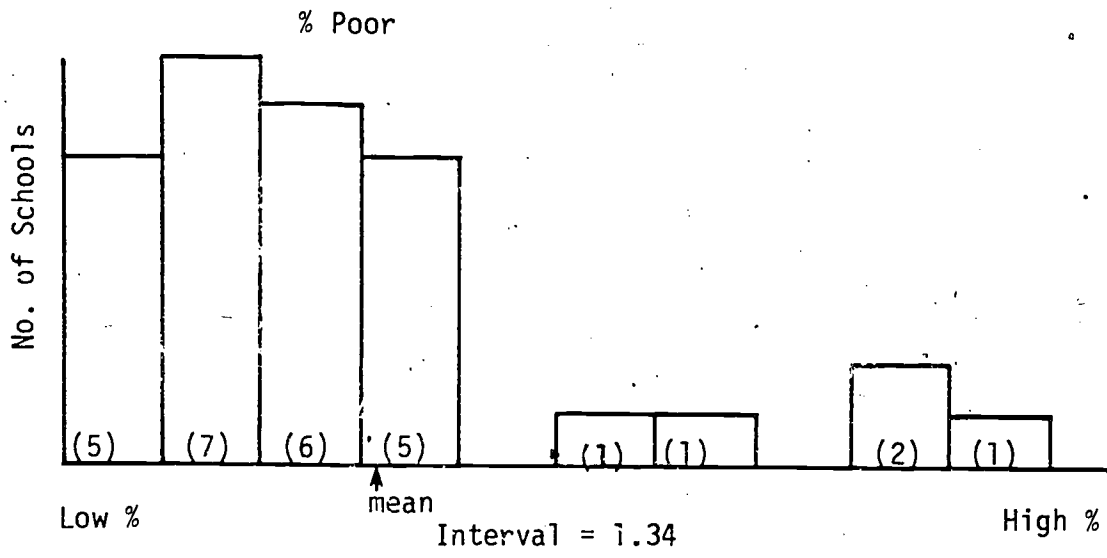


FIGURE C. DISTRIBUTIONS OF PERCENT POOR AND PERCENT LOW ACHIEVERS IN RACINE

APPENDIX D. BACKGROUND: NIE NATIONAL SURVEY
OF COMPENSATORY EDUCATION

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The NIE National Survey of Compensatory Education was conducted during the 1975-76 school year. The survey was designed to sample the population of all operating public school districts in the continental United States that received Title I funds and had at least one grade in the range K-8. Of the 15,453 school districts in the continental United States serving some elementary (K-8) grades in 1975-76, Title I funds were distributed to 13,877 or 90% of these districts (information from NIE Survey sampling frame). The sample was stratified by enrollment, regional location, and receipt of state compensatory education funding. The enrollment size categories were:

Category 1—enrollment less than 4,359

Category 2--enrollment from 4,359 through 17,623

Category 3—enrollment above 17,628

The four categories for regional size, which were based on Census Bureau definition, were Northwest, South, North-Central, and West. The two categories under state compensatory education funding for the districts were (1) presence of state compensatory education funds and (2) absence of state compensatory education funds.

The sample was selected in order to permit estimates from the data on both a per-district and a per-pupil basis and to ensure approximately equal reliability for both types of estimates.¹ One hundred school districts were selected on this basis; individuals from these districts were then interviewed. In order to confirm details of the compensatory education programs, information was collected not only from those responsible for designing programs at the district level, but also from those

¹The probabilities of selection of districts for the sample were chosen as a compromise between the extremes of equal probability and probabilities proportional to size.

responsible for implementation: principals and teachers. Interviews were thus conducted with a number of different persons within each of the sample districts: district administrators, principals, and Parent Advisory Council (PAC) chairpersons, as well as teachers--over 5000 individuals in all. Although some public records and documents on compensatory education services and participants were collected, most of the data were gathered through face-to-face interviews ranging in duration from 30 minutes to 2½ hours.

The cooperation that the interviewers received from all these people deserves recognition here. The completion rate for interviews was 99.4%. It is only due to the continuing cooperation of the 100 sample districts, which were promised that their participation in the survey would not be revealed, that the NIE Compensatory Education Study was able to provide the information contained here. The overall findings of the national survey have been published elsewhere (NIE, 1976, 1977).

APPENDIX E. DISTRICT ESTIMATES OF
EXPENDITURES OF TITLE I FUNDS
FOR FISCAL YEAR 1976

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TABLE E-1

DISTRICT ESTIMATES OF EXPENDITURES OF TITLE I FUNDS FOR
FISCAL YEAR 1976 ON INSERVICE EDUCATION,
CLASSIFIED BY DISTRICT SIZE

<u>Estimated Expenditure</u>	<u>Large*</u>	<u>Medium</u>	<u>Small</u>	<u>Total</u>
None	55.7%	48.4%	75.8%	72.3%
0 to \$ 500	0	11.1	9.9	9.8
\$ 500 to \$ 1,000	5.4	1.8	8.6	7.6
\$ 1,000 to \$ 2,000	7.7	9.1	5.7	6.2
\$ 2,000 to \$ 4,000	6.8	9.3	0	1.2
\$ 4,000 to \$ 6,000	0	0	0	0
\$ 6,000 to \$ 8,000	1.5	12.6	0	1.4
\$ 8,000 to \$10,000	6.3	3.8	0	0.6
\$10,000 to \$15,000	2.4	3.8	0	0.5
Over \$15,000	14.2	0	0	0.3

*Three size categories were established with cutting points at the 33.3 and 66.6 percentiles of numbers of students. Small districts have enrollments less than 4,359; medium districts have enrollments between 4,359 and 17,628; and large districts have enrollments greater than 17,628.

TABLE E-2

DISTRICT ESTIMATES OF EXPENDITURES OF TITLE I FUNDS FOR FISCAL YEAR
1976 ON INSERVICE EDUCATION, CLASSIFIED BY PRESENCE OR ABSENCE
OF STATE CE PROGRAM

<u>Estimated Expenditure</u>	<u>State CE Program Present</u>	<u>State CE Program Absent</u>
None	63.4%	75.0%
0 to \$ 500	3.6	11.6
\$ 500 to \$ 1,000	18.1	4.7
\$ 1,000 to \$ 2,000	10.6	4.9
\$ 2,000 to \$ 4,000	2.2	1.0
\$ 4,000 to \$ 6,000	0	0
\$ 6,000 to \$ 8,000	1.9	1.3
\$ 8,000 to \$10,000	0	0.8
\$10,000 to \$15,000	0	0.6
Over \$15,000	0.4	0.3

APPENDIX F. TRAINING AS IT RELATES
TO COMPENSATORY EDUCATION
TEACHER SELECTION

The relationship of selection methods and selection criteria to training content and training type was examined. Some of the differences that emerged were difficult to interpret in that there was no apparent pattern. In other cases, however, patterns of differences were apparent.

Table F-1, which compares training content of districts using each of four selection methods with that of districts using other methods, shows that:

- (1) Districts that include district personnel as selectors are generally positive toward all content areas except planning.
- (2) Districts that allow volunteering tend to be less instruction oriented and more concerned with instructional support.
- (3) Districts that include principals as selectors are more concerned with instruction and instructional support and less with theory.
- (4) Districts that use other methods, usually including parents as selectors, are more theory oriented.

Table F-2, which examines training methods employed by districts according to selection method, shows that districts using district personnel are the least likely to employ the various training methods.

Table F-3 examines training content as it relates to selection criteria. This table indicates that:

- (1) Districts that use teacher seniority as a selection criterion seem less concerned about teacher training than those not using this criterion.

- (2) Districts that use academic training in compensatory education as the selection criterion are less instruction oriented than those that do not.
- (3) Districts that use the language criterion are more positive toward all content areas except language (toward which they are less negative) and learning disabilities.

Table F-4, which presents data on training methods related to selection criteria, shows that:

- (1) Consultations, staff meetings, and workshops are virtually universal.

- (2) Where language is a criterion, all training methods are more common than where it is not.
- (3) All districts (100%) that use teacher seniority as a criterion use the three aforementioned training methods and rely heavily on classroom demonstrations, mailed materials, and college courses--all traditional approaches to teacher training.
- (4) Districts relying on academic compensatory education training make heavy use of observational methods (classroom demonstrations, observations, and videotaping) and little use of mailed materials, staff meetings, and special classes relative to districts not using the criterion.
- (5) Except for their relatively heavy use of videotaping, districts that apply other criteria tend to make less use of the various training methods than do their counterparts.

TABLE F-1

**DISTRICT RATINGS OF THE IMPORTANCE OF VARIOUS TRAINING CONTENT
AREAS TO DISTRICT PROGRAMS, CLASSIFIED BY
CE TEACHER SELECTION METHOD**

Training Content Area	Rating	CE Teacher Selection Method							
		Volunteers		District Personnel		Principals		Other	
		Yes	No	Yes	No	Yes	No	Yes	No
Introduction of new instructional techniques	Very important	38.0%	50.1%	47.5%	46.6%	55.3%	31.7%	71.2%	42.4%
	Somewhat important	62.0	49.9	52.5	53.4	44.7	68.3	28.8	57.6
	Not at all important	0	0	0	0	0	0	0	0
Introduction of new content material	Very important	26.5	48.9	41.7	47.2	41.3	46.1	83.5	34.5
	Somewhat important	55.5	43.8	52.7	36.1	51.8	43.6	16.2	55.8
	Not at all important	18.0	4.1	5.7	16.7	6.9	10.2	0.3	9.7
Utilization of instructional equipment and materials	Very important	31.3	40.5	40.7	28.4	43.9	23.9	68.5	30.5
	Somewhat important	50.5	55.7	54.3	54.3	48.9	65.5	31.5	60.1
	Not at all important	18.2	3.8	5.0	17.3	6.2	10.6	0	9.4
Measurement, evaluation, and reporting	Very important	65.3	54.1	66.2	23.3	55.9	59.5	36.8	62.2
	Somewhat important	34.5	41.0	29.2	76.5	43.1	31.2	45.9	37.1
	Not at all important	0.2	5.0	4.6	0.2	1.0	9.3	17.4	0.8
Philosophy of compensatory education	Very important	27.5	31.7	37.8	6.2	29.4	33.2	16.5	34.5
	Somewhat important	34.7	55.3	42.9	77.1	46.1	59.0	56.1	48.4
	Not at all important	37.8	13.0	19.4	16.7	24.5	7.8	27.4	17.1
Educationally disadvantaged children	Very important	55.9	33.8	39.5	40.6	38.7	41.9	29.7	42.6
	Somewhat important	40.9	47.6	48.2	37.0	43.6	50.4	30.5	48.3
	Not at all important	3.1	13.5	12.3	22.3	17.6	7.7	39.8	9.1
Types of learning disabilities	Very important	58.2	39.7	44.4	45.7	51.0	31.3	46.8	43.6
	Somewhat important	33.3	41.7	46.7	12.6	35.3	48.1	12.6	45.6
	Not at all important	8.5	18.6	8.9	41.8	13.7	20.6	40.6	10.8
Project planning and design	Very important	32.8	19.0	23.8	16.7	17.1	32.2	3.9	26.8
	Somewhat important	41.2	68.1	56.0	82.0	51.2	63.1	71.4	59.0
	Not at all important	26.1	12.9	20.2	1.2	21.8	4.7	24.7	14.2
Utilization of supportive services	Very important	11.9	6.8	10.0	6.8	11.2	1.8	3.8	9.0
	Somewhat important	7.8	49.2	61.0	21.7	48.9	58.1	54.3	50.2
	Not at all important	7.8	44.0	29.0	77.5	39.7	40.1	41.9	40.3
Utilization of other resources in the community	Very important	34.8	9.2	16.9	0.2	1.0	1.6	14.1	13.4
	Somewhat important	54.8	52.3	49.5	40.8	49.6	45.5	28.0	51.0
	Not at all important	10.4	38.5	33.6	59.0	32.5	52.9	57.9	35.6
Instruction in a foreign language	Very important	0	0	0.3	0	0.4	0	0	0.3
	Somewhat important	0.2	2.0	1.2	3.0	2.4	9	1.0	1.7
	Not at all important	99.8	98.0	98.5	97.0	97.2	100.0	99.0	98.0

TABLE F-2

PERCENT OF DISTRICTS USING VARIOUS TRAINING METHODS,
CLASSIFIED BY CE TEACHER SELECTION METHOD

Type of Training	CE Teacher Selection Method							
	Volunteers		District Personnel		Principals		Other	
	Yes	No	Yes	No	Yes	No	Yes	No
Visits or demonstrations in the classroom	51.5	59.9	48.3	94.0	55.7	61.5	52.0	58.4
Visiting, observing other teachers in their classrooms	62.5	51.9	43.7	97.2	58.2	48.1	66.0	51.0
Workshops	34.6	90.9	90.8	83.3	94.7	78.9	83.7	90.5
Consultations with specialists not in the classroom	99.5	95.5	95.7	100.0	99.8	90.4	83.7	99.8
Materials mailed to the teacher for his/her own use	52.8	51.7	49.7	60.7	49.7	56.4	49.7	51.8
Videotapes of model teaching episodes	26.6	7.3	15.2	0.8	13.6	9.7	22.9	9.5
Videotapes of teacher in teaching episodes	4.8	4.7	5.6	0	4.3	7.0	15.8	2.4
Staff meetings	87.1	92.4	87.0	100.0	84.4	99.6	89.2	89.7
Courses for college credit	26.0	18.3	21.8	15.4	21.6	18.2	27.2	17.6
Special classes	36.1	31.8	24.7	64.5	33.5	31.9	43.5	29.3

TABLE F-3

DISTRICT RATINGS OF THE IMPORTANCE OF VARIOUS TRAINING CONTENT AREAS TO DISTRICT TRAINING PROGRAMS, CLASSIFIED BY CE TEACHER SELECTION CRITERIA

Training Content Area	Rating	CE Teacher Selection Criteria									
		Teacher Seniority		Work with Disadvantaged Children		Academic CE Training		Language		Other	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Introduction of new instructional techniques	Very important	21.1%	49.6%	36.7%	56.8%	32.9%	68.6%	64.3%	46.5%	44.5%	52.5%
	Somewhat important	78.9	50.4	63.3	43.2	67.1	31.4	35.7	53.5	55.5	47.4
	Not at all important	0	0	0	0	0	0	0	0	0	0
Introduction of new content material	Very important	15.1	45.1	60.3	29.5	33.2	58.3	52.6	42.4	44.7	39.3
	Somewhat important	84.2	46.2	29.4	65.4	54.1	41.2	32.6	49.9	44.6	58.3
	Not at all important	0.6	8.6	10.4	6.0	12.7	0.5	14.8	7.7	10.8	2.4
Utilization of instructional equipment and material	Very important	27.4	39.3	55.6	23.6	25.9	57.5	65.0	36.9	44.5	25.4
	Somewhat important	77.6	52.4	34.1	70.9	62.3	41.5	35.0	55.2	45.2	72.1
	Not at all important	0	8.3	10.3	5.5	11.8	1.0	0	8.0	10.2	2.4
Measurement, evaluation, and reporting	Very important	29.3	59.4	67.5	48.5	54.0	62.1	76.4	56.2	20.2	30.4
	Somewhat important	70.1	36.7	26.8	49.5	40.9	36.7	21.3	40.0	24.2	69.4
	Not at all important	0.6	3.9	5.7	2.0	5.2	1.3	2.3	3.7	5.5	0
Philosophy of compensatory education	Very important	10.7	32.4	24.3	36.5	33.6	26.5	74.6	28.7	26.8	38.4
	Somewhat important	88.7	47.2	51.7	49.5	43.3	61.1	24.3	51.7	44.5	61.4
	Not at all important	0.6	20.3	24.0	14.0	23.1	12.4	1.1	19.6	28.7	0
Educationally disadvantaged children	Very important	10.4	42.2	45.4	35.1	44.6	32.0	76.8	38.1	39.2	39.4
	Somewhat important	89.6	42.2	36.5	53.5	49.7	39.7	23.2	46.8	43.7	50.3
	Not at all important	0	15.6	18.1	11.4	5.7	28.3	0	15.1	16.4	10.3
Types of learning disabilities	Very important	18.8	46.8	58.2	33.4	48.6	38.3	29.0	45.3	38.9	56.1
	Somewhat important	81.2	36.0	29.9	47.3	44.1	32.0	69.8	38.1	43.3	31.1
	Not at all important	0	17.2	11.9	19.2	7.3	29.7	1.2	16.6	17.7	12.8
Project planning and design	Very important	10.5	23.2	22.8	21.6	30.2	10.4	57.2	20.6	24.3	18.1
	Somewhat important	87.2	59.6	60.9	62.7	52.8	75.2	23.3	63.6	54.1	76.1
	Not at all important	2.3	17.1	16.3	15.7	17.1	14.3	19.5	15.8	21.6	5.8
Utilization of supportive services	Very important	10.5	7.7	3.1	12.4	10.1	4.7	32.8	6.8	10.0	4.1
	Somewhat important	89.5	48.9	67.2	38.3	57.4	44.1	66.5	51.4	55.8	45.1
	Not at all important	0	43.5	29.7	49.3	32.5	51.2	0.7	41.9	34.2	50.8
Utilization of other resources in the community	Very important	17.8	13.0	4.9	20.2	12.3	15.1	29.7	12.6	17.7	4.1
	Somewhat important	12.9	50.5	47.6	47.6	48.9	45.5	68.0	46.7	44.3	54.1
	Not at all important	69.3	36.5	47.5	32.1	38.8	39.4	2.2	40.7	38.0	41.8
Instruction in a foreign language	Very important	0.4	0.2	0.3	0.2	0.2	0.3	6.2	0	0.2	0.1
	Somewhat important	0.6	1.7	1.7	1.5	2.5	0.2	21.2	0.8	1.3	2.1
	Not at all important	98.5	98.1	98.0	98.3	97.2	99.5	72.7	99.2	98.5	97.8

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TABLE F-4
PERCENT OF DISTRICTS USING VARIOUS TRAINING METHODS,
CLASSIFIED BY CE TEACHER SELECTION CRITERIA

Type of Training	Ce Teacher Selection Criteria									
	Teacher Seniority		Work with Disadvantaged Children		Academic CE Training		Language		Other	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Visits or demonstrations in the classroom	85.5	55.5	47.8	65.4	71.1	38.0	71.6	57.1	48.7	76.8
Visiting, observing other teachers in their classrooms	30.0	56.6	67.5	44.8	63.7	41.4	85.1	53.4	53.3	57.6
Workshops	100.0	88.4	92.1	87.0	87.5	91.8	100.0	88.8	89.2	89.3
Consultations with specialists not in the classroom	100.0	96.3	100.0	93.9	100.0	91.5	100.0	96.4	94.9	100.0
Materials mailed to the teacher for his/her own use	89.9	49.0	53.9	50.5	42.5	65.9	98.9	50.0	46.9	62.7
Videotapes of model teaching episodes	10.6	12.4	11.4	12.9	18.3	3.4	33.1	11.4	16.6	3.2
Videotapes of teacher in teaching episodes	2.1	5.5	7.3	3.7	7.3	2.2	32.0	4.1	7.6	0.3
Staff meetings	100.0	88.9	89.5	89.9	82.9	99.7	100.0	89.3	89.7	89.6
Courses for college credit	78.7	15.8	15.4	24.4	21.7	18.6	51.7	19.1	15.3	31.3
Special classes	18.4	34.1	31.2	34.3	28.0	40.1	54.4	32.0	28.6	42.0

APPENDIX G. SUMMARY OF THE SCHOOL YEAR STUDY

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The Instructional Dimensions Study was designed to examine the relationship between selected instructional practices, classroom setting, and achievement in reading and mathematics. Classrooms for the school year study were specially selected to provide a range of instructional practices from traditional, whole-class instruction to highly individualized, diagnostic, and prescriptive teaching. In addition, exemplars of both pullout and mainstream (in-class) classroom service delivery were included.¹

Although the sample was not nationally representative, it contained urban, rural, and suburban districts having varied ethnic and socioeconomic mixes. All study schools were either Title I eligible or participating. Many of the schools had additional state-funded or locally funded compensatory education programs. The major findings of IDS for the 1976-77 school year² follow.

First, the compensatory education students examined gained, on the average, more than has commonly been reported for large-scale compensatory education. Table G-1 shows mean achievement gains for the IDS 1st- and 3d-grade students in reading and math. As the table indicates, 1st-grade students made average gains of 12 months or 12 percentile points in reading and 11 months or 14 percentile points in math; 3d graders made average gains of 7 months or 9 percentile points in reading and 12 months or 17 percentile points in math.

Second, when achievement gains of compensatory education students were examined according to the setting in which they received compensatory instruction, pullout or mainstream,³ the findings favored the mainstream setting in three out of

¹ Pullout instruction is defined as supplemental instruction that is delivered to students outside the regular classroom. Mainstream instruction is supplemental instruction delivered within the regular classroom.

² 1976-77 (fall-to-spring) testing occurred in late September or early October 1976 and in mid-April to early May 1977.

³ First graders were tested using Level B, Form S of the Comprehensive Test of Basic Skills (CTBS); 3d graders were tested using Level 1, Form S and Form T of the CTBS.

four cases, with no difference apparent in the fourth case.⁴ As may be seen in Table G-2, 1st graders gained an average of 13 months or 17 percentile points in reading when they received mainstream instruction compared with 12 months or 11 percentile points in pullout settings. In math, 1st graders in mainstream settings averaged 13 months or 20 percentile points, compared with average pullout gains of 11 months or 7 percentile points. Third-grade reading showed average gains of 10 months or 13 percentile points for mainstream settings and 7 months or 8 percentile points for pullout settings. These three differences are all statistically significant ($P < .001$). Average 3d-grade math gains were identical, 12 months or 17 percentile points.

Third, while students in individualized diagnostic and prescriptive instructional programs made substantial achievement gains, these gains were generally no higher than those of students in less individualized programs.

Fourth, while particular instructional techniques did not relate to achievement differences, students' gains were clearly related to the content and intensity of the instruction they received, particularly in 1st grade. When instruction emphasized the skills on which achievement gains were measured, the gains were especially large. Finally, the amount of time spent in instruction was particularly important for students in pullout programs.

⁴The findings reported here differ from those published earlier (NIE, 1977) in that they are based on data which have been more thoroughly and carefully categorized and analyzed than was possible for the earlier report due to time constraints and deadlines for Congressional hearings. These findings replace those reported earlier.

TABLE G-1

FALL AND SPRING ACHIEVEMENT TEST SCORES FOR CE
CHILDREN IN THE IDS SAMPLE*

	n	Raw Score			Grade Equivalent			Percentile		
		Fall	Spring	Gain	Fall	Spring	Gain	Fall	Spring	Gain
Grade 1 reading	1,415	23.8**	47.6	23.7	0.4	1.6	1.2	22	34	12
Grade 1 math	630	15.5***	27.4	11.8	0.4	1.5	1.1	21	35	14
Grade 3 reading	1,542	19.7†	31.7	12.0	1.9	2.6	0.7	13	22	9
Grade 3 math	830	21.4††	38.6	17.2	1.7	2.9	1.2	5	23	18

*Approximately 10% of the compensatory education students in IDS classrooms were eliminated from this analysis because their fall test scores were above the mean for all students in the sample. A separate analysis of gain scores for those students indicates that their rates of gain were similar to the ones presented here.

**Maximum possible score = 84.

***Maximum possible score = 56.

†Maximum possible score = 85.

††Maximum possible score = 98.

TABLE G-2

FALL AND SPRING ACHIEVEMENT TEST SCORES FOR CE CHILDREN RECEIVING
INSTRUCTION IN PULLOUT OR MAINSTREAM SETTINGS

	n	Raw Score			Grade Equivalent			Percentile		
		Fall	Spring	Gain	Fall	Spring	Gain	Fall	Spring	Gain
Grade 1 reading										
Mainstream	309	24.3*	51.4	27.1	0.4	1.7	1.3	23	40	17
Pullout	1,106	23.7	46.5	22.8	0.4	1.6	1.2	21	33	12
Grade 1 math										
Mainstream	307	15.4**	29.1	13.6	0.3	1.6		21	41	20
Pullout	323	15.6	25.7	10.1	0.4	1.5		22	30	8
Grade 3 reading										
Mainstream	198	19.4***	34.3	14.9	1.8	2.8	1.0	12	25	13
Pullout	1,344	19.8	31.3	11.5	1.9	2.5	0.6	13	20	7
Grade 3 math										
Mainstream	165	20.6†	37.7	17.1	1.7	2.9	1.2	5	22	17
Pullout	665	21.6	38.8	17.3	1.7	2.9	1.2	6	23	17

*Maximum possible score = 84.

**Maximum possible score = 56.

***Maximum possible score = 85.

†Maximum possible score = 98.

APPENDIX H. SUBSAMPLE CHARACTERISTICS

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In selecting districts for follow-up, two major criteria were used: (1) the district's willingness and ability to participate, and (2) the availability of complete data from the original study for individual classrooms being considered. On this basis, 7 of the original 14 districts were selected.

Schools were selected within districts that had three or more classrooms with complete data from the original IDS work and in which student turnover was expected to be relatively low.¹

The subsample districts were located in five States. Three districts were in the North-Central portion of the country, two were in the Mid-Atlantic, and two were in the South Atlantic. Total populations of these districts ranged from about 40,000 to over 1 million. Minority populations accounted for 2% to 47% of these total populations. The smallest district had some 8000 students and 20 schools. The largest had over 200,000 students and over 200 schools. Minority enrollment ranged from 4% to 76%.

Twenty-seven school buildings participated in follow-up testing. Fourteen schools were located in urban areas, nine in suburban areas, and four in rural areas. Two-thirds of the schools (14) enrolled 500 to 750 students. Four enrolled fewer than 500 students, and two enrolled over 1000. Minority enrollment averaged 53%. One school had no minority enrollees, and two had only minority students.

Of the classrooms selected, 78 provided 1st-grade reading scores, 73 provided 1st-grade math scores, 76 provided 3d-grade reading scores, and 74 provided 3d-grade math scores.²

¹It should be noted that while the existence of complete IDS data was a selection criterion, some schools were selected that included one or more classrooms without complete IDS data (although all had testing data). Approximately one-fifth of the total classrooms included for follow-up testing were of this sort.

²One 1st-grade classroom's reading scores were invalid. All teachers except three in grade 1 and six in grade 3 taught both reading and math.

In order to verify the similarity of the follow-up classrooms to the overall IDS sample, several comparisons were made. These comparisons showed that test score distributions were approximately the same for the two samples. The follow-up classrooms tended to have somewhat lower pretest scores than did the overall sample. Table H-1 shows that pretest (fall 1977), posttest (spring 1977), and fall-to-spring mean gains were virtually identical for the sample and the subsample. This evidence eases concern that students who were unavailable for fall 1977 testing would be those from lower income families, which are more likely to be mobile and therefore to be underrepresented in a longitudinal sample. Since such students tend to have relatively low achievement scores, prima facie evidence for attrition of such students would be higher general achievement levels in the follow-up subsample.

Students in schools participating in follow-up testing who had valid IDS pretest and posttest scores for the reading or the math tests were scheduled for testing. All available compensatory education and noncompensatory education students were retested if they met this criterion. In the subsample districts, 74% of such 1st graders and 78% of such 3d graders were available for follow-up testing. Ninety-six percent of the available 1st graders and 98% of the available 3d graders actually participated in the follow-up testing.

TABLE H-1

FALL AND SPRING ACHIEVEMENT GRADE-EQUIVALENT SCORES FOR CE STUDENTS
IN THE FALL IDS SAMPLE AND THE FOLLOW-UP SUBSAMPLE

<u>Study Group</u>	<u>Type of Sample</u>	<u>n</u>	<u>Fall 1976 Mean</u>	<u>Spring 1977 Mean</u>	<u>Fall- to- Spring Mean Gain</u>
Grade 1 reading	Full sample	1415	0.4	1.6	1.2
	Follow-up subsample	395	0.4	1.6	1.2
Grade 1 math	Full sample	630	0.4	1.5	1.1
	Follow-up subsample	143	0.4	1.4	1.0
Grade 3 reading	Full sample	1542	1.9	2.6	0.7
	Follow-up subsample	565	1.9	2.6	0.7
Grade 3 math	Full sample	830	1.7	2.9	1.2
	Follow-up subsample	314	1.7	2.9	1.2

APPENDIX I. PERCENTAGE OF COMPENSATORY EDUCATION STUDENTS
WHOSE TEST SCORES INCREASED OR DID NOT CHANGE FROM
AN EARLIER TO A LATER TESTING PERIOD

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<u>Study Group</u>	<u>n</u>	Fall 1976 to Spring <u>1977</u>	Spring 1977 to Fall <u>1977</u>	Fall 1976 to Fall <u>1977</u>
Grade 1 reading	395	91.1	55.4	88.9
Grade 1 math	45	88.8	62.9	86.0
Grade 3 reading	565	52.7	65.7	84.2
Grade 3 math	314	95.5	52.9	95.9

APPENDIX J. A STUDY OF THE ADMINISTRATION OF THE
ELEMENTARY AND SECONDARY EDUCATION ACT
(ESEA), TITLE I IN EIGHT STATES

(Syracuse Research Corporation)

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Eight States were selected for case studies on the basis of their representativeness of characteristics and problems as indicated by U.S. Office of Education reports and documents and by interviews with officials of the Division for Education of the Disadvantaged, U.S. Office of Education. Additionally, four LEAs were selected within each State by basically the same criteria. The responsibility for district and school selection rested with the case study team assigned to each State.

APPENDIX K. AN ANALYSIS OF THE NECESSITY, CLARITY AND
RESTRICTIVENESS OF THE PROGRAM REQUIREMENTS
APPLICABLE TO LOCAL SCHOOLS DISTRICTS
APPLYING FOR GRANTS UNDER TITLE I
OF THE ELEMENTARY AND SECONDARY
EDUCATION ACT

(Legal Standards Project, Lawyers' Committee for Civil Rights Under Law)

The Legal Standards Project, which involves an indepth analysis of Federal and state legal frameworks, focused on the policies of 10 States. Site visits were made, and a wide range of state officials were interviewed. The States' written policy statements were received, and preliminary determinations were made concerning (1) the substance and extent of state regulations and (2) the degree of comprehensiveness and apparent conflicts, inconsistencies, ambiguities, and omissions in and among these state regulations. At least one LEA in each State was also visited.

**APPENDIX L. ESEA TITLE I
ALLOCATION POLICY:
DEMONSTRATION STUDY**

(Abt Associates, Inc.)

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The demonstration study is being conducted in 13 LEAs across the country. The purpose of the study, which is in direct response to Congressional mandate provided in the Education Amendments of 1974 (Public Law 93-380), is to demonstrate the effects of changing rules for allocating Title I funds within school districts. Specifically, each district is initiating several changes in funds allocation procedures, e.g., changes from poverty to achievement eligibility criteria and changes in per-school and per-pupil expenditures.

The portion of this study with which Chapter IV is concerned, however, involves the results of data collected from PAC chairpersons interviewed in the 13 demonstration districts. Data were also collected from the parents of Title I children in these districts.

APPENDIX M. SECTION 116a.25 OF THE TITLE I
RULES AND REGULATIONS

(September 28, 1976)

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There are basically eight parts to Section 116a.25. Seven of these are primarily directed at the district or LEA level, and the eighth concerns the option of SEAs. The eight parts are as follows:

- a. General requirements
- b. Participation of parents in selection of councils
- c. Identification of parents eligible for membership
- d. Procedure for selecting eligible parents
- e. Membership of districtwide or intermediate councils
- f. Local educational agencies with one school or less than 1000 students in all project area schools
- g. Involvement of councils
- h. Additional rules and procedures

Each LEA is to demonstrate that it has established a district advisory council, except in cases where the LEA has only one school at which Title I services are provided or has two or more such schools with a combined enrollment of less than 1000 children, and that it has established an advisory council for each school (school advisory council) in its annual Title I application. Intermediate councils for groups of schools within its school district may be established. The following provisions of this section apply to each LEA in that its annual application should demonstrate that each district, intermediate, and school advisory council:

- (1) Has as a majority of its members parents of children (public as well as private) who participated in that program the preceding year or who will participate in the current year's program

- (2) Is composed of members selected by the parents in the school attendance area designated project areas (except in the case of the school advisory council) and, in the case of the school advisory council, is composed of members selected by the school attendance area of such council (we have this information as it relates to district PACs as well as information on other ways of becoming members of the district PAC)
- (3) Has been given responsibility by the LEA for advising it in the planning for and implementation and evaluation of the district's Title I program
- (4) Is provided by the LEA with access to appropriate information concerning the program or project
- (5) Operates under procedures which are adequate to ensure timely and proper performance of its functions, including procedures for convening meetings and for the recording and maintenance of minutes
- (6) Has been provided with procedures for coordinating its functions and its recommendations to the local educational agency with those of other councils in the district

Participation of Parents in Selection of Councils

All of the parents of children eligible to attend a public school serving a project area, including parents of children living in such area and enrolled in private schools, shall be eligible to participate in selection of members of the appropriate district, intermediate, and school advisory councils.

Identification of Parents Eligible for Membership

The LEA shall establish appropriate procedures for identifying parents of children who participated in the preceding year's program or parents whose children will participate in the current year's program so that they may be considered for membership on a school, intermediate, or district advisory council.

Procedure for Selection

"After consultation with the district advisory council, the LEA shall establish appropriate procedures for nominating and selecting eligible parents and other persons for service on district and school advisory councils. Such procedures shall include provision for affording adequate notice to the parents and the general public in the agency's school district (or in the appropriate school attendance area in the case of a school council) of the time, place, and method whereby such selection would be made. Upon the selection of members of the council, the names of all members of such council shall be made available to the public through appropriate notices and continue to be available upon request."

Membership of Districtwide or Intermediate Councils

The LEA may provide that the memberships of its district or intermediate advisory councils will be composed solely of members of school councils, elected by that school council.

Local Educational Agencies with One School or Less Than 1000 Students in All Projects Area Schools

If an LEA has less than 1000 students enrolled in project area schools or has only one project area school, it may (with approval of the SEA) have its district advisory council also serve as its school council. There must be at least one district advisory council member representative and one for each project area school. (It should be pointed out that 80% of all Title I districts have a total enrollment, Title I as well as non-Title I, of 4000 pupils or less. It therefore seems probable that a considerable number of districts fall in this category.)

Involvement of Councils

Each LEA shall include in its application sufficient information to enable the SEA to determine the following:

- (1) That each council has been furnished, free of charge, copies of Title I, of the Federal regulations guidelines and criteria issued pursuant thereto, and of state Title I regulations and guidelines
- (2) That all council members will receive appropriate training materials and orientation which will assist them in carrying out their functions under this section
- (3) That each council will be provided with the local educational agency's current application and other information and documents as may be needed for the effective involvement of each council in the planning, implementation, operation, and evaluation of projects under Title I
- (4) That each council has had an adequate opportunity to consider the information available concerning the special educational needs of the educationally deprived children residing in the project area and the various programs available to meet those needs, and to make the recommendations concerning those needs which should be addressed through the Title I programs
- (5) That all parents of children to be served have had an opportunity to present their views concerning the application to the appropriate school council, and that each council has had an opportunity to submit its comments to the LEA, which shall consider such comments in determining whether or not the application shall be approved and submitted to the SEA

Additional Rules and Procedures

The SEA may establish such additional rules and procedures, not inconsistent with the provisions of this section, as may be reasonably necessary to ensure the involvement of parents and the proper organization and functioning of PACs.