DOCUMENT RESUME

ED 283 933 UD 025 650

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TITLE Local Program Design and Decisionmaking under Chapter 1 of the Education Consolidation and Improvement Act.
INSTITUTION SRI International, Menlo Park, Calif.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO SRI-1246
PUB DATE Dec 86
CONTRACT NIE-400-85-1029
NOTE 288p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC12 Plus Postage.
DESCRIPTORS Change Agents; *Compensatory Education; Decision Making; *Educationally Disadvantaged; Educational Policy; Elementary Secondary Education; *Federal Programs; High Risk Students; Political Influences; *Program Design
IDENTIFIERS *Education Consolidation Improvement Act Chapter 1

ABSTRACT

This study describes how local educators design Chapter 1 instructional programs for educationally deprived students from low-income areas. A multiple case study investigation was done in 20 districts in 11 states, chosen to reflect differences in context, program design, and design change. The report includes discussions of the following: (1) the focus of the study and its methods and limitations; (2) patterns of program design and decisionmaking; (3) change and continuity in the basic features of Chapter 1 program design; (4) options for curriculum, approach, and instructional support; (5) change in arrangements for special groups or situations; (6) Chapter 1 program design in relation to other educational programs and initiatives; and (7) explanations of design choices and changes. Also included are a list of references and appendices showing study methods and samples as well as Title I and Chapter 1 provisions. (PS)

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December 1986

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The conclusions of this report are those of the authors and contractors and do not necessarily reflect the views of the U.S. Department of Education or any other agency of government.

SUMMARY

This study describes how local educators design instructional programs for educationally deprived students from low-income areas in a federally sponsored compensatory education program, Chapter 1 of the Education Consolidation and Improvement Act (ECIA) of 1981. The study, part of a congressionally mandated national assessment of Chapter 1 conducted by the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education, addresses a federal audience primarily and comes at a time when the law governing Chapter 1 is being considered for reauthorization by the U.S. Congress.

Our research investigated three study topics:

- The process of making decisions at the local level about program design and changes in the design.
- The principal contextual and policy factors that affect actual design choices.
- The combinations of local, state, and federal factors that have triggered change in program design over the last 5 years, that is, since the passage of ECIA.

We pursued these topics through a multiple case study investigation in 20 districts in 11 states, chosen to reflect differences in context, program design, and design change.

Patterns of Change and Continuity in Particular Design Features

We concentrated on design features and associated changes that have attracted considerable attention among policymakers and compensatory educators in recent years. These features and changes include:

- Basic Features of Chapter 1 Program Design

  - Grade-level focus: extension of compensatory services to the high school level; increased emphasis on early intervention.

  - Delivery models: shift from in-class to pullout arrangements (and vice versa); adoption of replacement or add-on models.

  - Staffing: shift toward aides and paraprofessionals; greater or exclusive reliance on certificated teaching staff.

- Options for Curriculum and Approach

  - The technology of instruction: adoption and use of computers.

  - Skills emphasis: incorporating an orientation toward higher-order thinking skills in some or all aspects of the program.

  - Parents' instructional support roles: use of parent volunteers in school; encouragement of parents in home support roles.

- Arrangements for Special Situations and Populations

  - Arrangements for nonpublic school students: change in location of services in response to recent Supreme Court ruling.

  - Arrangements for schools with high concentrations of poor students: adoption of schoolwide projects or other alternatives.

- Connections with Other Instructional Programs and Initiatives

  - Connections with existing local programs: shift in the degree of integration with the regular educational program; coordination with other special needs programs.

  - Responses to initiatives for educational improvement: adjustments in design due to state educational reforms.

With regard to each of these features, we described the range of current designs in our sample districts, examined recent changes (or lack of change), and identified factors that explained the presence of the current design or that had stimulated (or inhibited) recent changes. A summary of findings about each feature can be found at the end of the corresponding section in the body of the report.

Across the design features, several larger patterns of influence on program design and decisionmaking can be discerned. We summarize these patterns below, separated into factors that originate primarily outside the policy realm and those that come directly from federal and state policy. We conclude with a summary of our observations on the program's responsiveness or resistance to change.

Influences from Outside the Policy Realm

We examined the influences that shape the local decisionmaking process in Chapter 1 as well as those that determine the outcomes of the process--that is, the choice of, or change in, program designs. The theme in our findings is the same in either case: the major determinants of both the process and its outcomes lie outside the federal or state policy realm.

Our data on decisionmaking processes indicate that either the district or school administrators, depending on the customary local patterns of authority, are the major decisionmakers; informal data and perceptions play at least as large a role as systematic data from needs assessments or evaluations; and consultation with parents or teachers is rarely an integral part of real decisions. The driving forces shaping program decisionmaking processes are the prevailing decisionmaking style of the district, the degree of autonomy granted schools, the degree of local preference for participatory or data-based decisionmaking, and the complexity of the program.

Our analyses indicate that the outcomes of the process are powerfully shaped by five sets of factors that are rooted in the local setting and, to a lesser extent, reflect the state context:

- Local program tradition. For any one district, a key determinant of this year's program design is last year's program design. Program managers generally make only one or two changes at a time. The reasons include the relative stability of the program's legal and budgetary framework (an indirect effect of federal policy) and the limited time and attention of decisionmakers.

- Local educational philosophies. Local beliefs about effective educational practice--as manifested in both the instructional approach and administrative considerations--are also important in shaping program designs. In particular, the Chapter 1 director (who has different titles in different districts) is a key interpreter of the evidence from inside and outside the district concerning what works. This is not to say that Chapter 1 programs are always evolving in the direction of greater effectiveness. Flawed evidence, wishful thinking, and professional fads may steer directors into poor choices. However, their convictions about what will work best for their students, their staff, and the regular program are important determinants of their design decisions.

- The local environment for educational improvement. The local environment for educational improvement sets the stage for change in and around the Chapter 1 program. This environment derives from locally initiated efforts to stimulate a better instructional program as well as from local responses to state reform initiatives. Although often not aimed directly at the Chapter 1 program, these efforts can have implications for Chapter 1 where the program is designed to dovetail with the regular program.

- Local resources and political constraints. The availability of such diverse resources as space and skilled staff also presents constraints and opportunities for program design; so do the political relationships within the district, as different individuals and groups compete for resources or influence.

- Implementation experience. Experience in implementing a design change has an effect on later changes. The result may be divergence in implementation at the school level, as teachers modify a central directive to fit their own ideas. Sometimes district staff deliberately introduce change on a pilot basis and use what they learn about the results to make further decisions.

We must note that, whereas it is explicit about certain procedures related to decisionmaking (e.g., needs assessment, evaluation), federal Chapter 1 policy is intentionally unspecific about the particulars of program design. Thus, the fact that forces from outside the policy realm are most powerful in shaping program design should not be surprising and, in fact, is in accordance with federal intent. It is also true that the sets of nonpolicy factors we have identified can show the residue of federal influence in various ways.

How Federal and State Policy Can Influence Decisionmaking and Design

Although they do not play the leading role in determining decisionmaking processes or the specific program design, federal (and state) policies do have important effects, which our analyses reveal. We summarize these below in terms of the requirements affecting decisionmaking, funding levels, the legal framework, and state reform initiatives.

Requirements Governing Decisionmaking Processes--The requirements for needs assessment, consultation, and evaluation are intended to structure a process that revolves around certain types of information and that includes attention to the views of parents and teachers. We found that the results of this policy are mixed. Although the requirements are not the primary determinants of the way the local decisionmaking process works, they have added elements that are important in many districts. These requirements (or their history) generally add to the types of information that are available for use in decisionmaking--that is, survey results, parents' questions and comments, and test scores are at hand in case decisionmakers want to use them. We did find evidence that these types of information enter into design decisions. More specifically, we found the following:

- Needs assessment. Federal policy about needs assessment (which has remained constant under Title I and ECIA) has put in place and maintained an enduring ritual in the decisionmaking process that can do more than satisfy a reporting requirement. At the least, the results of the process provide a way of justifying program designs to diverse audiences. But even more, the process has the potential to provide broad-based evidence of problems or needs that have not been as well addressed as they could be.

- Consultation with parents. Under ECIA, the relaxation of federal rules governing parent consultation either have had no effect (e.g., in districts that have maintained parent advisory councils) or have contributed to a lessening in local efforts to seek advice from parents. In either case, the actual direct contribution of parents to decisionmaking has been minimal, except under unusual circumstances. However, it is also easy to overlook a long-term effect of federal policy regarding parent involvement in the decisionmaking process: the requirements under Title I and, to a lesser extent, Chapter 1 have reinforced local commitment to making Chapter 1 programs responsive to community needs in some way, with ramifications for the designs of programs.

Evaluation. The collection of evaluation data continues generally as it was done under Title I, despite changes in federal regulations. As with needs assessment, evaluation provides local decisionmakers with informational resources used in justifying decisions and sensing needs or unanticipated problems. Occasionally, evaluation information contributes more directly to program improvement, under somewhat specialized conditions (where there is local expertise in evaluation, a high value is placed on data-based decisionmaking, etc.).

Funding Levels--Changes in the district's Chapter 1 funding level are of major importance to program design. These changes are often understood in Washington as leading to increases or decreases in the overall number of students served. However, they also have other types of effects on program design. Budget increases can provide the slack resources for experimentation with computers or new forms of staffing. Budget cuts can trigger the selective elimination of program components such as grade levels or subject areas.

The Legal Framework--The federal framework of regulations and guidance occasionally dictates specific design decisions, as when district staff consult the guidelines to find out how to design replacement programs or schoolwide projects. A more important influence of the legal framework is that it establishes general boundaries around acceptable design decisions, which may encourage caution in changing the existing program, especially where a change concerns possible supplanting violations. Although our evidence is incomplete on this score, we found little indication from our sample (which included sites we had visited 4 years earlier) that local decisionmakers were any less concerned about compliance issues under ECIA than under Title I in its final year.

Relatedly, specific suggestions or prohibitions from state education agency (SEA) staff--which either interpret federal requirements or add to them--are an influence on design decisions. These occasionally include suggestions about educationally effective designs but more often, in our sample, revolve around ways of designing compliant programs.

State Reform Initiatives--Another set of major policy influences arises outside the Chapter 1 system in the reform initiatives of states (which have received federal encouragement). As important as the SEA Chapter 1 office is in defining the options for local programs, its influence is at least matched by that of other initiatives at the state level. Educational reform efforts advanced by the state legislature, governor's office, or chief state school officer may have indirect but significant effects on the design of local Chapter 1 services, in particular through the powerful effect of state testing initiatives, but also through school improvement programs, new state requirements concerning staff quality or qualifications, and supplemental funding for various education programs.

Responsiveness or Resistance to Change

At this stage in the program's maturation, sweeping changes in design or approach are unlikely to occur. Although we selected programs for the presence of change, we were struck by the cautious, often incremental nature of the change process. In one year, for example, computers might be added to the middle school component or the staffing pattern might be altered at the elementary level to deemphasize aides in the classroom (without removing all of them from in-class settings); a similar change then might be effected in subsequent years at another grade level. Our analyses of the forces in the local settings, affected as they are by policy forces that set boundaries around the range of compliant designs, have dramatized why the scope of change is typically narrow.

A complex equilibrium is associated with instructional design decisions. Even in small districts, multiple parties must be reasonably satisfied with a decision for the program to work; in large districts, assembling a coalition behind a design feature can be a major challenge. The equilibrium is more complex in categorical programs because another actor, the SEA Chapter 1 office, enters the picture, wielding the power to withhold funds or (more realistically) to make life unpleasant for local administrators until compliance is demonstrated. To the extent that SEA monitors prefer the status

quo in a program, change will often be that much more difficult to bring about. We can also assert that, as managers of a categorical program, Chapter 1 decisionmakers often have more people to convince of a design change than their counterparts in the regular instructional program.

Local program directors also hold power based on their expert knowledge of program rules. In our sample, this often means that the director simply shapes the final details of a design change to achieve compliance. However, we can reasonably speculate that directors who dislike change may use the specter of noncompliance to block change or, conversely, may invoke the rules to justify a change that others are resisting.

More generally, our findings suggest several ways in which Chapter 1 program designs and decisionmaking processes respond to signals or stimuli that induce change. Some of these signals are local, such as the arrival of new administrators with different educational philosophies or a disappointing experience with the initial implementation of a design. Others are manipulable through federal policy and are traceable to budget changes, some statutory changes (although the shift from Title I to Chapter 1 did little to upset the stability of existing program designs), and the process requirements for decisionmaking. Finally, both SEA Chapter 1 offices and broader state policies--most strikingly in the areas of testing and curriculum standardization--are potent sources of influence on program design.

PREFACE

This report presents the results of the Study of Local Program Design and Decisionmaking Under Chapter 1 of the Education Consolidation and Improvement Act (ECIA), conducted by SRI International in collaboration with Policy Studies Associates. This law was implemented in school districts across the nation in the 1982-83 school year, following the passage of ECIA in 1981. Chapter 1 of ECIA is the continuation of the former Title I of the Elementary and Secondary Education Act of 1965 (ESEA). Chapter 1 of ECIA retained the basic focus of Title I of ESEA, but changed several administrative features of the program. In 1983, Congress passed technical amendments to ECIA to clarify several ambiguities that had surfaced during the first 2 years of its implementation.

Because of these legislative changes and in anticipation of its own need to inform debate on reauthorization and appropriations, the U.S. Congress determined a need for a national assessment of Chapter 1, to be conducted by the National Institute of Education (NIE), now part of the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education. As part of that assessment, SRI International was commissioned by NIE in 1985 to study Chapter 1 program design and the decisionmaking process used by local education agencies to arrive at local program designs. We conducted this 1-year study during the 1985-86 school year, the fourth year of Chapter 1's implementation, although information was also collected to examine retrospectively operations during the years immediately preceding the implementation of ECIA and changes that occurred during the first 3 years of the implementation of Chapter 1.

As part of the NIE/OERI Chapter 1 assessment, our research was one of five field studies, primarily based on case study data, that were designed by NIE/OERI to examine complementary aspects of the Chapter 1 program as it operated in the 1985-86 school year (National Institute of Education, 1984). The five studies and their relationships to one another are schematically represented in Figure P-1. By intention, the topics investigated by each study overlap, as the figure shows: issues of funds allocation, targeting, and local administration are thus part of this Program Design Study's focus.

In addition to the field studies, OERI sponsored several other kinds of data collection that touch on matters related to Chapter 1 program design, among them a mail survey of 2,200 nationally representative school districts to determine local practices in a variety of aspects of the program (Research and Evaluation Associates, 1986b), a telephone survey of 230 nationally representative schools to elicit quantitative descriptions of instructional practices and arrangements (Westat, 1986), and a review of literature on the effects of alternative compensatory education designs (Research and Evaluation Associates, 1986a). These data collection efforts, supplemented by other forms of analysis, are summarized in OERI's reports to Congress (Kennedy, Jung, and Orland, 1986; OERI, in progress).

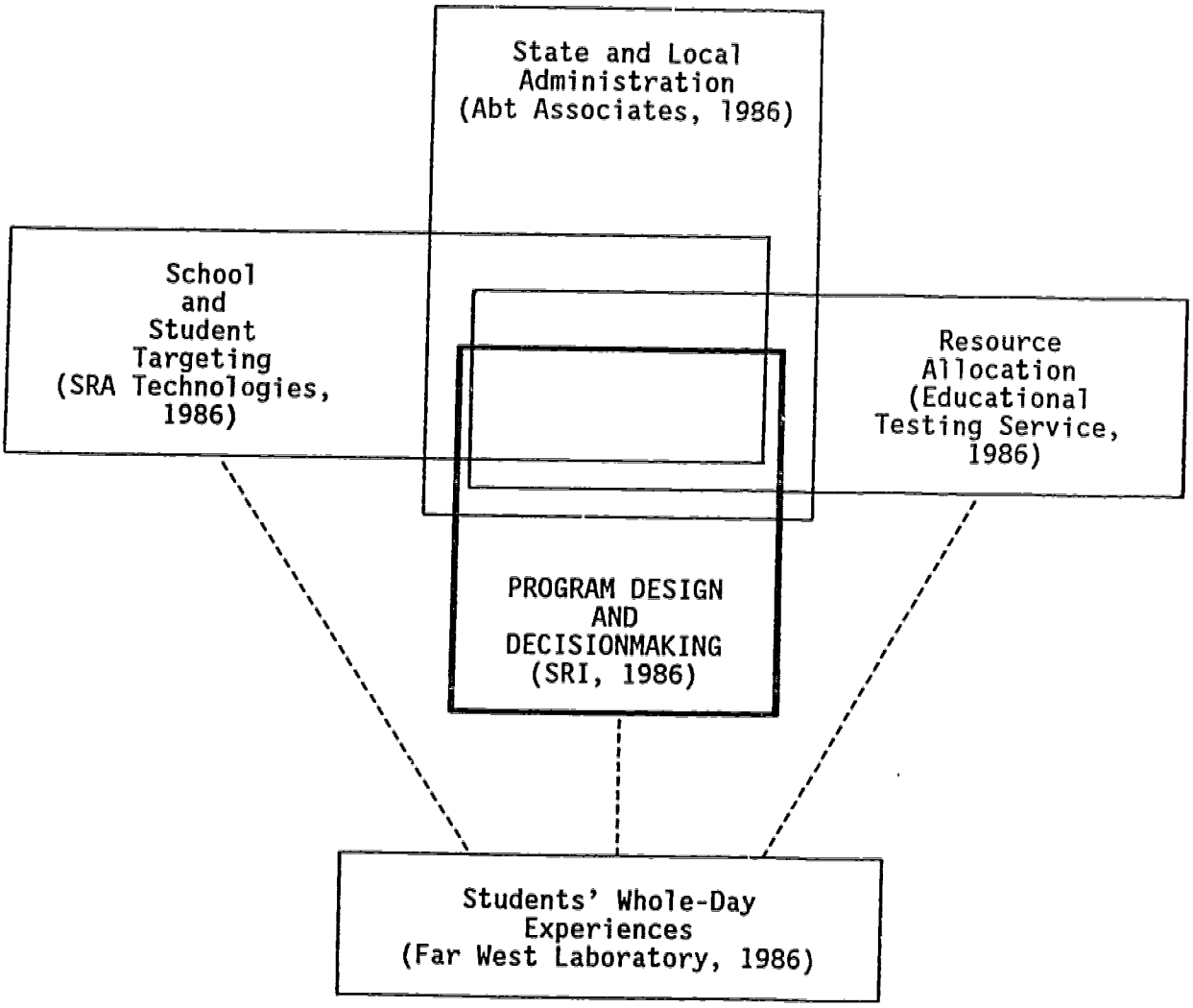

FIGURE P-1 OVERLAP AMONG TOPICS ADDRESSED BY OERI-SUPPORTED FIELD STUDIES OF THE CHAPTER 1 PROGRAM

Collectively, these studies respond to the congressional mandate that directed NIE to assess the following aspects of Chapter 1 program operation:

- Services delivered.
- Recipients of services.
- Background and training of teachers and staff.
- Allocation of funds (to school sites).
- Coordination with other programs.
- Effects of programs on students' basic and higher-order academic skills, school attendance, and future education.
- Local implementation of Section 556(b) of the enabling law.

Most of these topics are involved in the phenomenon of program design and the decisionmaking process as that leads to design choices. The types of services delivered and the recipients of these services derive, in part, from the design decisions made by local program staff. The background and training of staff are major considerations in the design of instructional programs, as is the allocation of funds to school sites. Coordination with other programs is also an inescapable part of the design process, especially in light of the fact that Chapter 1 students typically participate in a core academic program as well as in compensatory education services; these students may also fall within the purview of other specialized programs addressing similar needs. Finally, the provisions of ECIA's Section 556(b) deal primarily with the process of decisionmaking within local programs, much of which concerns instructional design.

We studied the choices that districts make about the design of their Chapter 1 programs as reflected in current program design features, the process of decisionmaking that led to current implementation, and the nature of the factors that influenced these decisions. The study focused on three principal research issues:

- The decisionmaking process in the district and in Chapter 1 in particular.
- The effect of contextual and policy factors on local decisionmaking.
- The combination of local, state, and federal triggers that led to program design change in the last 5 years.

However, our study did not address one important aspect of the congressional mandate: we did not investigate the effects of the program on students, even though, indirectly, we were concerned with the way information about student effects (or perceptions of these effects) is a part of the story of program design.

Michael S. Knapp,
Project Director

December 1986

ACKNOWLEDGMENTS

We owe much to the support and guidance that various state and local education agency administrators provided us during our early conceptual efforts, at the sampling stage, during data collection, and during the preparation of this final report. In particular, we would like to mention those who participated as members of our advisory panel--Freda Holley, Sylvia Roberts, Thomas Rosica, and Herbert Ware.

We also received considerable assistance from university faculty and members of research and other private firms--Jane David, Michael Gaffney, Susan Loucks-Horsley, Milbrey McLaughlin, and Lee Sproull. We also wish to extend our thanks to colleagues in other research firms engaged in other OERI-supported Chapter 1 studies who contributed to our thinking and study plans--in particular, Barbara Bessey, Eleanor Farrar, Margaret Goertz, Mary Ann Millsap, Brian Rowan, and Christine Wood.

Several staff at the National Institute of Education, now part of the Office of Educational Research and Improvement, also provided considerable assistance and guidance during both the development and analysis periods of this project. In particular, we would like to thank our project officer at NIE/OERI, Ron Anson, for his support throughout this effort. His comments about our work throughout the project, always insightful and stimulating, helped to focus this report in a way that will be most useful to the policymakers who are its primary audience. In addition, Mary Kennedy, the first director of the NIE/OERI Chapter 1 study, and Beatrice Birman, the current Chapter 1 study director, provided excellent leadership throughout and helped us focus on useful analytical steps that would fit within the context of the larger series of NIE/OERI-sponsored studies. Finally, other members of the NIE/OERI Chapter 1 study team--Randy Demaline, Gilbert Garcia, Richard Jung, and Martin Orland--contributed to our thinking in various ways during the course of this project. We would also like to acknowledge the assistance provided by staff of the Chapter 1 study technical assistance contractor, Decision Resources Corporation--in particular, Janie Funkhouser, Mary Moore, and David Myers.

The dedication and professionalism of the entire study team was the key to making this a successful research project. Marian Stearns, director of SRI's Social Sciences Department, deserves considerable credit not only for the role she played in this project, but for the positive, supportive environment within which we work. Others on the study team, besides the authors of this report (see title page), include the following: Richard Apling, Susan Boxer, Craig Brookins, Pedro Castaneda, Marion Collins, Carolyn Estey, Elaine Guagliardo, Mary Hancock, Klaus Krause, Lynn Newman, Christine Padilla, Ellen Renneker, Debra Richards, Sanda Spiegel, Annette Tengan, and Kathryn Valdes.

Finally, the findings of our research synthesize the responses of many school and district staff, school board members, parents, and others at the local level. To all who responded to our questions, we owe the deepest

gratitude--for taking the time to provide information that will help federal policymakers understand what Chapter 1 looks like at the local level and how decisions about program design occur.

To all these people, the success of this project is attributable to you.

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PART ONE: STUDYING CHAPTER 1 PROGRAM DESIGN AND DECISIONMAKING

This report describes how local educators design instructional programs for educationally deprived students from low-income areas in a federally sponsored compensatory education program, Chapter 1 of the Education Consolidation and Improvement Act (ECIA) of 1981. Our research focuses on understanding (1) change and continuity in the design of instructional programs for these students and (2) the associated decisionmaking processes.

Formerly Title I of the Elementary and Secondary Education Act of 1965 (ESEA), Chapter 1 is a long-established program, one that has evolved over two decades while maintaining a consistent focus on a target group of students. The program has been a centerpiece of the efforts by the federal government to contribute to the improvement of educational opportunities for students who otherwise might not acquire the necessary foundation in reading, language arts, and mathematical skills.

Our report is addressed principally to a federal audience and comes at a time when the current law governing this program is being considered for reauthorization by the U.S. Congress. The research is part of a multifaceted investigation, mandated by Congress and conducted by the National Institute of Education, which has now been reorganized as part of the Office of Educational Research and Improvement (OERI) in the U.S. Department of Education. Our study is one of several field investigations sponsored by OERI that constitute the information base for OERI's reports to Congress on the Chapter 1 program.

In the first part of the report we accomplish two things. First, in Section I, we present the purposes of our study in more detail, along with background, rationale, and a brief description of our methods. In Section II

we discuss the conceptual terrain we have traversed in this research. There we define the key variables, present a model of important influences on program design and associated decisionmaking, and demonstrate the way these concepts are linked to federal policy.

The remaining parts of the report present findings of the research with regard to:

- The variety of program designs in our sample and the processes of decisionmaking we observed (Part Two).
- Change or continuity in specific design features (Parts Three through Five).
- The relationship of Chapter 1 to other educational programs and initiatives (Part Six).
- The forces that influence design choices and changes, including the effects of federal policies on local program design (Part Seven).

I INTRODUCTION

In this section, we summarize the purposes of the Study of Local Program Design and Decisionmaking in Chapter 1 of the Education Consolidation and Improvement Act, discuss the rationale for examining program design as a federal policy concern, and outline the methods used to develop answers to the study's research questions, noting the limitations on our findings.

The Focus of Research

We studied the choices districts make about the design of their Chapter 1 programs, the process of decisionmaking that leads to those choices, and the nature of the forces that influence these decisions. The study addressed three broad research questions.

(1) How do district and school administrators make decisions about the design of Chapter 1 services? What influences the decisionmaking process?

(2) What contextual and policy factors affect the actual design choices?

(3) What combinations of local, state, and federal factors trigger changes in program design? What has stimulated particular design choices in the last 5 years (e.g., the decision to extend services to the high school level, the shift to an in-class arrangement for service delivery, etc.)?

The motivation for addressing these questions derives from our understanding of program design as a concern of policymakers, which we discuss below.

Program Design as a Concern of Federal Policy

In most respects, the design of instructional programs under Chapter 1 has stayed beyond the reach of federal compensatory education policy. Neither Title I nor Chapter 1 specifies particular designs in law or regulations. Instead, the design and implementation of the instructional program is left to local decisionmakers within wide boundaries set by fiscal controls, provisions governing the process of decisionmaking, and the statutory admonition that local programs "be of sufficient size, scope, and quality" to ensure effectiveness.

In practice, however, federal (and state) actions can and do influence the way local programs are designed. Guidance from the U.S. Department of Education, for example, defines acceptable ways for districts to meet the fiscal requirements by presenting six program models that provide a basic vocabulary for describing program designs, both for school districts and for this research (these models are discussed in Section II). State Chapter 1 offices can put their stamp on local program designs in numerous ways--for example, by advocating a particular program model, grade level for service, or approach to relating Chapter 1 to the regular instructional program.

The fact that government policies can have these effects makes it important to study the program design process. Federal agencies and congressional audiences are likely to be interested in:

- The implications of particular Chapter 1 provisions for instructional designs and the services students receive.
- The effect of the change from Title I to Chapter 1 on program design, as a result of either particular provisions or more general policy signals.
- The degree of variation in response to federal policy across states (and across districts).

More generally, what local staff do to design their programs reveals the way federal (and state) constraints interact with local initiative. A delicate balance exists between local discretion and external constraint in all federal programs at the local level. Under Chapter 1, this balance is struck

as the categorical nature of the program interacts with the great variety of conditions, motivations, and capacities among school districts. Chapter 1 has encouraged flexibility in choices about program design while preserving the basic structure that existed under Title I. During the course of reauthorization, questions may well be asked whether the interests of educationally deprived children in low-income areas have been properly attended to in local decisions since the passage of ECIA, whether the changes in the law have made a difference to the design of services for these children, and whether the categorical structure of the program has had such effects without unduly constraining local initiative or discretion.

Important as these concerns may be, the current context of concern over educational quality provides an equally compelling reason for examining program design in Chapter 1. As states and districts across the nation are attempting to reform their instructional programs, it is important to assess how much the spirit and substance of these reforms extends to the compensatory instruction that Chapter 1 students receive. For example, are Chapter 1 programs changing to accommodate what has been learned about effective schools, technological advances (e.g., the computer), or other developments in pedagogy? Have districts reviewed their strategies for compensatory instruction and considered ways these strategies might be improved? Does the Chapter 1 tradition or categorical program structure inhibit such improvements or enable them?

The fact that Title I/Chapter 1 has become deeply rooted in most districts makes these kinds of questions especially germane. For one thing, as a well-established part of the local district's educational offerings, Chapter 1 may benefit from, and contribute to, districtwide efforts to reform the instructional program. The Chapter 1 program may even be a source of reform ideas or innovations. At the same time, there are traditions that may remove Chapter 1 in varying degrees from school improvement activities; in the extreme case, where a clear separation between Chapter 1 and the rest of the instructional program has developed over the years, the compensatory program may ever resist change or improvement.

Study Methods and Limitations

We addressed the study's questions and associated policy concerns by conducting a coordinated set of case studies in 20 school districts located in 11 states. Districts were chosen to vary on a number of dimensions, including these four primary criteria:

- The kind of instructional design now operating in the Chapter 1 program (we looked for variation on design features, which are described in Section II).
- The extent and nature of changes made in the program's design over the last 5 years, that is, since the year preceding the implementation of ECIA.
- District size (enrollment).
- Student poverty level in the district.

Within constraints imposed by these criteria, we took other factors into account in selecting a diverse sample: the size and heterogeneity of the special-needs population within the district, the number and types of other special programs present, the district's metropolitan and desegregation status, and the locus of program control (school vs. district level). Logistical factors were also considered in the final choice of sites so that site visits could be done efficiently and economically.

We also sought variation in the state contexts collectively represented in the sample. States were chosen so that they differed from one another on four key criteria likely to be related to local program design and decision-making: the way the state implemented Chapter 1 (e.g., directive vs. *laissez faire*), the presence and nature of state compensatory education programs, the nature of mandated testing programs aimed at minimum competencies or basic skills, and the state political culture (e.g., as reflected by the degree of autonomy granted localities by state government). Secondary factors were also considered (e.g., region, the nature of other state reform initiatives, and several factors related to the state's fiscal health and policies).

Data were collected by two-person teams that visited districts during the middle of the 1985-86 school year for 2 to 5 days, depending on the size of the district. Site visitors interviewed a variety of local personnel: in particular, district Chapter 1 staff, instructional administrators, the superintendent, school board members, school principals (in selected schools that illustrated the range of designs and design-related conditions within the district), teachers in the regular school program, Chapter 1 instructional staff (teachers and, where they were used, aides or others), and parents involved in an advisory capacity or who participated in instructional support roles. Further detail about study methods appears in Appendix A.

The findings from our research are subject to the following limitations:

(1) Because we went to a relatively small number of sites, we are unable to make statements of incidence or prevalence about all Chapter 1 programs nationwide.

(2) Our sites were chosen to provide examples of recent change in some aspect of the program's design. Although the sample reflects much of the diversity among Chapter 1 programs and their settings, it probably underrepresents the programs in which nothing has changed in the last 5 years.

(3) The primary data source was interviews with district and school administrators and teachers, inside and outside the program. Although we learned a good deal about the role of others in program design (e.g., state agency personnel, private school officials), we did not interview them; similarly, we did not directly observe or measure the consequences of program designs for students.

(4) The study did not explicitly assess the effectiveness of any of the designs in question; instead, our focus was on explaining the presence of these designs.

II FRAMEWORK FOR STUDYING PROGRAM DESIGN AND DECISIONMAKING

Before presenting our findings, we define the terms of our investigation: decisionmaking, program design and design change, and the explanations for design choices. Synthesizing existing research literature and previous experience, we present below a way of thinking about these concepts that guided our data gathering and analysis.

The Decisionmaking Process

The process of decisionmaking is elusive: the subtlety of interactions among decisionmakers and the difficulty of pinpointing the moment of decision or the causes of decision outcomes have challenged several decades of scholars (e.g., Allison, 1971; Nutt, 1984; March and Olsen, 1976). Accumulating knowledge about decisionmaking in organizations, however, helps us gain perspective on the structure of decisionmaking in Chapter 1 and on federal prescriptions for the decisionmaking process. It also points out what we should look for as we describe the way local staff make decisions in this program.

However decisions are actually made in programs like Chapter 1, the process takes place under the influence of strong expectations about the way the process ought to be, as we describe below.

Rational Expectations for Program Decisionmakers

Program managers and the administrators to whom they are responsible tend to espouse a rational approach to decisionmaking. Accordingly, the following sequence of events has by now become a routine expectation for program and project planning:

(1) Needs assessment and goal formulation. Program planners systematically determine the needs the program will address. The results of this assessment are a primary input into the formulation of goals and specific objectives.

(2) Systematic consultation. Program planners consult with those who will deliver the service and others affected by it as they make specific plans for providing services.

(3) Specification of means to reach objectives. Guided by needs assessment findings and advice from those consulted, program planners devise the program's format, schedule, etc.

(4) Implementation. Program managers carry out the program as planned, making adjustments as necessary to meet unforeseen contingencies.

(5) Evaluation. The results of the program (and often the process, as well) are measured in some formalized way and used as input to further cycles of program operation and also as a demonstration of the program's accountability to outside audiences.

This sequence of events, often referred to as a "rational model," is widely believed to represent the most desirable approach to making decisions in programs or other organizational settings. The attractions of the model are obvious: it implies a clear sense of direction, the involvement of all affected parties, careful consideration of the best means to achieve program goals, and a way to ascertain how well these goals are achieved.

Whatever their value as a source of expectations for the decisionmaking process, rational decisionmaking models have not been found to describe accurately what program participants do when they make decisions, even when they try to follow a rational sequence of events. The objections to the model as a descriptive guide are well known and summarized in various literatures dealing with decisionmaking in programs and organizational settings (e.g., March and Olsen, 1976; Elmore, 1978; Nutt, 1984). But the fact that decisionmakers typically do not follow a rational sequence of events, despite their best intentions, does not necessarily mean that the resulting decisions are poor ones, or that rationally motivated practices have no place in decisionmaking. The activities undertaken in the name of rationality may still serve useful functions. Furthermore, the best decisions may rely on a more subtle series of interactions and deliberations than can be captured in a five-step process.

Federally Prescribed Steps in Program Decisionmaking

Federal law and regulations in Chapter 1 are specific about three aspects of the program's decisionmaking process: the assessment of student (and program) needs, consultation with parents and teachers, and the evaluation of the program. Although these requirements were not consciously put in place as an integrated rational approach to local decisionmaking, they do embody many of the assumptions about rational decisionmaking just described. These requirements thus may reinforce widely held beliefs at the local, state, or federal level in the desirability of making Chapter 1 decisions in a systematic and rational way.

Although there have been some changes since the passage of ECIA, these requirements represent an enduring feature of the program; local practices stimulated by them are therefore likely to be part of program tradition. We summarize below what these provisions require.

First, Chapter 1 provides that students' needs will be assessed annually as a way of identifying who is eligible for the program. Although not explicitly mentioned in the law, state Chapter 1 offices typically require that a programmatic needs assessment be done periodically. These requirements have changed little since Title I.

Second, the law requires that two kinds of people be consulted in the process of designing the program: teachers and the parents of the students served. Current regulations are less specific about the mechanism for parental consultation; under Title I, program staff were to form a parent advisory council (PAC), which was supposed to meet regularly. Requirements have never been so specific about how program staff should consult with teachers, but federal nonregulatory guidance suggests methods districts might consider when consulting teachers.

Third, as was true under Title I, the program's results are to be evaluated in a systematic way. Initially, evaluation was instituted in the Title I program as a way to demonstrate accountability to the outside world, particularly to the parents of Title I students. The role of evaluation in

The program evolved subsequently into a multilevel reporting system, with prescribed testing models to demonstrate student performance. More recently, under ECIA, federal law and regulations have emphasized the use of evaluation findings in further efforts to improve program operations, while allowing more flexibility in the choice of evaluation approach.

Aspects of Decisionmaking on Which We Focus

For our purposes, what scholars have learned about decisionmaking generally and what the federal government explicitly prescribes point the way to a more useful framework for examining the decisionmaking process in Chapter 1 programs. With this framework we can understand the way Chapter 1 staff make decisions about program design, including what they do (or don't do) in response to federal provisions governing the process. The framework directs our attention to four aspects of the decisionmaking process: participation, focus, form (and formality), and the role of information.

- Participants. Participants in Chapter 1 decisionmaking include both those whose voice in design decisions will predictably be very strong, such as the federal program manager, and those whose input to decisions may have much less impact, such as parents or teachers. Varying somewhat by size but also by local politics and routines, the number of participants and their relative importance may range from one or a few to an elaborate advisory network.

- Focus. Depending on the occasion that brings together the participants, their activities may focus on some aspects of the program design while ignoring others, although not necessarily in a conscious or predetermined way. (Following the work of March and Olsen, 1976, we believe that once an occasion for decision arises, any aspect of the program may become the focus of attention, as the participants' agendas and values interact.)

- Form. Decisionmaking activities range from formal interaction among participants through defined steps to informal give-and-take leading to action by one or more participants. Districts run the gamut of possibilities, depending on what advisory arrangements exist (and how seriously these are taken) and how program planning for other instructional programs is done, among other variables.

- Information. Local routines for processing information define the kinds of information about the program that participants pay attention to when making decisions and the ways in which they use it. This may be systematic data--such as that provided by Chapter 1

needs assessments and evaluation--but perception, hearsay, and nonsystematic observations may also play a role.

Chapter 1 program design decisions may be made at different levels, varying with state or district factors and with the design feature about which choices are made. The principal locus of decisionmaking may be at the state educational agency, the district office, the school--or even a combination of the three. Most of the "official" design decisions are made at the district level, often with input from the state (e.g., state guidelines may suggest preferred modes of service delivery). But district-level decisions may often be reinterpreted at the school level by the manner in which school staff implement decisions, at least for those activities that lie within the school's realm of discretion.

Program Design

Program "design" has many meanings. For this study's purposes, we focused on the design of instructional services. To the practitioner, the concept of "program design" may encompass more. In addition to instructional arrangements, ancillary services (e.g., counseling, nutritional services) and instructional support services (e.g., teacher training and supervision) may be thought of as part of the program's "design." Program staff also develop policies and procedures for identifying schools and students that will be served--in short, the "targeting design" of the program. The design of services and approach to targeting imply an allocation of resources, and this, too, may be thought of as part of program design. Finally, program administrators develop approaches to organizing and administering the program--the "organizational design" of the program.

Because other aspects of the OERI assessment were investigating targeting, resource allocation, and local administration more directly, we did not make these the major focus of our research. However, we recognized that, in practice, all aspects of local program design may form an integral whole. Consequently, we paid attention to them not only to determine how they are related to the design of instructional services but also to

increase the understanding of these topics for the broader purposes of the OERI assessment.

Design Dimensions and Key Features

We included within the concept of program design the following major dimensions: (1) the grade-level focus (e.g., early intervention, remedial strategies that respond to deficiencies in later grades), (2) the service delivery model (e.g., pullout instruction, in-class services, schoolwide project arrangements), (3) staffing (e.g., certified teachers, aides, parent volunteers), (4) the curriculum (including subject areas, the nature of materials and equipment, skill emphasis), and (5) the connection between compensatory and other instructional programs.

We examined design features and associated changes in several groupings corresponding to the sets of decisions that program staff were likely to make:

- Basic features of the program design. Whatever else they do, program planners must select grade levels to be served, choose the model(s) by which services will be delivered, and decide who will deliver these services.

- Options for curriculum and approach. Program planners have many options before them regarding the nature of the curriculum and the way it is taught or reinforced. The use of the computer, an emphasis on higher-order skills, and the encouragement of parent participation in various instructional support roles are among the options that have attracted attention recently.

- Arrangements for special groups (e.g., nonpublic school students) or situations (e.g., schools with high concentrations of poor students). Because of the diversity in the population served and the enormous variety of settings in which the students are found, special arrangements may (or must) be made to accommodate these differences.

- Connections between Chapter 1 and other instructional programs or initiatives (e.g., state or district reforms). Whatever the design of the program, program planners face choices about how to respond to and link Chapter 1 to the surrounding instructional programs. This area of design is only partially within the program planners' control, because outside programs and initiatives are involved. Nonetheless, Chapter 1 is typically designed to reinforce these

regular instructional program; furthermore, developments in the outside world may provide opportunities or new constraints.

Table II-1 displays the dimensions of program design on which our investigation focused and the key design features related to each one, organized by the four groupings above.

Changes in Program Design

Current design features may or may not represent a change from earlier Title I practices (or from the first few years of ECIA). We were particularly interested in program design changes that have taken place in the last 5 years, a time frame that includes the 4 years of Chapter 1 implementation (since the 1982-83 school year), but also the last year of Title I, because the key events in that year (final Title I regulations published, funding cutbacks, passage of ECIA) could bear an important relationship to the change process under Chapter 1.

Changes may be major, touching many facets of the program's design, or they may be limited to one dimension only (e.g., one year a district's program makes no use of computers; the next year, half of the Chapter 1 eligible elementary schools have one minicomputer used on a pilot basis). Operationally, we included the full range of changes from major to minor, provided that:

- One or more dimensions of instructional program design were affected (a change in targeting alone was not considered a "program design change," for purposes of this study).
- The change was not trivial (e.g., the change affected more than a small proportion of the Chapter 1 population, either currently or as projected).
- The change was not temporary--that is, it had been in place (or, if being enacted, was likely to be in place) for more than a short period of time (e.g., for more than one school year).

Change in program design need not be the product of conscious, formal decisions. Particularly at the school level, new Chapter 1 curricula or changes in relationships between Chapter 1 and other programs may evolve

Table II-1

DIMENSIONS AND KEY FEATURES OF INSTRUCTIONAL PROGRAM DESIGN

Dimension	Key Features
Basic Features of the Design:	
Grade-level focus	. Level of intervention
Delivery models	. Relationship in time and place between Chapter 1 service and core instructional program
	. Intensity and duration of services
Staffing	. Presence and type of professional staff (specialist teachers, other certified teachers)
	. Presence and type of noncertificated instructional staff (aides, paraprofessionals)
Curriculum and Approach:	
Subject area(s)	. Basic remedial subjects: reading, language arts, mathematics
	. Other subject areas: e.g., science, social studies
Skills emphasis	. Nature, complexity of skills taught
Technology of instruction	. Materials
Nature of instructional support and reinforcement	. Role of ancillary staff in school (e.g., counselors, social workers)
	. Involvement of parents or other community members in support of instruction
Special Arrangements: (for particular types of students or settings)	. (Adaptations of the above basic features and curriculum/approach options for particular situations)
Connections with Other Instructional Programs: (the regular academic program; other special-needs programs)	. Sharing of students
	. Coordination of instructional content
	. Coordination of instructional planning; communication among staff

over time, without a declaration from anyone that the program will be this way.

Although there are many possible changes that might be considered, we concentrated on 10 areas of change, chosen because they have attracted attention in recent years among policymakers and program designers. The focal areas of change are shown in Table II-2, grouped into the four sets described previously.

Explaining the Decisionmaking Process and Program Design Choices

We are trying to explain three things:

- The nature of the decisionmaking process.
- The current state of the program's instructional design.
- The recent changes (or lack of change) in the design.

Explanations for all three derive from existing studies of the implementation of social programs or policies and on Title I or Chapter 1 specifically, which provide a framework for developing explanations.

Sources of Explanation

A decade or more of scholarship helps to locate Chapter 1 program design and decisionmaking in a network of influences spanning several levels of an intergovernmental governance structure that includes Congress and federal agencies, state education agencies, and often intermediate units as well. Policies promulgated at the top are redefined as they are enacted by successive layers of the system, so that the intent of the original policy often changes (e.g., see Williams, 1980; Wildavsky, 1979; Farrar et al., 1980), but so does the behavior or mission of organizations at each level, often in subtle ways not intended by the original policy (Berman and McLaughlin, 1978; Cohen, 1983).

Table II-2

CHANGES IN PROGRAM DESIGN ON WHICH THE STUDY FOCUSED, BY CATEGORY OF PROGRAM DESIGN FEATURE

Basic Features of the Design:	Types of Recent Change
1. Grade-level focus	. Expansion (or reduction) of services to the secondary school level
	. Increased emphasis on early intervention
2. Delivery models	. Shift from in-class to pullout arrangements (and vice versa)
	. Adoption of replacement or add-on models
3. Staffing	. Shift toward aides and paraprofessionals
	. Greater or exclusive reliance on certificated teaching staff
Options for Curriculum and Approach:	
4. The technology of instruction	. Adoption of computers
5. Skills emphasis	. An orientation toward higher-order thinking skills in some, or all, aspects of the program
6. Parents' instructional support role	. Expanded use of parent volunteers in school
	. Encouragement of parents in home support roles
Special Arrangements:	
7. For nonpublic school students	. Change in location of instructional services (no longer on parochial school premises)
8. For high-poverty school settings	. Adoption of schoolwide projects
Connections with Other Instructional Programs and Initiatives:	
9. Connections with existing local programs	. Shift in degree of integration with core academic program
	. Coordination with other special-needs programs
10. Responses to educational improvement initiatives	. Adjustments in design due to state educational reforms
	. Response to (or initiation of) local educational reform

This "adaptation" or "evolution" of policies is driven by the powerful forces in the immediate environment of the implementers. The strong influences of these forces and the resulting coping mechanisms have often been observed at the state, district, and school levels in research on educational program implementation (e.g., Weatherly and Lipsky, 1977; Stearns et al., 1980; Orland and Goettel, 1982; McDonnell and McLaughlin, 1982). Recent research syntheses suggest that federal programs have gone beyond the "mutual adaptation" dynamics described by earlier implementation studies; instead, local personnel have grown accustomed to the presence of federal programs and at the same time have "customized" them to their own particular needs and situations (Kirst and Jung, 1985).

On the basis of this research, we can construct a simple model of the categories of factors likely to influence federal programs in general and Chapter 1 design decisions in particular, as shown in Figure II-1.

By searching for explanations within such a framework, we are able to identify multiple factors that influence the decisionmaking process and the particular design choices or changes in question. Some factors emerge from our analyses as driving forces for change or stability in a particular feature of program design; others act more as facilitating or inhibiting conditions. Because they have very different policy implications, we will try to distinguish local, state, and federal explanations as much as possible.

Federal Policy Influences

As a source of influence on design choices and the decisionmaking process, federal policy has particular importance in this study and to the OERI investigation as a whole. We note here the conceptual significance of federal policy in our study and the range of policy influences we have considered. Relevant Title I and Chapter 1 provisions are referred to throughout the analysis, where appropriate (an itemized list of these provisions, noting changes since ECIA, appears in Appendix B).

Our underlying conception of federal policy is broad--it includes not only requirements (the law and its provisions, rules and regulations based on these, and nonregulatory guidance), but also funding, sanctions, technical assistance, and the broad "signals" embedded in policy and in policy change. Other federal programs or policies that serve special-needs students and that may affect local Chapter 1 decisions are also included.

Because they will be the focus of discussion during reauthorization of the current law, we pay particular attention to the provisions of the law (95 Stat. 464), as interpreted in federal regulations (FR:52340, vol. 47, no. 224, 1982) or nonregulatory guidance (ED, June 1983), and as restated in Chapter 1 technical amendments (97 Stat. 1413). These provisions are obviously an important potential influence on decisionmaking and program design. (They may be interpreted in other ways at the federal level--for example, by the courts.) However, we note that the corresponding law, regulations, and technical amendments from before Chapter 1 are also a potential influence. These requirements can be as strong as current provisions in three ways: (1) by providing the basis for current nonregulatory guidance, (2) by affecting decisions made prior to Chapter 1, and (3) by setting precedents that have been adhered to since. Although the actual choice of design is a local matter, the federal regulatory framework may affect many aspects of the Chapter 1 program design and decisionmaking process.

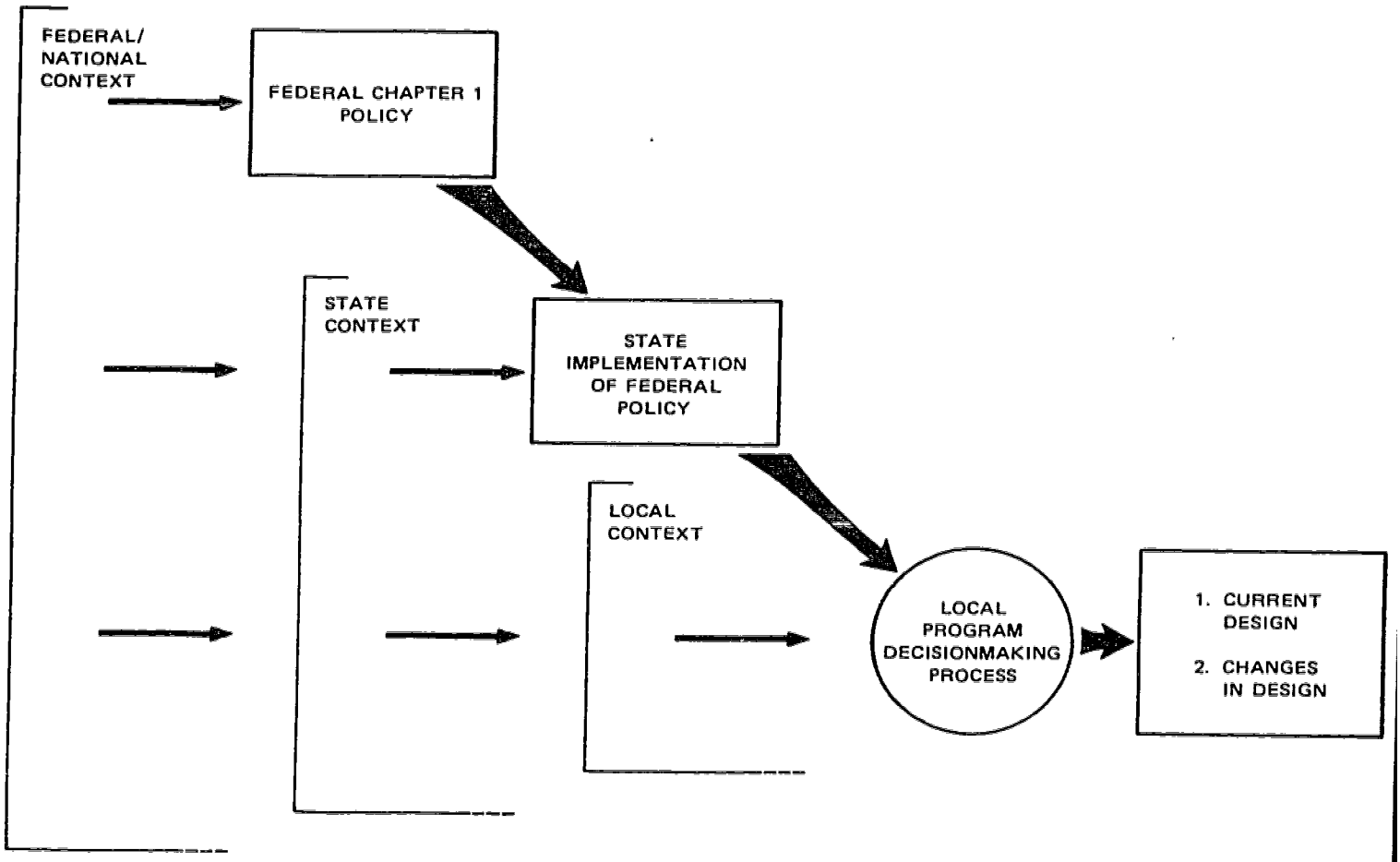

FIGURE II-1 SOURCES OF EXPLANATION FOR DECISIONMAKING PROCESSES AND PROGRAM DESIGNS

PART TWO: PATTERNS OF PROGRAM DESIGN AND DECISIONMAKING

The first set of findings describe the design of Chapter 1 programs in our sample districts and analyze the processes by which local staff make decisions about their programs:

- Chapter 1 Instructional Designs in Local Context (Section III)
- The Decisionmaking Process (Section IV).

We concentrate in this part on findings that give the reader a descriptive overview of the phenomena under study. Later sections will examine the evidence related to particular design features or explanatory factors. Thus, in Section III, we profile the Chapter 1 program in several sample districts, chosen to reflect a range of settings and designs, to familiarize the reader with the program designs as a whole. Similarly, in Section IV, we concentrate on the general features of the decisionmaking process, rather than its variation by particular features of the design.

III CHAPTER 1 INSTRUCTIONAL DESIGNS IN DISTRICT AND SCHOOL SETTINGS

In this section we describe the range of current Chapter 1 program designs in both district and school settings. We accomplish this by profiling particular programs that exemplify distinct design configurations in contrasting types of settings. The examples will help the reader to visualize the Chapter 1 program design as a whole, as a prelude to the analysis of particular design choices and associated changes that appears later in the report.

Program Configurations in District Contexts

Although there are numerous variations in the way local districts design their Chapter 1 programs, one can suggest the range of variation by describing particular programs that fall at distinct points along that range. We have chosen four districts that differ by size, region, and program design to represent that range. A brief description of the key features of program and setting follows for each site. To keep the profiles brief, we do not describe all aspects of the setting and program design, but rather concentrate on the following elements:

- Salient character of the setting and its Chapter 1 program.
- Basic features of the current program design (grade-level focus, delivery models, staffing arrangements).
- Chapter 1 curriculum and approach (subject matter, skill emphasis, use of the computer).
- Arrangements for serving nonpublic school students.
- Recent changes in Chapter 1 program design.

We confine ourselves, in this section, to description. Subsequent sections pursue explanations for the present designs or recent changes.

Chapter 1 Programs in Smaller Districts

In the smallest districts in our sample--those with student enrollments less than 10,000--the Chapter 1 program reflects very closely the philosophies, positions, and character of a few individuals--typically, the Chapter 1 director and the teachers or aides who work directly with students. The instructional design of the program is usually straightforward and simple and is less likely to vary significantly from school to school. The program inevitably reflects the salient characteristics of its context: a small, often rural, community, in which most members know each other personally; a relatively low budget for Chapter 1 services, varying somewhat with the proportion of students from low-income families; the small number of actors in program decisionmaking; the relative isolation from the outside world, if for no other reason than the small size of the program staff.

We present below a profile of the program in one such district.

District Profile A: Mill Town*

In this district of fewer than 2,000 students, located in a rural working-class community, the Chapter 1 program has become a central feature of the district's remedial offerings. The changes in the program over the last 10 years have been relatively minor, reflecting stability in leadership at the program, district, and state level.

District student population. The population served by the Mill Town district as a whole is largely white, with a small percentage of Hispanic students and a few black students. Although the local economy has not been prospering in recent years (several factories have closed), the proportion of the student population from families below the poverty line remains relatively small. This fact facilitates integrating Chapter 1 services into the instructional program at all levels.

Basic features of Chapter 1 design. Chapter 1 provides remedial reading classes for students in kindergarten through grade 10. At all levels Chapter 1 staff operate on the same basic delivery model: students are pulled out from their regular academic program (typically out of homeroom, social studies, and science periods) for reading instruction in periods corresponding to the normal class periods in the school.

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* Names of the districts in these profiles are fictitious.

Chapter 1 instruction is delivered by teachers with certification in remedial reading; there are six such teachers, who collectively serve approximately 250 students. The program makes no use of aides. Students receive Chapter 1 instruction in small groups of 3 to 12 students.

Curriculum and approach. The program's skill emphasis shifts somewhat across grade levels. In the kindergarten, the program emphasizes "reading readiness" skills, following a curriculum that is fairly independent of the regular program. In elementary grades, the program concentrates on basic reading skills, but with some attempt to provide a supportive service to the regular classroom instruction, by helping students with classroom assignments. At the secondary level, the proportion of time spent helping students master their writing, reading, science, or social studies homework increases, although there is still an effort to provide students with parallel material that addresses particular remedial needs more directly than the regular English courses. There is little explicit attention to higher-order skills at any level.

Arrangements for serving nonpublic students. The one parochial school in town sends half a dozen students by bus to the district for instruction (twice that number were formerly served when Chapter 1 staff went to the parochial school to provide instruction prior to the recent Supreme Court ruling that invalidated this practice).*

Recent Changes in program design. Although there have been relatively few changes in the overall shape or thrust of the program in the last 5 years, several changes are apparent: with some prodding from the state, the district eliminated "tutor" positions in favor of a Chapter 1 staff that was composed of certificated teachers only; computers were introduced into the curriculum, although in a minor role (little software was available or has since been bought for the program's DEC Rainbows; some teachers, however, make extensive use of Apple computers purchased for other purposes); remedial reading and mathematics services were extended from the middle school into the high school; remedial mathematics services were subsequently dropped.

Chapter 1 Programs in Larger Districts

The arrangement of Chapter 1 programs in districts with enrollments of 10,000 or more becomes more complex in several respects: first and most simply, there are many more schools eligible for services, except in the districts with relatively few poor students. Second, the diversity of needs

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* See Section XI for a more extensive discussion of the Supreme Court ruling and its ramifications for Chapter 1 program designs.

is often greater, prompting a more varied program design. Third, the size of the program and of the district in which it is housed encourages more formalized procedures for making decisions about program design.

These larger districts are found in a variety of settings, including larger rural counties, more substantial suburbs, and small to moderate-size cities. (Districts in the largest metropolitan areas have even larger and more complex Chapter 1 programs, which we describe later in this section.) We included districts of each type in our sample. Two of these districts illustrate some of the diversity in program designs that we encountered. We have chosen two, profiled below, that represent different points on a continuum ranging from those in which the Chapter 1 program is centrally controlled by district staff, allowing little variation among schools in the way Chapter 1 services are provided, to those that grant school-level staff considerable autonomy in the way that services are arranged and offered. First, we present a profile of a district with a more centrally controlled Chapter 1 program.

District Profile B: Central City

By contrast with Mill Town, this district presents a story of change in the design of Chapter 1. The changes stem in part from turnover in district and program leadership and have been influenced by the active environment in which the district finds itself. The district is located within the capital city of a state that has taken forceful measures to reform the quality of the instructional programs in districts statewide. The proximity to a university with an interest in educational improvement has provided further support for changes that influence both the regular and compensatory education programs.

District student population. Of the nearly 24,000 students in this district, between 10% and 15% are eligible for Chapter 1 services, a relatively low proportion by comparison with other urban areas of a comparable size and economy (a declining industrial base). A small percentage (approximately 10%) of these have limited proficiency in English. Many more are black--one-fifth of the district's students are of minority background; the district has been carrying out a desegregation plan over a number of years.

Basic features of Chapter 1 design. Chapter 1 services are provided in reading and mathematics to schools serving kindergarten through 5th grade. In the lower elementary grades, students are taught in one-on-one tutorial situations (outside the regular classroom) by aides under

the supervision of certificated Chapter 1 teachers. In the upper elementary grades, students receive their compensatory instruction in small groups. Students are pulled out of their regular programs for 40 minutes daily to participate in either the tutorials or small group classes.

Curriculum and approach. The Chapter 1 curriculum is built around several basal reading series used in the regular classroom; upper elementary students participate in a structured program based on the principle of maximizing students' instructional time on task. "Basic" skills are emphasized, although a recent effort has been made to introduce teachers to the concepts and techniques implied by instruction aimed at higher-order thinking skills (this new focus has yet to filter down to classroom instruction in any significant way). Computers do not have much role in Chapter 1 instruction, or in the regular program; in a few schools, however, Chapter 1 teachers have opted to use computer-based curricula such as IBM's Writing-to-Read Program.

Arrangements for serving nonpublic school students. As in Mill Town, students from some of the nonpublic schools in the community are bused to the district's schools to receive Chapter 1 instruction; other nonpublic schools choose not to have their students participate.

Recent changes in program design. The biggest changes in the Central City Chapter 1 program have come as a result of a shift in program (and district) leadership, which has sought to impose a more centralized control over the program and to standardize it across schools. In the past, Chapter 1 had supported aides in the regular classroom, but these had been performing various tasks unrelated to instruction and were perceived to be ineffective by the new leadership. Consequently, the program was shifted from an in-class delivery model to pullout arrangements; teachers with specialized training were hired to oversee the aides' work; new, structured curricula were put in place that guided the aides' and teachers' efforts in a coordinated way.

Not all districts try to exert such control over the design of the Chapter 1 program. Another urban district in our sample illustrates a more decentralized approach and its ramifications for Chapter 1 design.

District Profile C: Valley City

The decentralized relationship of district office to schools (and Chapter 1 program director to school-level program staff) sets the stage in Valley City for a diverse Chapter 1 program, designed at the school level to meet individual schools' needs. The pattern of changes in the program thus corresponds most directly to the particular circumstances of each school and the preferences of its staff, particularly the principal. Accordingly, there have been major changes in the design of services in some schools, and relatively little change in others. Also,

the district receives funds from many special needs programs, several funded at the state level, and uses all of these in combination at the school level to provide services to Chapter 1 (and other) students.

District student population. The student population served by Chapter 1 in Valley City is larger, poorer, and more diverse than its counterpart in the Central City School District. Of the approximately 50,000 students in the district, nearly a third come from homes below the poverty line. An even greater percentage have limited English proficiency because substantial numbers of Hispanic students and others from several Southeast Asian refugee groups are present. More than half of the district's students are from minority backgrounds. These facts, combined with the sudden nature of the changes in student population, have created a significant challenge for the schools and for the design of Chapter 1 services: schools have become eligible for Chapter 1 services almost overnight; new remedial curricula have had to be developed for the new students; adjustments in the district's desegregation plans have been made.

Basic features of Chapter 1 design. There is great variability in Chapter 1 designs across schools, due to the diversity of needs the schools face and the fact that principals are granted the final say-so over the arrangements for services in their schools (the district's Chapter 1 director has little direct authority in these design decisions, other than to indicate what will or won't meet compliance concerns). Consequently, some schools focus funds on the lower grades; others on all grades. Some use in-class models, others serve students exclusively through pullout arrangements. Some support only aides, while others favor certificated personnel. Chapter 1 funds are used in the full range of eligible schools in the district, from kindergarten through grade 12.

Curriculum and approach. By the same token, Chapter 1 curricula and delivery approaches are extremely varied. Schools may choose to follow district-approved remedial curricula or pursue their own course of instruction (with the district's approval, which has always been granted). More often than not, instruction at the elementary level combines reinforcement of basic reading and mathematics skills (with aides as the instructors) with some work with specialists in language and reading. In the middle schools, computer-managed drill and practice in Chapter 1 laboratories is especially popular. High school Chapter 1 students are taught in either in-class or pullout arrangements that concentrate on remediating basic skill deficiencies, rather than preparing students for the state's graduation tests. Little attention is given at any level to instruction in higher-order thinking skills of any kind.

Arrangements for serving nonpublic school students. For nearly a decade, no students from nonpublic schools have participated in Chapter 1. Although there are a number of nonpublic schools, each for its own reasons has shown little interest in being part of the program (e.g., the numerous Fundamentalist Christian schools in the area have an aversion to taking part in any program supported or influenced by the

federal government); the district, on its part, has not made a concerted effort to attract these schools.

Recent changes in program design. Alterations in the design of the Chapter 1 services tend to be school-specific in Valley City. With a few exceptions, there are no clear districtwide change patterns. In one of the high schools, for example, Chapter 1 services were shifted from an aide-dominated model to a laboratory setup; the other high school, which had been using a laboratory arrangement for several years, made the opposite switch. In each case, the change was fairly substantial and, in the view of school staff, a sensible response to the perceived weaknesses of current remedial services. Some more general patterns of change appear to have taken place, however, mostly as a result of the diffusion of an apparently good idea among schools--for example, the adoption of a computer-managed individually oriented laboratory program for middle school Chapter 1 students. This approach was introduced in one school by a new principal assigned to the school to "clean it up." Other schools subsequently picked up on the idea, after it had demonstrated its success in the original school.

Chapter 1 Programs in Very Large Urban Districts

Because the largest urban districts have unique characteristics and because they house so many of the nation's poor students, we describe the program configurations for such districts separately. In this kind of setting, Chapter 1 programs are by necessity somewhat decentralized, in two senses: subdistrict units may operate separate components of the program, each with a different design, or schools may choose their design from a menu of options provided by the district, or both. The complexity of the program in these settings is great, given the large number of staff members involved and the size of the budget.

We included three such districts in our sample; a profile of one of these appears below, which illustrates the nature of Chapter 1 program design in such a setting.

District Profile D: Factory County

This district of nearly 100,000 students operates a multicomponent Chapter 1 program serving all levels of the school system. The district comprises a moderate-size industrial city and the surrounding county. The district is now emerging from a period of turbulence associated with the introduction of a countywide desegregation plan. Stable leadership

and renewed attention to the quality of education by the state have provided a more stable environment for the Chapter 1 program. Even in the most difficult times, however, the Chapter 1 program has maintained a strong and constant presence in the schools (the federal government has recently cited several of the program's components as exemplary).

District student population. The district serves a poor and highly mobile population, with significant concentrations of minority students. Approximately a third of the district's student body are black; nearly the same proportion come from families below the poverty line. The desegregation plan that has been in place for more than a decade involves extensive busing and continual adjustments in school attendance areas and student assignments to schools. Unlike Valley City, Factory County does not have great linguistic or ethnic diversity among its students.

Basic features of Chapter 1 design. Delivery models and staffing in Factory City's Chapter 1 program vary by program components, which are defined by educational levels and subject matter (at the elementary level, for example, there are four components: an individualized reading lab taught by teachers and aides, a one-on-one reading tutorial program taught by paraprofessionals, and corresponding lab and tutorial arrangements for teaching mathematics). Each school selects the program model for its students; the content and format of the program are largely determined by the district Chapter 1 office.

Curriculum and approach. The curricula in each component combine individualized instruction in basic skills with an emphasis on what the district terms "thinking" skills (the latter emphasis is most pronounced in the middle and high school grades). The curricula in all components--in some instances commercially published materials, in other cases materials developed locally or by a nearby university--are highly structured, which facilitates their use by paraprofessionals and helps to maintain district control over what is taught in Chapter 1. Computers have played a prominent role in high school and middle school reading components for several years, both as a motivational tool and as a tool for practicing writing and language arts skills.

Arrangements for serving nonpublic school students. By contrast with the preceding three districts and with all other districts in our sample, the Factory County district continues to provide Chapter 1 reading and math instruction in the eligible nonpublic schools, most of which are Catholic. Although this practice runs counter to the current Supreme Court resolution (discussed in Section XI), it is justified by district staff because it conforms to the ruling of a local federal court on a previous suit brought by the nonpublic schools. The district is awaiting the outcome of other legal action regarding the implications of the Supreme Court ruling before it takes any further steps.

Recent changes in program design. There have been relatively few changes in the program's design over the past 5 years. Chapter 1 remedial mathematics in middle schools is new; there is more extensive use of computers in Chapter 1 at several levels. Otherwise, the program has remained as is. The stability of the program derives from various

factors, among them the comprehensiveness of the design: the program offers options at all levels that permit school staff to implement whatever they wish. Lacking the sudden fluctuations in student population that occur in districts like Valley City (other than the annual reassignment of students for desegregation purposes), the district has little motivation to alter its approach in significant ways.

Variation in Chapter 1 Design at the School Level

As the preceding profiles have suggested, the design of Chapter 1 services at the school level varies considerably as a result of the district's design choices, school-level decisions, and the programmatic adjustments made as district or school decisions are put into practice. The preceding profiles have already allowed the reader to infer the variety of ways Chapter 1 services are arranged in a given school--for example, in one school a computer-managed laboratory arrangement for drill and practice in basic skills, in another a one-on-one tutorial organized around the school's basal reading series. We note below several aspects of the variation in school-level design that we have not yet made explicit.

First, schools vary significantly in terms of the concentration of students who are eligible for the program or for other specialized services. At one extreme, a part-time Chapter 1 instructor may work with 15 to 20 students out of an elementary school of 300 or more. At the other, the great majority of students in the school are eligible; in such situations, Chapter 1 is likely to become a presence throughout the school program, for example, through the assignment of Chapter 1 aides to all classrooms or for extensive pullout arrangements serving most of the school's student body. In a few specialized cases, arrangements are made for the whole school's instructional program to be modified so as to serve compensatory education goals more effectively, as in the case of "schoolwide projects" in operation in two of our sample districts (see Section XII for an extended discussion of schoolwide projects), or the "replacement" models employed by several other districts (see Section VI). Whether or not specialized arrangements are made, the fact of a high concentration of eligible students drives district or school decisionmakers toward a different set of design considerations than those in schools with fewer Chapter 1 students. Logistical factors, for example, such

as the availability of space for pullout instruction, become a major concern in the program design equation for high-concentration schools.

Second, the relationship between Chapter 1 services and the regular instructional program varies greatly across schools. In some cases, as a joint result of district encouragement, school leadership, and the chemistry of the staff, among other factors, Chapter 1 services are closely integrated with the regular instructional program of the school. In other schools, the relationship is more distant because of a variety of forces, including intrastaff friction and the way the Chapter 1 program is structured (see Section XIII for a more extended discussion of connections between Chapter 1 and other instructional programs).

IV THE DECISIONMAKING PROCESS

Before examining particular design choices, we describe the processes districts use in making decisions about Chapter 1 program design. We first describe the context for the process: the events and interactions that comprise the decisionmaking process in a district. We then examine how Chapter 1 design decisions are made, first with respect to participation patterns, second with regard to what districts do to implement federally prescribed steps in decisionmaking. Next, we examine the degree of formality in the decisionmaking process. Finally, we note variations in the decisionmaking processes across design features and levels. Our analyses address the following questions:

- How is the process of decisionmaking within the Chapter 1 program related to, and conditioned by, the larger context of decisionmaking in the district (or school) as a whole?
- Who participates in program design decisions and who is excluded? Why are these people participating in this way?
- How do districts implement federally prescribed steps in the decisionmaking process-- needs assessment, consultation with parents and teachers, and evaluation? What explains the roles these activities play in decisionmaking?
- What form does the decisionmaking process take? How formal and specified is it? What explains the format and formality of the process?
- How much does the decisionmaking process vary with the type of design feature under consideration?
- How do the decisionmaking processes at school and district levels differ? How are they connected?

The Context for the Decisionmaking Process

The process of making Chapter 1 design decisions takes place at the district and school level in the context of decisionmaking about the regular instructional program or other special needs programs. Under certain

conditions, the larger decisionmaking processes subsume or strongly influence the process by which Chapter 1 decisions are made, even though in almost all the districts we visited, the Chapter 1 program is structurally separate from the core instructional program. Three aspects of the larger context are especially important for understanding Chapter 1 decisionmaking: (1) the prevailing style of decisionmaking in the district, (2) the distribution of decisionmaking authority between district and schools, and (3) idiosyncratic events outside the program.

In most of the sites we visited, an identifiable style or pattern of decisionmaking prevails districtwide and leaves its stamp on the process within the Chapter 1 program. In some cases, for example, district decisionmakers favor careful research on, and justification for, programmatic changes. In other cases, the district's decisionmaking process is characterized by formal participatory consultation through task forces and standing committees. In still others, the charismatic influence of particular individuals sets the tone for decisionmaking events. These are only a few examples of the ways that the district's decisionmaking style manifests itself. In each case, a shared understanding among participants defines who should be involved, how elaborate the process should be, how information should be used, or whose views should be given the most weight.

Districts also vary in the degree of autonomy granted to school-level decisionmakers--especially the school principal--in matters of instructional design. In some districts, curricula are centrally defined and materials selected by district-level staff; in other cases, school staff are given more leeway in curricular decisions. In more extreme cases--for example, in situations where "school-based management" is emphasized--school personnel have effective control over hiring, budgeting, and many other aspects of school life affecting the instructional program. Although Chapter 1 is not formally part of the regular instructional program, it cannot help being affected by the way decisionmaking authority is distributed. Two extreme examples illustrate the point:

- The new superintendent of a small rural district, who came to town "with guns blazing," took charge of the Chapter 1 program for all practical purposes, even though he retained a former principal as the nominal head of the program. The superintendent's decisions about the program became part of his process of revitalizing the district as a whole.

- By an unusual arrangement in one large urban district (see profile of the Valley City district in Section III), direct authority over school Chapter 1 staff is given to the line instructional hierarchy; the director of state and federal programs acts in a staff capacity to the regular chain of command and thereby exercises no direct control over instructional program design. Rather, he advises on matters of compliance and oversees budget allocation or other administrative matters, while school-level staff--typically the principals--take the lead on decisions about instructional design.

The process of decisionmaking in Chapter 1 is not always controlled by surrounding authority patterns as completely as these examples imply. In most types of districts we visited, program decisionmakers preserved some distance from the larger context. We even encountered examples where the locus of decision within the program was opposite to the prevailing district pattern. In one site, for example, in which schools have great discretion in most matters of instructional design, the district Chapter 1 director maintained control over design decisions by dint of her forceful manner and respect among school staff developed over a long period of time. In fact, extreme examples of centralized or decentralized decisionmaking patterns can result in formal decisions about Chapter 1 instructional design occurring outside the program, either in the central office or in the schools.

Idiosyncratic events that occur independently of the federal program occasionally have significant effects on the Chapter 1 decisionmaking process. Special conditions that imply major alterations to the overall instructional program of a district (e.g., the implementation of desegregation plans) can subsume or even preempt the Chapter 1 decisionmaking process, in effect moving it to the superintendent's cabinet, a desegregation planning committee, or a special task force. For example:

- In one very large Southern district, a lawsuit was filed alleging discrimination on the basis of national origin. The resulting consent decree initially required busing. Subsequent judicial action specified that the district would cease the unsuccessful busing activities and create a number of special-emphasis schools with the highest

number of low-achieving students. This consent decree explicitly stated that federal funds would be removed from these schools.

Upper-echelon decisionmakers outside the program were much more heavily involved in this decision than anyone else; school staff, typically involved in an interactive decisionmaking process, were rarely consulted.

Patterns of Participation

The distribution of responsibilities within the district sets the stage for examining patterns of participation in Chapter 1 decisionmaking. As one moves along the continuum from centralized to decentralized decisionmaking arrangements, an increasingly large and diverse array of individuals take part in the decisionmaking process.

Chapter 1 program design decisions are made by some combination of district-level administrators, school-level administrators, teachers, and community members. In centralized districts, an individual (e.g., superintendent, Chapter 1 director*) or small group of district administrators or staff (e.g., a superintendent's cabinet, Chapter 1 program staff) is primarily responsible for making most important decisions. Other district- or school-level staff may have considerable input on certain programmatic decisions, but they do not typically have decisionmaking power. Principals tend to become involved only if there are implications for school scheduling, facility use, etc. For instance, in such a district, the decision to incorporate computers into Chapter 1 might involve a teacher from the high school because of particular high-technology expertise. In the following example, the superintendent and administrators were the key players in decisionmaking:

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* Note: Throughout this report, "Chapter 1 director" refers to the individual who runs the Chapter 1 program. In fact, the Chapter 1 director may be the manager of state and federal programs (whose office may also have titular Chapter 1 staff). In districts where a titular "coordinator of Chapter 1" working under the manager of state and federal programs exists whose function is more clerical or like an administrative assistant, we refer to the higher-level position as the director of Chapter 1. If the superintendent runs the program, s/he is still referred to as the superintendent.

- In a very large district in the Southeast, the superintendent's cabinet looks at the Chapter 1 plan each year and discusses change where appropriate. For every decision that is considered, a committee is appointed. But the Chapter 1 coordinator describes the decisionmaking process by suggesting that: "They [committee members] find a way to do what he [the superintendent] wants to do."

In other centralized districts within our sample, the Chapter 1 director (and staff) exercised control over program decisions in an analogous way. At the other extreme, where some or all of the decisionmaking power resides with school-level administrators or teachers, the principal is typically the key decisionmaker, as the following example shows:

- The principal of one middle school, brought in by the district to "clean up" a situation of low morale and poor student performance, noted a lack of continuity in the existing compensatory program. Aides were assigned to classrooms with little coordination or direction. The principal decided to bring in a computer-based program that had been successful in another school. He laid off two-thirds of his aides, hired two certificated specialists, trained the staff, purchased the computers, and implemented the program. The district Office of Curriculum and Instruction staff had to sign off on the plans, but this approval was primarily a formality.

In districts that fall at some midpoint along the continuum of centralized to decentralized decisionmaking arrangements, a broader and more varied cast of characters is typically involved in program design decisions. For example, one very large district we visited follows what might be described as a "menu-driven approach" to decisionmaking.

- Inspired partly by effective schools research, district administrators decided that increased school-level autonomy is essential to the effectiveness of instruction. District administrators determine the level of funds each school will receive, and provide technical assistance and evaluation data to schools on an individualized basis. But principals must conduct building-level needs assessments and sustained gains evaluations, as well as address program design and implementation issues, as they prepare a Chapter 1 plan from among the district-approved options.

In this kind of district, a certain amount of school-level autonomy is allowed within limitations established by the district administration. School-level variations can occur across the board, as in the example cited above, or in certain schools where innovative programs are in operation.

Besides district- and school-level administrators, other individuals can play a significant role in the Chapter 1 decisionmaking process, although less frequently in the districts within our sample. For example, some districts require any decision involving the purchase of capital equipment (e.g., computer purchases) to be approved by the school board. Although this is generally a pro forma procedure, school boards attend to these details occasionally. Parents are sometimes involved in the decisionmaking process, as well, but their role tends to be limited to ratifying decisions made by administrative staff. Teachers have surprisingly little role in the formal decisionmaking process, although they participate informally in the program design process in various ways (the participation of parents and teachers in the decisionmaking process will be addressed in detail later in this section).

Federally Prescribed Steps in Decisionmaking: Needs Assessment, Consultation, and Evaluation

The federal requirements for needs assessment, consultation, and evaluation establish a set of events that accompany, and can affect, the interaction of decisionmakers. Because federal law and regulations have concentrated on these aspects of the decisionmaking process (and because changes in law under ECIA alter these requirements somewhat), we describe what districts do in response to these requirements in some detail. In our description, we consider the kinds of roles these activities do--and don't--play in program design decisionmaking.

Needs Assessment

Despite their enormous differences in setting and approach, Chapter 1 programs in virtually all the districts we visited conducted formal assessments of needs both at the student level (as input to student selection decisions) and at the programmatic level (in conjunction with program decisionmaking). This consistency is attributable in part to the long-standing commitment under Title I and Chapter 1 to documenting needs in a systematic

way. State Chapter 1 offices have tended to insist on yearly student assessments, and on formal programmatic needs assessments either yearly or on some periodic basis (e.g., every 2 or 3 years).

To assess individual students' needs, annual testing is virtually universal in the Chapter 1 programs we visited. The results typically form the primary basis (or one major basis) for determining a student's eligibility and relative "need" for services. The role of programmatic needs assessments in decisionmaking is far less direct. The fact that programmatic needs assessments are performed is not a guarantee that they are used--at least not in a straightforward way. It was not unusual for the Chapter 1 directors in our sample to make the following kinds of remarks: "[The effect of the needs assessment is] practically nothing, but I do it," or "We go through the steps, but the budget dictates what we do."

Programmatic needs assessments in the districts we visited typically take the form of elaborate surveys. At a minimum, the respondent pool includes school staff (Chapter 1 teachers and administrators). Other staff within the district may also be surveyed, such as teachers in the regular academic program or district-level instructional managers, as may parents or community members (one district of more than 21,000 students mails over 13,000 survey forms to the community annually). In several instances, students are also asked to fill out questionnaires. These needs assessment surveys tend to address large issues of respondent preference regarding program design (e.g., opinions about the most important grade levels or subjects to include in Chapter 1), satisfaction with existing programs, unmet needs or concerns, and the like. In a few districts we visited, these surveys are administered yearly. More often, the Chapter 1 program mounts such a survey every few years.

Our respondents were candid about the limited usefulness of such efforts in the earlier stages of decisionmaking--as alternative courses of action are being formulated and a tentative direction for the program set. In only a few instances did we find the needs assessment process clearly integrated with the ongoing review and reconsideration of program design:

- In one district, Chapter 1 needs assessment is part of a yearly districtwide process that gathers "a ton of data," including test results, reliable attitude surveys, and program-specific evaluations. This information is consolidated and sifted by a committee of evaluators, administrators, principals, and teachers, which does "free thinking and discussion of needs [based on the information]" and generates a list of 30 or 40 needs. The committee then looks for resources to meet these needs, including Chapter 1, state compensatory programs, and other kinds of resources. Action recommendations follow, which are forwarded to principals and program people for comment as well as to the district's top management. The recommendations are typically accepted.

The conditions that contribute to the presence of this arrangement suggest why this kind of needs assessment process is less common in other districts. In this case, district leaders believe in systematic decisionmaking and have equipped the district with a strong evaluation and testing program to collect the data. A tradition of broad-based participatory decisionmaking has been formalized in a yearly process that participants now expect. The Chapter 1 program is integrated with the regular instructional program to an unusual degree. And there exists a range of programmatic resources that can be orchestrated to respond to the needs the decisionmaking group identifies.

More commonly among the districts in our sample, formal needs assessments have one of two roles in the decisionmaking process. First, and most typical, the results of the needs assessment are used to justify decisions about program design made on other grounds. Simultaneously, the fact of the needs assessment process conveys a message to diverse constituencies that their "vote" has been registered. The justification process could be elaborate, as in the case of one district that conducts formal surveys, then submits these to a review team in the manner described above, but gives the review team no mandate to develop action implications from its review of data. Or the process could involve hastily conducted surveys with poor response rates, the results of which are selectively referenced in the annual application to the state. In either case, the survey instrument may be designed to promote particular responses. We visited one district where the Chapter 1 director, a computer buff, added an item about computers to this year's survey, and another where questions about the need for secondary

school services were dropped after district decisionmakers chose to eliminate these services.

Second, needs assessments appear to play a role in "problem-sensing": however crude they may be as a measurement of anything, the results of needs assessment surveys may be a way of alerting program staff to unforeseen problems or to the extent of a concern about the program, with the result that some action may then be taken. Several examples illustrate how this works:

- In a Southwestern site, the findings of a community survey conducted at the state's request as part of a wide-ranging needs assessment process revealed that the district was communicating less effectively with parents than even its administrators had believed (even though they were aware that communication had not been good). Following the survey, plans were made to institute a parent liaison position and initiate new kinds of outreach to them.

- The disaggregated reporting of student testing in another district revealed a pattern of poorer performance by minority students in the Chapter 1 program, which disturbed program officials and district top leadership. Ultimately, staff development resources were redirected to address this need.

One must keep in mind that the needs assessment process is not the only, or necessarily the most important, way that program officials sense the presence of a problem or weakness in the program. Although difficult for us to assess accurately, in most districts the Chapter 1 director's internalized sense of programmatic needs is the primary "information source" for judgments about the appropriateness of program components. Directors form their impressions in many ways, especially the following: (1) through direct observation of district conditions or program operations, (2) by listening to the views of superintendents and principals about what the district needs most, (3) by listening to the suggestions or complaints of program staff and other school-level staff, and (4) by assembling data of some kind about the conditions or other people's opinions about them. Information from all these sources, of course, is run through the filter of the director's beliefs about what is good for disadvantaged students and how programs should operate.

Consultation with Parents and Teachers

The direct contribution of parents to consideration of program design changes was negligible in all but a few cases in our sample. Title I and Chapter 1 requirements in this area have contributed to the following range of situations. At one extreme, under circumstances that appear to be unusual, parent councils remain active and in some ways influential in the process of examining and considering changes. In one large Southeastern district, for example, parents are involved in every step of a decision-making process characterized by task forces (which include parents) that consider program design changes and other matters related to the program. The district parent advisory council must also approve every task force decision. At the other extreme, parents are not now, nor have they ever been, involved in any meaningful advisory role. In a smaller Southwestern district, "parent consultation" consists of a poorly attended annual meeting of parents convened to explain the year's program; under Title I, the district was cited for noncompliance with the stricter parent advisory requirements then in force.

Between the extremes, parent councils of some kind have been retained under Chapter 1 (typically at district level, less so at school level). Periodic meetings of these groups "advise" in only the loosest sense; rather, the councils function as one way for the program staff to communicate about the program. Chapter 1 program officials continue to satisfy this requirement but expect it to contribute little to program design decisions. As one Chapter 1 director put it:

> "We do what we have to do to be legal, but parent involvement doesn't amount to much."

Another (the Chapter 1 director of the Mill Town district, profiled in Section III) expressed a common sentiment about the usefulness of parents in design-related matters, when asked whether parents are a factor in decisionmaking:

> "They are not. They can't be. When we had money, I asked them questions like whether volunteers should get free lunches in the schools. ... [But with regard to bigger decisions] before I made the decision about pulling out of the middle school, they were informed."

Whether or not they maintain a parent council, local Chapter 1 decisionmakers are likely to tap parents' sentiments in several other ways. First, the formal needs assessments (discussed above) frequently include a community or parent survey. Second, school-level Chapter 1 staff try in various ways to maintain communication with parents, including the active efforts to solicit parent involvement in the instructional process discussed in Section X. Once again, these efforts do not determine program design decisions, but they do provide decisionmakers with a sense of how parents react to the program and what they are doing--or can do--to support it.

Consultation with teachers, which has been a federal requirement since 1978, does not take place through any special, formal process in most of our sample districts. Teachers, for example, did participate as members of the task force noted above. Teachers also participate in whatever surveys a district may conduct as part of its needs assessment. District decisionmakers have occasion to learn about teachers' concerns in inservice sessions and visits to schools, as well. The decisionmakers we interviewed commonly cited teachers' concerns or opinions as one of the motivating forces for all sorts of program decisions. Thus, even in centralized districts, teachers may have significant input on some decisions.

Individual Chapter 1 teachers exert a more subtle, informal influence over program design decisionmaking by the way they implement decisions from above. This was most clearly seen in the way teachers did or didn't put into practice district decisions about computers in the Chapter 1 curriculum (e.g., some teachers simply ignored the machines; others made extensive use of them--see Section VIII) or about higher-order thinking skills (e.g., some teachers remained unclear about what this meant and carried on with basic-skills-as-usual; others encouraged their students to engage in critical-thinking exercises, even though no formal decision had been made to do so--see Section IX).

Evaluation

The role of evaluation in the Chapter 1 program decisionmaking process parallels the pattern described for needs assessments. In practice, local staff do not draw sharp distinctions between the two. Testing, for example, both assesses needs and documents program results. Process evaluations are simultaneously a way of appraising program implementation and identifying new programmatic needs.

As with needs assessments, the insistence under Title I that local programs be evaluated through pre-/post-testing and (depending on the state) through process evaluations or monitoring as well, has established a strong precedent at the local level, which continues in one form or other under Chapter 1. Among the districts in our sample, the changes in evaluation requirements brought about by ECIA have hardly been noticed. Districts still tend to use the Title I evaluation models. Some districts have begun to examine the evidence of sustained gains in students over a period of more than 1 year, but relatively little attention is paid to the information derived from this exercise, if it is even done. The enhanced emphasis in ECIA on the use of evaluation results in program improvement has had little effect at the local level, although the state Chapter 1 office has in some cases transmitted this message in the form of specific requirements. The response of one district to an emphasis on evaluation use illustrates the point:

> The state requires the district's application to include a narrative describing the way evaluation results have shaped this year's program. The Chapter 1 director writes that narrative but indicated that evaluation hasn't influenced any real decisions, because the "test results aren't that bad."

The example typifies a view of evaluation held by many Chapter 1 program directors--namely, that it has relatively little to do with the decisionmaking process--but at the same time, it points out the potential problem-sensing function of evaluation, analogous to that described for needs assessments. Had the testing results been "bad," the director might have taken notice; in some states, the state Chapter 1 office would certainly have done so. The test thus constitutes a rough thermometer of the

health of the program, either in the district as a whole or in individual schools. The Chapter 1 director in a Southwestern district explained:

> "The [testing] reports submitted to the state are not used very much for program design. I look for significant gains in achievement. If test scores start to drop at a school, I talk to the Chapter 1 teacher about the content of the program."

However, there are exceptions to the lack of connection between evaluation and decisionmaking. States, for example, are beginning to force testing programs on districts. These schoolwide testing programs identify weaknesses in instructional areas relative to other schools in the district, larger community, or state. The publicity generated by these tests is bringing enormous pressure on school and district administrators to change instructional content to improve weak programs. Chapter 1, the designated remedial instruction program, is naturally a resource that is considered when looking for options for remediation in weak instructional areas. Several district and school administrators spoke directly of the impact of state tests on the focus of remedial programs, including Chapter 1.

Evaluation can take on a more proactive position as well. For example, in one medium-size district in the sample, the Chapter 1 staff relied heavily on the district evaluation group. They conducted pilot evaluations of all new programs and closely monitored both process and outcome data. However, the state and federal program director's background is in evaluation. Therefore, this extensive use of evaluation feedback is undoubtedly an anomaly.

Like needs assessments, the results of evaluations may also be used in justifying program design decisions, but our evidence suggests that "justification" can mean more than simply "selling" a design decision to relevant audiences. The process of justifying decisions also goes on among the people involved in the decision as the group develops confidence in the course of action it is planning or undertaking on a trial basis, as in the case of a large Southern urban district in which the decision to shift from a pullout design to an excess-cost/replacement model was subsequently confirmed by evaluation results demonstrating that students gained more in the latter delivery arrangement. In other instances where program designs were

enacted on a pilot test basis, evaluations could play an important role in the review of the design change, both for proponents of the design change (who wished to gather ammunition for expanding the effort) and for skeptics. A top administrator in a large urban district commented on the Chapter 1 program's experiment with higher-order thinking skills as follows:

> "The decision to start a [higher-order thinking skills] program came from the [school buildings]. Now I would like a complete evaluation of the program. I am concerned about higher-order thinking skills being taught in a vacuum. The problem with the program is that it seems like an addendum.... It's not incorporated in the regular curriculum."

We may conclude that, by themselves, the federal requirements for evaluation of the program do little more than assure that some evaluation is done and that the information that results is available for decisionmaking, should local staff choose to use it. As the examples above demonstrate, there are various ways that local staff have chosen to draw on this resource. Several factors in the environment of the local Chapter 1 program contribute to the likely use of evaluation in decisionmaking:

- Local staff with expertise in evaluation.
- Large size of the district, coupled with centralized control of the program.
- Increased attention to testing more generally.
- Controversial matters of program design that are the subject of much debate.
- The belief by top district leadership that systematic research or evaluative information should play a role in decisions.

Without federal or state regulations requiring the annual evaluation of Chapter 1 projects, less of this activity would take place in all but the most evaluation-conscious districts. Current regulations do not provide much detail or guidance when mandating that evaluations take place. Additional specificity might affect the extent to which Chapter 1 evaluations are brought to bear on the project planning process.

The Formality of the Chapter 1 Decisionmaking Process

The interaction among participants in Chapter 1 decisionmaking and the sequence of steps they follow may be formal or informal. The districts in our sample could be placed along another continuum from those in which most design decisions are made in a systematic, formalized way (e.g., with task forces, data gathering, presentation of recommendations) to those in which the decisions are made informally (e.g., with corridor conversations among participants, or by unilateral action by the Chapter 1 director or others).

The formality of the decisionmaking process depends, to a great extent, on the size and complexity of the district. Those districts in our sample with many bureaucratic levels tend to exhibit a more formal decisionmaking process. The opposite is true of smaller districts. Although an occasional small district will exhibit a formal decisionmaking style, our observations suggest that there are local forces that encourage small districts to do otherwise (e.g., the fact that there are few people involved, who all know each other personally and see each other regularly).

The formality of the process seems unrelated to the degree of centralization or decentralization. Two contrasting examples of districts with enrollments greater than 25,000 illustrate the point. Both have a decisionmaking structure that would be characterized as formal. In the first, a large district (Central City, profiled in Section III), district administrators have standardized certain aspects of the instructional program, but principals are still allowed considerable flexibility in designing their regular curriculum as well as their Chapter 1 program.

- Any curriculum-related decision has to pass before an instructional review committee composed of 24 individuals representing equally the administration, teachers, parents, and students. This committee approves all instructional changes. The Chapter 1 decisionmaking process follows a similar pattern. School-based program design alternatives have to pass before the district's staff and other district committees if instructional changes are proposed. An assistant superintendent (occasionally the superintendent) also has to sign off on changes. If general district funds are involved, then it is necessary to obtain the approval of the school board as well.

In a second large district, in which virtually all decisions regarding Chapter 1 program design are made in the central office, the process of making decisions is equally formal:

- A district-level committee is appointed for each decision to be made. Committee members usually include a district-level supervisor (e.g., the reading coordinator), other district-level staff (e.g., an assistant superintendent), the Chapter 1 coordinator, some area office staff, some Chapter 1 consultants (who monitor daily operations), and occasionally a few teachers and a principal. This committee reviews all options and makes a formal recommendation to the superintendent and his cabinet for their decision.

In each of these instances, the absolute size of the district forces a certain level of bureaucratic and political complexity. This complexity in turn makes it necessary for decisions to proceed through a series of steps so that all relevant interests are "represented" in the decision.

By contrast, smaller districts in our sample have more flexibility in this regard--once again, whether the decisions are made at the district or school level. One or a few district administrators can make most of the decisions related to instruction and monitor the implementation in the schools. Although a small district may have formal procedures established, it is more likely that administrators in smaller districts are free to operate in a less formal decisionmaking process because the absolute number of factors to consider in making program decisions is much smaller than in larger districts. Two examples capture the dynamics of the process:

- In one rural district with enrollment less than 1,000 students, a Chapter 1 kindergarten teacher became concerned about what to do with students who do not successfully complete kindergarten and are not ready for 1st grade. She approached the superintendent with her concerns. The superintendent had read about a transitional program in another district in the state and sent this teacher to investigate. She returned with a positive report that led to the development of a program geared directly to their needs. However, on several other occasions, the superintendent has implemented significant changes in the program without consulting others in the district (e.g., elimination of middle school math).

- No one seems to devote a great deal of attention to the Chapter 1 program in a suburban district with enrollment of 3,000 students (an assistant superintendent and the Chapter 1 director who are responsible for the program have several other responsibilities). Decisions seem to occur at the last minute without much thoughtful

preparation. The decisionmaking process is so informal that it was difficult for central staff to remember how decisions were made. A common response to questions about how decisions took place was: "I ran upstairs and talked to [another administrator] and then we did it...."

Other factors besides district size contribute to the formality of the decisionmaking process in Chapter 1, in particular:

- The personal working style of the Chapter 1 director.
- The specificity of state requirements for decisionmaking, planning, and evaluation (including state interpretations of federal requirements).
- The level of concern about compliance with state or federal requirements.
- The importance placed on participatory or consensus-based decisionmaking in the district as a whole.
- Districtwide norms about the use of systematic information as a basis or justification for program decisions.

Variation in Decisionmaking Process by Design Feature

So far, we have examined Chapter 1 decisionmaking processes with little reference to the particular features of the design about which decisions are being made. The next nine sections will examine choices about each feature of the design and the factors influencing decisions about them, but we note here that the decisionmaking process may differ accordingly. In other words, the patterns of participation in decisionmaking, the role of federally prescribed procedures, and the formality of the process may vary, depending on the particular feature in question.

The type of design decision being considered affects who makes the decisions regardless of the factors mentioned earlier in this section. Even in decentralized districts, decisions regarding grade-level focus, schools to be served, student targeting, and occasionally staffing are likely to be influenced, if not determined, by district administrators. But decisions about delivery models and additions to the basic design are more likely to involve input from the school level. Politically sensitive decisions are

almost certain to involve upper-level district administrators. The districts' responses to the Supreme Court's ruling on services for nonpublic school students (see Section XI), virtually without exception, involved upper-level district staff regardless of the predominant decisionmaking pattern in place in the district.

The federally prescribed steps in the Chapter 1 decisionmaking process have greater relevance to some program design feature decisions than others. For example, decisions regarding grade-level focus, subject matter served, schools selected, etc., are all much more susceptible to influence from needs assessments, whereas decisions regarding delivery model or skill emphasis are much less likely to be influenced in this way.

Finally, the formality of the decisionmaking process can also vary by design feature. Although there tends to be an overriding style of decisionmaking exhibited by district decisionmakers, some design decisions demand a more formal process than others. Staffing decisions--particularly when the hiring or firing of staff is concerned--and decisions regarding politically sensitive issues such as relationships with private schools typically require a more formal decisionmaking pattern. The decision to add a computer component to a Chapter 1 program may require a more formal decisionmaking pattern to be observed as well (e.g., the school board may need to approve capital purchases).

School- Versus District-Level Decisionmaking

As the preceding discussion has made clear, the district- and school-level decisionmaking processes are closely linked. We have also indicated that the school-level process is largely shaped by (1) the characteristic way of allocating authority over instructionally related matters, (2) the degree of bureaucratic complexity within the district (a function of district size, primarily), and (3) the particular design features involved, some of which are more typically made at the school level than others. There are, however, some important differences between the processes at the two levels. We

summarize what has been said so far about this issue and elaborate on it somewhat.

Program decisionmaking at the district level tends to be more formal, more outwardly focused (e.g., on state-level program requirements or monitoring), and more concerned with noninstructional issues than the corresponding process at the school. Also, it is typical for the district-level program staff to deal with program design issues more comprehensively, by considering the ramifications for all schools in the district, overall policy formulation or allocation of resources. At this level, design solutions are often a resolution of a number of interacting considerations, some of which have little to do with instruction.

At the school level, the process is less formal, if it exists at all, and focused more inwardly--that is, on the solution of particular instructional or coordinative issues confronting school staff, a particular grade, or a classroom. The cast of characters is typically restricted to the school principal or program coordinator (if such a person exists) and a few teachers. School-level staff participate in design-related decisionmaking to the extent they are permitted to by district policy and to the extent they are willing to take or push for an influential role in design-related issues. While district administrators are quick to describe the teachers and principals as important parties to any significant design decision, our fieldwork suggests that school staff influence is more indirect and subtle than this characterization implies, if it is felt at all.

Our data indicate three kinds of connections between the district-level and school-level decisionmaking processes. The district-level Chapter 1 program manager (and this person's staff in larger districts) participate in school decisionmaking in one or more of the following ways:

- Compliance monitor--In the same manner as state-level program staff often assume a compliance orientation toward districts, district-level staff may adopt this stance toward the schools. The district coordinator or supervisor injects him/herself into school-level decisions as a referee, indicating what kinds of design choices are out of bounds and in bounds.

- Instructional leader--In other districts, the staff guide school-level decisions (or prompt them altogether) toward a particular instructional philosophy or design approach.

- Facilitator--Still other Chapter 1 programs adopt a supportive stance toward schools; here the district-level staff offer to help with decisions that are the schools' to make.

Within the same district, schools vary in the degree to which they participate in program-related design decisions, depending on the dynamism of the principal and key program staff and on the salience of the program within the school.

Summary

The findings regarding decisionmaking in Chapter 1 suggest that the process depends to a great extent on the characteristics of the district and to a lesser extent on the particular features about which decisions are being made. In general, we found that:

(1) Local factors are the primary determinants of the way design decisions are made, especially two aspects of the larger local context of the program:

- The prevailing districtwide "style" of decisionmaking in the regular educational program.

- Local agreements on the balance of authority between district office and schools.

Idiosyncratic factors with districtwide ramifications, such as the implementation of a desegregation order, can also subsume or strongly influence the way Chapter 1 decisions are made.

Regarding participation in decisionmaking, we found that:

(2) Key players in decisionmaking include the Chapter 1 director (who can be the manager of state and federal programs) and staff, sometimes superintendents or top instructional administrators (in centralized districts), and principals or sometimes school Chapter 1 staff (typically in districts with decentralized arrangements).

(3) The balance of district- versus school-based participants in Chapter 1 program design decisionmaking tends to reflect the degree of autonomy granted to schools.

Regarding the implementation of federally prescribed procedures and their role in the decisionmaking process, we found that:

(4) Federally prescribed procedures for needs assessment, parent consultation, and evaluation do not greatly rationalize the process of program decisionmaking at the local level. The local factors summarized in (1) above are too powerful and variable to allow a linear, rational process of decisionmaking to occur, no matter what is required by higher levels of government.

(5) Federally prescribed procedures do have subtle and indirect effects, however, on the course of decisionmaking.

Specifically, our analyses indicate the following regarding needs assessment:

(6) Needs assessments to determine student eligibility for the program are universally done; formal programmatic needs assessments are commonly done, typically in the form of elaborate surveys, but have a far less direct effect on decisionmaking about program design, except in unusual circumstances where district decisionmakers place high value on data-based decisions.

(7) Needs assessments (and systematic evaluations of program process or results) play one of two roles in decisionmaking: (a) justification for decisions made on other grounds, and (b) "problem-sensing," that is, a way of alerting staff to unforeseen problems, needs, or poorly performing components of the program.

Our analyses point to the following findings regarding consultation with parents and teachers:

(8) In circumstances that appear to be unusual, parents may be active in the consideration of design changes or related matters (e.g., where parent advisory councils have remained active and have sign-off authority). Across most types of conditions in our sample, parents are not consulted very actively and their input into design decisionmaking is minimal.

(9) Changes in ECIA have either contributed to a deemphasis on parent consultation or had little influence on ongoing consultation arrangements. Either way, the net impact of parents on design decisions tends to be small in most kinds of districts we visited.

(10) Consultation with teachers does not take place through any special, formal process in most of our districts, although teachers respond to needs assessment surveys and occasionally sit on task forces or committees. Teachers may influence the decisionmaking process by (a) voicing concerns or opinions, which are a strong motivating force for district decisionmakers, and (b) implementing decisions in ways that effectively "remake" the original decision.

We found the following regarding evaluation and its role in the decision-making process:

(11) Changes in ECIA have had little effect on the implementation or role of evaluations: districts perform evaluations pretty much as they did under Title I, and tend not to pay much attention to the results other than for decision justification and problem-sensing (see finding 5 above).

(12) The primary effect of federal evaluation requirements is to make evaluative information available to decisionmakers, not to ensure its use. Certain local factors encourage district decisionmakers to use evaluation results, in particular: staff expertise, district size, increased attention to testing, controversy in design-related matters, and district belief in the value of research and data-based decisionmaking.

Regarding the formality of the decisionmaking process, we found that:

(13) Chapter 1 decisionmaking processes vary from formal (i.e., involve a sequence of specified steps and procedures) to informal, depending principally on the size and complexity of the district, but also on the preferred working style of decisionmakers, the specificity of state requirements, the level of concern about compliance, and the importance placed on participatory or data-based decisionmaking.

Finally, our analyses indicate that Chapter 1 decisionmaking processes vary somewhat, depending on:

(14) The particular aspect of program design that is the focus of decisionmaking (see next nine sections for discussions that pertain to each feature of decisionmaking).

(15) The level of decisionmaking (school vs. district). At the district level, the decisionmaking process tends to be more formal, comprehensive, outwardly focused (e.g., on state-level program requirements), and concerned with noninstructional matters of various kinds. The decisionmaking process in schools--if it occurs at all--tends to concentrate more on the solution of particular instructional or coordinative issues in the school. The district Chapter 1 program manager typically participates in school-level decisionmaking in one of three roles: as compliance monitor, instructional leader, or facilitator.

PART THREE: CHANGE AND CONTINUITY IN THE BASIC FEATURES OF THE CHAPTER 1 PROGRAM DESIGN

In this part, we present findings regarding the change (or lack of change) in particular features of the Chapter 1 program's instructional design. Although there are many aspects of the design that can be changed, three features are present in all programs. Summary Table 1 lists variation on these design features among sample sites. They represent the basic design decisions that every program staff must address in one way or another:

- Grade-level focus (Section V)
- Delivery models (Section VI)
- Staffing (Section VII).

We note at the outset that these features are highly dependent on one another. Choices of delivery models, for example, have implications for the kind of staffing used in the program: in-class designs tend to employ aides rather than reading specialists (although the design does not preclude the latter). In practice, then, local decisionmakers may, in effect, be making decisions about several of these features at once. We have tried to point out these relationships where our data indicate they are important.

In discussing change and continuity with respect to each design feature, we are answering four basic questions:

(1) What do current practices look like and how do they vary, both within and across the diverse districts in our sample?

(2) What kinds of changes have taken place over the last 5 years? What has remained unchanged?

(3) What explains the current designs and their variation across districts? What are the driving forces and facilitating conditions for a particular feature, and what inhibits, or acts as a barrier to, its presence?

(4) What stimulates change (or continuity) in each design feature and what accounts for the process of change that ensues?

Before beginning our analysis, we remind the reader that we specifically selected our sample to include districts that had changed their grade-level focus, delivery model, or staffing arrangements as well as those that had not. Relative to the nationwide population of districts, our sample districts--and the information presented below--are probably biased in the direction of change (rather than stability).

Summary Table 1

VARIATION AMONG SAMPLE DISTRICTS
ON BASIC CHAPTER 1 PROGRAM DESIGN FEATURES

State; District	Enrollment Size**	Basic Design Features: Grades Served	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides
WEST/SOUTHWEST				
ARIZONA				
Site A[1,5]	Very large	Pre-K-8*	In-class Pullout Excess cost Replacement*	Both
Site B[1]	Medium	K-8	In-class Pullout	Both
CALIFORNIA				
Site A[1,2,4,5]	Very large	Pre-K-12	In-class* Pullout	Both
Site B[1]	Large	K-8	In-class Pullout	Aides
TEXAS				
Site A[1,2,4,5,6]	Very large	Pre-K-6	Pullout Excess cost*	Both
SOUTHEAST				
FLORIDA				
Site A[1,5]	Very large	2-6*	In-class Pullout Replacement*	Both*
Site B[1,3]	Large	K-5*	In-class* Pullout	Teachers

* This feature of the design has changed in the last 5 years.

**Enrollment size ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Summary Table 1 (Continued)

State; District	Enrollment Size**	Basic Design Features: Grades Served	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides
SOUTHEAST (cont.)				
GEORGIA				
Site A[1,2]	Very large	1-12*	In-class Limited and extended pullout Replacement Summer school	Both
LOUISIANA				
Site A[1]	Large	K-8	In-class Pullout Replacement	Aides*
Site B[1,2,4,5]	Very large	Pre-K-5*	In-class Pullout* Extended day	Both
CENTRAL				
ILLINOIS				
Site A	Small	K-9*	In-class Replacement Summer school	Both
Site B[1]	Large	Pre-K, 1-8	Extended day Pullout	
KENTUCKY				
Site A[1,6]	Very large	1-12	In-class Pullout	Both
Site B	Medium	1-9	Pullout Replacement	Both*

* This feature of the design has changed in the last 5 years.

**Enrollment size ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Summary Table 1 (Concluded)

State; District	Enrollment Size**	Basic Design Features: Grades Served	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides
CENTRAL (cont.)				
MICHIGAN				
Site A[1]	Medium	Pre-K-8*	In-class Pullout	Both
Site B[1,5]	Large	1-5	In-class Pullout	Both
EAST/NORTHEAST				
MARYLAND				
Site A[1,2]	Medium	1-5	In-class	Both
Site B[1,5]	Large	Pre-K-5*	In-class Pullout	Both
MASSACHUSETTS				
Site A[5]	Small	K-10	Pullout	Teachers*
Site B[1]	Large	Pre-K-9*	In-class Pullout	Both

1 - Site overlap with district survey sample (REA).
2 - Site overlap with telephone follow-up sample (REA).
3 - Site overlap with targeting sample (SRA).
4 - Site overlap with school survey sample (Westat).
5 - Site overlap with Cumulative Effects Study or Title I District Practices Study.
6 - Exemplary Projects (participation in ED recognition project).

* This feature of the design has changed in the last 5 years.

**Enrollment size ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

V GRADE-LEVEL FOCUS

Nothing in the federal law or regulations stipulates which grades should receive Chapter 1 services, and few SEAs dictate that districts serve specific grades with Chapter 1. Most districts in our sample do not have sufficient resources to serve all students or grades eligible for Chapter 1, so staff must decide which grades receive Chapter 1 services. Most districts choose to concentrate Chapter 1 services on younger students (NIE, 1977), usually because staff believe that early intervention is an educationally sound strategy for disadvantaged students.

In this section we review the grade-level options that districts in our sample have chosen, factors that explain the different arrangements across those districts, and types of grade-level changes that districts in our sample have implemented recently. A district's choice of which grades to serve is closely related to several other program design dimensions, including the delivery model used for services and connections with other programs (later sections discuss these topics in more detail; here we will address them when appropriate).

Current Arrangements

The districts in our sample use Chapter 1 for early intervention: every district we visited serves elementary school grades. Several districts in our study have extended Chapter 1 into early childhood education (ECE), serving youngsters in preschool and kindergarten classes. The handful of districts that offer Chapter 1 in high schools usually attach greater importance to the elementary school program, consigning less attention and resources to the secondary school program.

The emphasis on lower grade levels that we observed is consistent with research on Title I and Chapter 1 practices (e.g., NIE, 1977; Advanced Technology, 1983). Clearly, Chapter 1 is seen primarily as a program for younger students. Many people believe that by the time educationally disadvantaged children reach the 5th or 6th grade they are already as much as 2 years behind in reading and math skills, with too much missed learning at that point. Intervention at earlier ages means that there is less to make up later. The following descriptions are typical of the grade-level focus we found in our sample sites:

- A middle-sized district in the Midwest offers Chapter 1 from kindergarten through 5th grade; services are concentrated in grades 1 and 2, to a lesser extent in kindergarten and 3rd grade, and scattered in grades 4 and 5. The district has long stressed elementary grade services.

- A very large Southern district uses Chapter 1 mainly for grades 3 through 6, with some services for 2nd graders. A state-funded program provides extra teachers, diagnosticians, and specialists for kindergarten through 3rd grade; state compensatory education funds support remediation in secondary schools.

- Another very large district uses Chapter 1 in prekindergarten through grade 5. An ECE program, with a developmental rather than an academic focus, aims at preparing children from educationally disadvantaged homes to handle the skills they will need in kindergarten. In the Chapter 1 program ECE is the biggest component in terms of both staff and budget. Kindergarten is the next largest, with half-time aides in every class at every Chapter 1 school.

- Grades prekindergarten through 8 receive Chapter 1 in yet another district, with most Chapter 1 services concentrated at the elementary level. The district had Chapter 1 in high schools until a few years ago, when a drop in federal funds forced program reductions.

Not all districts in our sample follow this pattern of focusing exclusively on early grades. Some sites have Chapter 1 in both elementary and secondary schools. The districts with Chapter 1 in secondary schools seem to use this aspect of the program in response to different local conditions, such as political situations, funding levels, and particular needs. The following examples illustrate the differences between these districts and those that serve only elementary school students, and suggest reasons for their divergence:

- A district with nearly 120 schools has Chapter 1 in all but two of its buildings. Services are offered in grades 1 through 12, although few 11th or 12th graders actually receive Chapter 1 aid. Three factors explain why Chapter 1 is spread to all grade levels: (1) student promotion and graduation hinge on several state and locally imposed multiple competency tests, and Chapter 1 is the major remediation program for students who do not pass the tests; (2) Chapter 1 provides a legitimate reason for central office staff to go into each school (e.g., to monitor Chapter 1 operations); and (3) the district's sense of "equity" translates as all schools sharing the something extra that Chapter 1 makes available.

- A large Western school system uses Chapter 1 for kindergarten through grade 12. The district also has state funds for an array of special services, many of which cover different types of remedial education. At the district level, staff allocate money from these accounts to each school, and school staff then decide which students get what services. (District staff have constrained certain grants; for example, state compensatory education dollars are earmarked for elementary schools only.)

- One rural district we visited has four schools: a kindergarten, an elementary, a middle, and a high school. Chapter 1 is in all schools, centering on kindergarten through grade 10. Although Chapter 1 serves a wide range of grades, remedial education is emphasized in the lower grades, where the district has invested more resources for students.

- Recently, a Northeastern district added ninth grade to its prekindergarten-through-8 Chapter 1 program. Several factors contributed to the expansion: extra Chapter 1 funds were available; the district was implementing a state mandate that requires, but does not fund, remediation for students who fail a minimum competency test; and staff wanted to replace a dropout prevention program that was no longer being funded.

Explanations for Different Arrangements

The examples just listed begin to indicate some of the reasons why districts choose different grade levels to serve with Chapter 1. Below, we explore these explanations further. Again, we emphasize that Chapter 1 is primarily an elementary school program: all of our sites served lower grades. Even in the districts that used Chapter 1 in higher grades, more resources were usually targeted to younger students.

Instructional Factors

Pedagogical beliefs exerted a powerful influence on the choice of grade levels for Chapter 1 services, especially when the choice was to focus on the earlier grades (we did not find that pedagogical beliefs were involved so strongly in support of secondary-level arrangements). Administrators, principals, and teachers told us time and again that early intervention was a wise course. In essence, they believe that identifying and correcting problems sooner--rather than later--is more beneficial to the student. The earlier that educationally disadvantaged children can have their needs recognized, they argue, the faster extra assistance can be provided. Offering immediate help to young children increases the likelihood that the students will (1) make up what they have already lost, (2) be able to counteract their negative experiences, and (3) not fall farther behind their peers.

We also heard that some teachers prefer providing remedial instruction to younger students. A Chapter 1 teacher, responsible for grades 1 through 6, told us she would rather work with students in earlier grades (1 through 3) because she finds them more responsive and easier to work with. She has her aide work with the comparatively "more difficult" 4th, 5th, and 6th graders.

Other Local Factors

Other factors, related less to instruction per se and associated more with the organization of schools and the district as a whole, complement the pedagogical influences just described. Our field data point to three such influences: the district's grade-level structure, problems unique to the high schools, and district size.

Grade-Level Structure--The way a district has divided its schools into grade levels affects, and possibly limits, decisions about the grades to be served by Chapter 1. We found, for example, that almost all districts that

have K-5 schools also offer Chapter 1 in grades K through 5. Similarly, if a district decides to have Chapter 1 in its middle schools, students in grades 6 through 8 participate in Chapter 1. In general, when district staff place Chapter 1 into a building, eligible students in that school may be served by Chapter 1, regardless of grade level.

At the same time, districts may identify particular grades to receive more attention. For example, one school system serves children in grades K through 5 with Chapter 1 but stresses services to students in grades K through 3. Another that has Chapter 1 in grades K through 12 focuses on students in grades 1, 2, 3, and 9.

Two reasons may explain the effect of grade-level structure on Chapter 1's grade-level focus. First, the law and regulations allow districts to group grade levels for selecting Chapter 1 schools. Collapsing grade levels into elementary, middle, and high schools makes calculations relatively simple. Second, district staff or a school principal may consider it educationally sensible to provide special services for all low-achieving students in a given building, regardless of their grade placements.

Problems Unique to High Schools--Even if districts had sufficient resources and motivation to serve secondary school students with Chapter 1, the structure of high schools makes such services harder to implement successfully. Problems are created by scheduling, space availability, credit hours needed for graduation, and student reluctance. Some districts in our sample developed creative solutions to these problems. For example, the district serving 9th graders (as noted above) is using a replacement model (see Section VI for an explanation of this model) to alleviate these problems. Another district minimizes problems by enrolling high school students in a language arts replacement model for one semester and in regular English classes for the other semester.

Other districts have not fared as well in molding Chapter 1 to fit high school styles. One large district has Chapter 1 in grades K through 12.

Staff at one of the high schools cited problems in serving their students with Chapter 1. Many vocational students who are eligible for Chapter 1 cannot take the class because of their heavy schedules, which leave little room for substitute classes. These students are usually assigned to Chapter 1 in the 12th grade, after they have struggled through their regular English classes in earlier grades. This problem has led the school to avoid pushing students into Chapter 1; instead, staff encourage students to obtain employment through the vocational track.

District Size--Very small districts in our sample--typically having fewer than 10 schools--have Chapter 1 in almost every building. These tiny districts, with relatively homogeneous populations and neighborhoods, may not be able to ignore any schools: political, educational, and personnel considerations may force district staff to put Chapter 1 at all levels. Thus, Chapter 1 serves most grades because once Chapter 1 is in a building, it is likely that students in all grades are considered for services. In larger districts, this pattern is not as consistently observed.

State Influences

Although no states order districts to serve certain grades, some do exert indirect influence. We detected four kinds of factors from the state level that affected grade-level choices: state reforms, the state Chapter 1 office, state compensatory programs, and tests.

State Reforms--Many districts in our sample are in states that have recently enacted educational reform packages, and some Chapter 1 grade-level choices are affected by the types of programs the reforms contain. For example, a new state-mandated kindergarten program in one site is causing the district to decide whether its Chapter-1-funded kindergarten program should continue. Another site is decreasing its Chapter 1 kindergarten services as the state is increasing its funding for those children.

State Chapter 1 Office--SEA Chapter 1 staff can also influence local choices about grade levels. Chapter 1 directors in different states reported that SEA personnel had encouraged them to expand Chapter 1 to (1) unserved grades in one site, leading to the addition of 9th grade, and (2) high school students in another site. SEA staff can also bolster local opinions: in one of our sites, services to 6th through 8th graders were eliminated 2 years ago when money became tight, leaving Chapter 1 in prekindergarten through grade 5, which fits with the state's preference for early intervention.

State Compensatory Education Funds--Because they wield a more direct influence on local grade-level choices, state compensatory education funds are worthy of separate mention. Of the 11 states represented in our sample, 8 have state-funded compensatory education. Some states strictly direct how the funds should be spent, while others allow school districts considerable flexibility.

The districts we visited that receive state compensatory education money use it, in conjunction with Chapter 1, in different ways. Some school systems put all state compensatory funds into secondary schools and Chapter 1 into elementary schools. Staff believe that keeping the two separate is good for establishing compliance with Chapter 1's supplement-not-supplant provision.

Other districts use state compensatory education funds in ways that reinforce their decisions about the grades where remedial programs are most needed or most likely to be effective. For example, some districts use state money for the lowest-achieving students in certain grades, then pick up the next group of students with Chapter 1. Other districts concentrate Chapter 1 in their lowest-income schools, then put state money into other schools that serve the same grade levels.

Test Scores--Some districts match Chapter 1 services with the grade levels at which students are tested. A number of states and localities have intensified their testing programs, and students must pass the test(s) to be promoted or to graduate from high school. In some cases students who do not

pass then get Chapter 1 remedial education; in other cases students "at risk" of failure receive preventive services before they take the test(s). Although not solely a state-level factor, we consider testing here because state-initiated competency tests have played such a prominent role in recent years (see Section XIV).

Change in Grade-Level Focus

When the districts in our sample change Chapter 1 grade levels, they often add or drop those (1) before the 1st grade or after the 8th, or (2) at the boundaries of the grade levels a district previously served. It seems that grade-level changes are designed to protect or strengthen the core of the Chapter 1 program, especially elementary school services, early childhood intervention, or remediation for specific groups of students. For example:

- Four years ago one district reduced the number of junior high schools with Chapter 1 and eliminated services at the senior high school. This move left Chapter 1 in pre-K and grades 1 through 8, with resources concentrated at the elementary level. A couple of years ago the district added a kindergarten Chapter 1 program.

- A different district reduced middle school services 4 years ago, then abolished them the following year. A prekindergarten program was dropped 5 years ago but reinstated on a limited basis this year. The district now has Chapter 1 in prekindergarten through grade 5.

- Two districts have recently added Chapter 1 for 9th graders. One now has Chapter 1 in grades 1 through 9; the other serves prekindergarten (including a program for infants) through 9.

- A very large district used to have Chapter 1 in grades prekindergarten through 12. Grades 9 through 12 were dropped 4 years ago. Grades 6 through 8 were dropped 3 years ago at the same time that the district expanded its early childhood Chapter 1 program.

Factors Promoting Change

A number of factors impel or encourage districts to change their grade-level focus. Some factors come from outside the local level (e.g., funding amounts) and some develop within the district (such as staff interests in

switching delivery models). Below, we review the catalysts that produced change in the districts we visited. Although we discuss them separately, a given district is likely to have factors working together to effect change in Chapter 1 grade levels.

Decreased Funds--Lower appropriations and/or census changes generated funding cuts in some districts. Some Chapter 1 grants dropped dramatically, causing staff to decide which components of their program had to be curtailed or discontinued. Some districts continued Chapter 1 in the same grades they had served before, but at reduced levels. Another district was able to serve the same grade levels by removing its Chapter 1 health program. Other districts seem to have used the opportunity to suspend services they thought were not particularly effective. For example, one district, faced with fewer funds, eliminated an unsuccessful math program from grades 7 and 8, leaving Chapter 1 reading and language arts services in K through 8.

A few districts decided to remove entire grade levels when money decreased, although no grades were eliminated solely because of fewer funds:

- One that used to have Chapter 1 in all grades now has the program only in prekindergarten through 5. Less money, dissatisfaction with the secondary school program, and greater interest in early childhood education led to the current arrangement.
- Another, anticipating serious budget cuts, dropped grades 7 and 8, the highest ones served by Chapter 1. When the actual budget cuts were not as severe as expected, Chapter 1 was not reestablished in the 7th and 8th grades--instead, the district used the "extra" money to change its delivery model.
- Similarly, a third district eliminated its kindergarten program when budget cuts were anticipated, reasoning that it was a diluted and ineffective program. When the expected cuts did not materialize, the program was not added back, but math services were added to existing reading and language arts programs.
- A fourth district (now with Chapter 1 in grades 2 through 6) stopped services to 1st graders when Chapter 1 funds dropped, but a special state program continues to support services in the primary grades.

Increased Funds--Districts can receive additional funds if the Chapter 1 grant goes up or if states allocate extra money. Districts may also sense

that they have "additional" funds if forecasted cuts are not actually made. Our districts show a wide variety of responses to increased funds.

Last year when a Northeastern school system received more Chapter 1 money, its program was expanded from prekindergarten through 8, adding services to 9th graders. Students' achievement test scores had demonstrated the need for Chapter 1 in the 9th grade. A different Northeastern district added compensatory reading and math for grades 7 through 10 when its SEA offered incentive grants many years ago. Although the special state funds are no longer available, the district continued these services (with Chapter 1 money), but dropped the math component when budgets tightened.

In two sites, extra funds were only one of the reasons--and sometimes a minor one--for extending services to more grades. One small district added Chapter 1 to the 9th grade this year, in part because staff were able to devise a delivery model suitable for high school students. Money was available to cover the extra grade. Another district added services for grades 7 and 8 when staff realized that (1) the junior high building became eligible for Chapter 1, (2) test scores and a state-required minimum competency test indicated need, and (3) there were extra dollars in the budget, although this was not the major reason for the new program.

Competency Tests--As mentioned earlier, a number of states and localities have instituted competency tests for promotion or graduation. Results from these tests may point out trouble spots, and districts may shift Chapter 1's grade-level focus to provide students some extra help. Some districts know that competency tests are coming in their state, and they are shifting Chapter 1 into grades that will be affected.

The small district that changed its delivery model and added services for 9th graders did so because students scored poorly on a state-mandated test. Another district in the same state is piloting a Chapter 1 math program in three middle schools this year, again because test scores showed problems; before, middle school students received only reading and language arts.

Elementary school students in one district we visited must pass tests to be promoted each year, and high school students must pass a state competency test to graduate. This district puts Chapter 1 into all grade levels, but different ones are constantly designated as priorities, shadowing (or preceding) the years in which students take these tests.

Delivery Model--On occasion the particular model a district chooses for Chapter 1 can affect the grade levels served. We have already discussed the district that added 9th grade when it shifted to a replacement model. One site did the opposite: it shifted to the replacement model for most elementary school programs, and concurrently removed Chapter 1 from secondary schools. Although there were other reasons for leaving middle schools (among them, that a state compensatory education program was implemented for those students), the costs of the replacement program foreclosed Chapter 1 services in middle schools.

Factors Promoting Continuity

We have identified a few factors that promote continuity in the grade levels that districts serve with Chapter 1. Foremost among them is the dominant belief in the value of early intervention. Preschool or elementary school services are maintained even when programs must be reduced. When districts have additional Chapter 1 funds, they often first strengthen services in early grades, adding more grades only if money is left over.

Tight resources also contribute to maintaining the status quo. When funds decreased or when inflation caught up with allocations, several of the districts we visited scrambled to keep the grade levels constant, especially early grades. These districts do not want to cut services further, and they obviously cannot consider adding grades.

In some cases, political utility argues against change. In one very large Southern district, Chapter 1 is found in almost all schools and grades because the superintendent and other high-level staff want the program

spread. They believe that all schools should share the extra resources Chapter 1 provides; it also provides a reason for district-level staff to go into all schools. Given these premises, changing grade levels is unlikely. In another very large Southern district, parents on a district advisory council strongly indicated their preference for Chapter 1 in as many schools as possible. School attendance boundaries change constantly because of the district's desegregation plan. Parents want Chapter 1 spread to many schools so the program can be available for their children, regardless of the school they attend.

Relationship Between Grade-Level Focus and Other Design Features

Decisions about Chapter 1's grade-level focus are related to certain program design features, especially service delivery models (which are discussed in the next section) and the subject matter taught in Chapter 1 classes (which was not part of our research). Although we cannot prove causality, we believe that in most cases decisions about which grade levels to serve precede these other design decisions.

The particular service delivery model used seems correlated with grade-level focus. For instance, one district relies mainly on the replacement model and has Chapter 1 in only elementary schools. Costs and scheduling difficulties make the program unattractive for secondary school students.

Another district is now able to serve its 9th graders because of changes in the delivery model. Many years ago the district had Title I in its one high school; students received services through a pullout model. The district suspended the program because of several problems (students received no credit toward graduation for the class, students were stigmatized, etc.). The district, still wanting to serve high school students--now because of a state basic skills test that identified low reading scores at the high school level--had some extra Chapter 1 funds and got approval from the SEA to credit students served with a replacement model. In 1985-86, the district reinstituted services to 9th graders, using a replacement model.

Decisions about grade-level focus and subject matter are often related. In terms of subject matter, Chapter 1 is most often a reading and language arts program. Every district we visited offers services in these areas. Other subjects, such as math or English as a second language, are secondary to reading and language arts in Chapter 1. Elementary and middle schools often offer reading and language arts, whereas high schools usually have specialized English courses. Moreover, we suspect that there are far more reading specialists in elementary schools than in secondary schools. Serving elementary and middle school students with Chapter 1 may be sensible not only for pedagogical reasons, but also for practical reasons: it may simply be easier to devise a program that supplements existing classes and exploits specialized skills.

Summary

Our findings about the choice of grade levels served by Chapter 1 can be summarized as follows:

(1) Districts use Chapter 1 primarily for early intervention. Every site we visited serves elementary school grades, and several sites serve kindergarten and preschool students (one even has a program for infants). Staff usually view grades K-5 as the core of the program; any other grades served usually adjoin K-5.

(2) Chapter 1 in secondary schools is generally treated as an extension of the preschool and elementary school program.

Regarding the factors that influence district decisions about the choice of grade levels, we found that:

(3) Pedagogical beliefs in the value of early intervention (namely, ameliorating problems before they get worse) ensure a continuing focus on younger students, even when budgets are cut and services must be reduced.

(4) States can influence local choices about the grades Chapter 1 serves: SEA personnel sometimes encourage serving particular grades, state funds may be available for special services, or state compensatory education funds may be designated for certain grades.

(5) When test scores show certain grades as trouble spots, districts may be motivated to move Chapter 1 into those grades.

(6) The way that a district has divided its grade levels into different buildings can affect Chapter 1's grade-level focus. For example, when a district that has grades 6 through 8 in middle schools decides to serve 6th graders with Chapter 1, chances are that services will also be extended to 7th and 8th graders.

(7) District staff encounter special problems when they consider putting Chapter 1 in secondary grades, especially in high schools. Scheduling, space availability, credit hours needed for graduation, and student reluctance create difficulties that tend to discourage Chapter 1 services at this level.

(8) In our sample, districts with only a few schools (i.e., fewer than 10) tend to serve all schools. Their size may preclude choices about Chapter 1 grade-level focus.

We examined recent changes in grades served with Chapter 1. The basic pattern and explanations for change or stability are summarized below:

(9) Changes in grade-level focus appear at the boundaries of the grades already served.

(10) Changes in funding amounts, results from competency tests, and delivery model used are among the most powerful stimuli for change in the Chapter 1 grade levels served.

(11) A few factors can keep the grade levels served constant. These include the dominant belief in the value of early intervention, absence of slack resources, and political considerations.

Finally, regarding the relationship of grade-level decisions to other design features, we noted that:

(12) The grade-level focus of a Chapter 1 program appears related to other program design features, especially the delivery model and subject matter.

VI SERVICE DELIVERY ARRANGEMENTS

Service delivery arrangements under Title I and Chapter 1 have long been a focus of policy discussions regarding program design. In fact, the scheduling and location of Chapter 1 services have often been treated as synonymous with "design," probably because these arrangements are among the most visible manifestations of program design and have often been used to demonstrate that services meet categorical requirements for supplementary service. In this section, first we describe current service delivery arrangements, including variation within and across districts in our sample. Motivations for using different service delivery arrangements are discussed next. Finally, we describe how service delivery arrangements in our sample changed over the past 5 years and the reasons for change and stability with respect to service delivery.

Current Service Delivery Arrangements

Districts arrange instructional services for Chapter 1 students in many ways. These arrangements often are classified into six categories* (in-class, limited pullout, extended pullout, add-on, replacement, schoolwide) based on (1) whether services are provided in the same or a different setting than would be the case if those children were not participating in Chapter 1, (2) whether services are provided at a time in which participants would otherwise be receiving non-Chapter 1 instruction, (3) the duration of services provided, and (4) whether the whole school operates, in effect, as a Chapter 1 program. Following are descriptions of in-class, pullout, replacement, and add-on delivery models observed in our sample. Schoolwide projects are discussed in a later section.

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* These categories are derived from regulations implementing the Title I Amendments of 1978, which were reiterated in Chapter 1 nonregulatory guidance. The terms have become a fairly standard vocabulary for describing delivery models at the local level.

In-Class Arrangements

In-class arrangements include instructional services that are provided to children in the same classroom and at the same time in which they would receive instructional services if they were not participating in Chapter 1. In our sample, next to pullouts, in-class arrangements are the most common arrangement for providing services to elementary students. Conversely, in-class arrangements are not very likely to be used for secondary students given the nature of the high school instructional setting.

In-class services are more likely to be provided by aides than teachers, although a few districts in our sample use a "team teaching" approach (with one non-Chapter 1 teacher and one Chapter 1 teacher in a classroom). Chapter 1 aides and teachers work with either individual students or small groups. For example, in a large district with a high concentration of limited English proficient students, the bilingual reading resource teacher in one school works with individual Chapter 1 students in grades 1 to 3 in their classroom for 10 to 15 minutes every day. In other districts Chapter 1 aides or teachers deliver most of their services in the classroom, although they often work in the back of the room or off to the side with a small group of students. In a third group of districts, the in-class services are not well defined, and there is not much concern about whether just Chapter 1-designated students are served. The primary rationale for the latter approach is that most students in the class are eligible for services anyway.

Pullout Arrangements

Pullout arrangements include instructional services that are provided to Chapter 1 students in a different setting or at a different time than would be the case if those students were not participating in Chapter 1. By definition, "limited" pullouts last less than 25% of the time that non-Chapter 1 students spend in the classroom from which Chapter 1 students are pulled out, whereas "extended" pullouts last 25% of the time or longer.

In our sample, almost every district uses some type of pullout arrangement, although in several districts this is not the main delivery model used. Pullout arrangements sometimes are coupled with in-class arrangements, particularly at the elementary level. For example, in a large Southeastern district that serves Chapter 1 students in grades 1 through 5, the typical school has both in-class and pullout arrangements: all schools have in-class services where aides come in and work with Chapter 1 students; most schools also have a pullout program in a Chapter 1 lab that is staffed by a teacher (and sometimes an aide in addition).

To avoid supplanting, students usually are pulled out of subjects other than reading or math. In our sample, the subjects that students are pulled out of usually are determined by the school on an ad hoc basis. Generally, attempts are made to accommodate the students' and regular teachers' schedules. However, in some districts students are pulled out of whatever subject best accommodates the Chapter 1 teacher's schedule. For example, in an elementary school in a small Southwestern district, the Chapter 1 teacher also is the music teacher (half of her salary is funded by Chapter 1, and half is locally funded). Because she teaches music in the afternoon, the Chapter 1 reading pullout is held only in the morning. In another school in the same district, the Chapter 1 teacher also is the school's coach, and he has similar scheduling constraints.

Pullouts often are conducted in resource rooms, media centers, or computer labs, although sometimes a regular classroom is used. They tend to be staffed by either teachers or a combination of teachers and aides who work jointly in the same setting. Computer lab pullouts are more likely to be staffed solely by aides than are pullouts in other settings. In such cases, aides supervise students while they work at the computer rather than provide direct instruction. The preference for using teachers rather than aides for pullouts is pedagogical, i.e., generally, teachers are perceived to be more effective in providing direct instruction than are aides. Additionally, one state in our sample prohibits the use of noncertificated personnel without the presence of a certificated teacher.

The intensity and duration of pullout services tend to vary by grade level. At the elementary level, pullouts last anywhere from 15 minutes to over an hour and are provided from 2 to 5 days a week. At the secondary level, pullouts often last 45 minutes a day or the equivalent of one elective period. Chapter 1 students are more likely to participate in extended pullouts for only part of the school year (e.g., one quarter or semester) than for the entire school year.

Replacement Programs

Like pullout programs, replacement programs provide instructional services to Chapter 1 students in a different setting or at a different time than would be the case if those students were not participating in Chapter 1. The name for this type of delivery arrangement comes from the fact that it replaces part or all of students' regular classroom instruction; a district can do this legally if it contributes enough local resources to the program. Replacement programs often are designed to meet Chapter 1 students' particular educational needs through instructional services in self-contained classrooms. Most replacement programs in our sample are reading or math programs that last the equivalent of one class period, but some districts have day-long replacement programs for students in the primary grades (particularly 1st grade).

Replacement programs are sometimes called "excess cost" or "matching" programs because districts must contribute resources to ensure that the instruction provided is over and above what a nonparticipating student would receive. (One Chapter 1 director referred to the district's replacement program as "legalized supplanting.") Districts contribute resources to their replacement programs in a variety of ways. Some districts in our sample pay for one teacher out of the general fund to teach a self-contained Chapter 1 class for every teacher funded by Chapter 1. Other districts split-fund teachers in self-contained classrooms (half from Chapter 1 and half from local or other special program funds). In a third group of districts, self-contained classrooms are taught entirely by locally paid teachers who are given Chapter 1 aides to reduce the student/teacher ratio. Most

self-contained Chapter 1 classes have fewer students (usually about 15) than either the school or district average.

Add-on Programs

These arrangements involve services that are provided to Chapter 1 students at a time in which they would not otherwise be receiving instruction, such as before or after school hours, during vacations or weekends or during other noninstructional time.

Very few districts in our sample have add-on programs. Most of the add-on programs are half-day prekindergarten programs in districts that normally do not provide any instruction for 4-year-olds or "young fives." Some districts have extended-day kindergartens (e.g., Chapter 1 students attend a regular kindergarten in the morning and a Chapter 1 kindergarten for 2-1/2 hours in the afternoon).

One large district has an after-school remedial program in three geographically isolated schools that have high concentrations of minorities. This program is in addition to the in-class and pullout services that all Chapter 1 schools in the district provide. In two relatively decentralized districts, a few schools have teachers or aides who remain after school to help Chapter 1 students with their homework. Additionally, a few districts in our sample are planning to implement Chapter 1 summer school programs.

District Variation

Most districts in our sample use more than one service delivery arrangement. As noted above, at the elementary level many districts in our sample use a combination of in-class and pullout arrangements. Replacement programs are less frequent at the elementary level, and large districts are more likely than medium or small districts to have them. At the secondary level, pullout arrangements are common in our sample (e.g., junior and senior high

school students attend a remedial math or English class during an elective period or study hall for which they do not receive credit toward graduation), and replacement programs are next most common (e.g., junior high and senior high students attend a remedial math or English course for credit in place of their regular math or English course).

Schools may have more than one type of delivery model. Within a school, delivery models sometimes vary by grade level because some models are viewed as more appropriate than others at certain grade levels. In a large urban district, for instance, one elementary school has an extended-day kindergarten, a full-day self-contained developmental 1st grade, a limited pullout language enrichment program for grades 1 through 3, and an extended pullout remedial reading program for grades 3 through 6.

Several district administrators perceived pullouts to be "too disruptive" for children in the primary grades. Moreover, in one school the principal said that in-class services have been provided to kindergarten and first grade students ever since one student got lost on his way to a Chapter 1 pullout reading program. Conversely, students in older grades are viewed as being more independent and as needing more stimulation. Pullout programs that use a special curriculum or that are conducted in labs are viewed as one way to provide the extra stimulation that these students need.

Also, delivery models within a school sometimes vary by the type of student served. For example:

- In a small Eastern district, most services are provided in class by aides. However, a few of the lowest-performing students are pulled out and taught by a resource teacher. Interestingly, district and school staff perceptions differ about what type of students travel well. For example, some argue that lower-ability students should be served in-class because being pulled out distracts them. Others argue that these students tend to be distracted in class.

- In two Southwestern districts (one smaller and one in a large urban setting), limited English proficient students receive pullout instruction in a resource room, whereas other Chapter 1 students in the same schools receive instruction in a computer lab. The main reason is that neither district has purchased bilingual software for its Chapter 1 program.

Additionally, in several districts in our sample there is considerable school-to-school variation in service delivery arrangements. The variation occurs in some of these districts because the district prepares a "menu" of Chapter 1 programs that have different delivery models, and school administrators are allowed to choose from the menu. In a few districts, there is no explicit district policy on how schools are expected to serve compensatory education students.

Interestingly, although some administrators do not believe that delivery models differ importantly in pedagogical respects, beliefs about the efficacy of different models are intensely held in most districts and schools in our sample, despite the lack of local evaluation data to support such beliefs. However, most administrators did explain that pedagogy is not the only reason for their choice of delivery models and that supplanting concerns or staffing and scheduling considerations are extremely important.

Explanations for Choice of Delivery Models

We identified a cluster of factors associated with choosing each type of service delivery arrangement, which we review below by type of arrangement.

Factors Associated with In-Class Arrangements

Recent research has suggested that use of in-class models is increasing (Gaffney and Schember, 1982). In our sample, these arrangements are perceived to be educationally superior for the following reasons:

- In-class aides (and teachers) lower the student/adult ratio.
- Chapter 1 students are not taken away from their classmates; therefore, they are not academically or socially "segregated" or "stigmatized."
- Because Chapter 1 instructional staff work in the same classroom as do regular teachers, they are better able to track and reinforce the regular teacher's lesson.

In-class arrangements also are used because district staff want regular teachers to be accountable for all of their students, and many regular teachers feel that they can be accountable only if their students are not taken from their classroom. Additionally, in-class arrangements require less space and create fewer scheduling problems than pullouts. In districts that have several categorical programs, some teachers said that they are "weary of pullouts" or that they want "uninterrupted time."

Other districts use in-class arrangements because they use aides for their Chapter 1 program, and aides are not perceived as capable of providing unsupervised instruction. Also, many teachers like having additional support in their classroom. Moreover, because in-class arrangements often use Chapter 1 aides only, they tend to be cheaper than other arrangements that use a combination of Chapter 1 teachers and aides.

Factors Associated with Pullout Arrangements

The popularity of pullout arrangements under Title I and Chapter 1 has been extensively documented (e.g., Glass and Smith, 1977; NIE, 1978, Advanced Technology, 1983; Stonehill and Anderson, 1982). In our sample, district and school administrators use pullout arrangements because of program tradition ("They have always been the major vehicle for Chapter 1") and because pullouts appear to be effective ("It works").

In other districts pullouts are used because of supplanting concerns; that is, pullouts are viewed locally and by the SEA as the best way to demonstrate that the district is providing services over and above what students would receive if they were not participating in Chapter 1. Our findings are consistent with other research that has shown pullouts to be perceived as the safest program for compliance with the supplement-not-supplant requirement (Kimbrough and Hill, 1982).

However, district administrators are more apt than school-level staff to mention supplanting concerns as a motivation for pullout programs. School administrators give a variety of reasons for using pullouts. Some principals

said that the pullout format (particularly computer labs) enables the school to serve more students with fewer staff. Other principals said that the pullout format makes it easier for them to oversee Chapter 1 staff. Additionally, in several districts that use teachers for their Chapter 1 program, teachers prefer pullouts because they do not want another teacher in their classroom.

Factors Associated with Replacement Programs

Many respondents in our sample said that replacement programs are used because they are an alternative to pullouts. Local staff feel that replacement programs are "educationally superior" because of the concentration of services. A Chapter 1 director said, "Instructionally this way is stronger." Additionally, unlike with pullouts, Chapter 1 students do not miss instruction in other subjects, such as science or social studies, while participating in a replacement program.

Factors Associated with Add-on Programs

As noted earlier, relatively few districts in our sample have add-on programs other than prekindergarten programs. The decision to offer prekindergarten programs relates more to districts' compensatory strategies than to local preferences for a particular delivery model. A few districts have extended day kindergartens because local staff feel that concentrating resources on young students will produce the greatest gains in achievement.

After-school and summer school arrangements seem to come about more idiosyncratically:

- One large Southeastern district decided to start an after-school program at three geographically isolated schools that have high concentrations of minorities. The three schools were excluded from the district's desegregation plan because busing would have been extremely difficult. As noted earlier, Chapter 1 funds are used to augment the after-school program, as well as for in-class and pullout services.

- In one district, the superintendent decided to implement a summer program because he noticed a loss in test scores between spring and fall. Additionally, this was part of the superintendent's plan to improve the district's Chapter 1 program overall.

- The choice for summer schools may reflect increases or cuts in funds. One district is planning to use Chapter 1 carryover funds for a summer school for 3rd graders who do not pass the state-mandated competency test. Conversely, another district in our sample used to have a Chapter 1 summer school program but eliminated it because Chapter 1 funds dropped.

- Another district abandoned its summer program after it was encouraged to do so by an SEA administrator who preferred that Chapter 1 funds be used during the regular school year.

Change in Service Delivery Arrangements

Over the past 5 years, the service delivery arrangements changed in most districts in our sample, although often the changes were relatively minor or due to the addition or dropping of a component. In our sample, there was a tendency for districts to shift away from pullout arrangements, although a few districts shifted from in-class to pullout arrangements. Also, some districts began using computer labs rather than resource rooms or classrooms for their Chapter 1 pullouts. Interestingly, in our sample most of the replacement programs for elementary students represented relatively recent changes (or additions) to existing service delivery arrangements. (This may be due to the recency of the 1981 regulations implementing the 1978 Title I Amendments, which formalized this kind of model, or to the fact that districts in our sample are biased toward change.) The following vignettes provide examples of some of the different types of changes in service delivery arrangements and the processes by which they occurred:

- Shift from Pullout to Replacement Program. A large Southwestern district piloted its first "excess cost" program in 1981-82 and quickly added schools as success was shown. The shift occurred because of teacher dissatisfaction with pullouts. The district staff member who suggested the excess cost approach said he came up with the idea by reading the law and regulations. He said, "People had wanted to do something other than a pullout for a while, and I was asked to see if there was another way.... After reading the law and regulations, the solution just sort of fell out. I took the plan to a principal of a medium-size school and asked if it would work. He said, 'Yes.' I tried it with a small school and a large school.

They all worked." It then became the district's job to sell the idea to the SEA. Most SEA staff were very hesitant about the idea because it was so unusual, and they had to be convinced that the district was not going to be supplanting with Chapter 1.

- Shift from Pullout to In-Class Arrangements. In a large Southern district, the change in service delivery arrangements was related to a staffing decision. All services used to involve pullout labs staffed by certificated teachers. Because of a severe teacher shortage, the district took the Chapter 1 math and reading teachers and put them in a regular program. Local staff decided to replace the Chapter 1 teachers with paraprofessionals and aides. Because aides were not perceived as qualified to teach unsupervised, the district started an in-class program.

- Shift from Classroom Pullout to Computer Lab Pullout. A large Southeastern district added labs because of the need to serve more students with the same amount of money. A related problem was space. The labs, as finally configured, permitted schools to serve 20 students with 2 teachers, whereas 2 teachers could serve only 10 to 14 students in a classroom pullout. Chapter 1 staff also viewed computers as a way to motivate the older and lowest-achieving Chapter 1 students, and as a means to revitalize a program and Chapter 1 teachers who were growing "stale."

- Shift from In-Class to Pullout Arrangements. A Midwestern district with a long history of in-class programs shifted to a pullout program only recently, even though state monitors had complained about the district's use of aides for several years. According to one district administrator, during scheduled instruction, aides would catch up with administrative work and run copies for the teacher. When the state and federal programs administrator became superintendent, he made efforts to gain more control over the entire instructional program, including Chapter 1 (which had been very decentralized). District administrators began to require principals to monitor aides and document how they were being used. In turn, the principals took the position "If you want us to be accountable, we're going to have to change the program." As a result, pullouts were introduced.

In most districts in our sample, the changes that we observed over the past 5 years are still in place. However, in a few districts, the changes that were introduced did not last very long. Following is one example:

> About 3 years ago, in a very large Southern district, the superintendent, reacting to criticisms about pullouts, directed that Chapter 1 services be delivered using in-class arrangements. In-class arrangements were instituted district-wide in response to the superintendent's directive. Most Chapter 1 teachers rotated into basic teachers' classrooms to provide special services to Chapter 1 students. According to district and school staff, the uproar was swift to follow. Halfway through the school year the superintendent responded to criticisms about in-class arrangements and withdrew his directive. Schools were given

freedom to choose whatever model their staff preferred. Almost immediately, nearly every school shifted back to the delivery model used before.

Factors Promoting Change in Delivery Models

We discuss below the most important factors that motivated districts in our sample to shift (1) away from pullouts, (2) from classroom to computer lab pullouts, and (3) away from in-class arrangements.

Shifts Away from Pullouts

In our sample, local staff were most likely to say that dissatisfaction with pullouts was the motivation for changing their former (or trying new) service delivery arrangements. Frustration with the disruptions and scheduling problems associated with pullouts already has been mentioned. Additionally, as in other studies (e.g., Doss and Holley, 1982), we found that some local staff no longer perceive pullouts to be effective. For example, one respondent in a very large Southern district said, "In the past, the theory was that if you gave a double dosage, you could solve the problem, and that wasn't the case."

Often, local staff in our sample had been frustrated with pullouts for a long time, but because existing staffing arrangements involved teachers, in-class arrangements did not represent a viable alternative (i.e., teachers did not want another adult in their classroom). In several districts, the shift away from pullouts occurred only after local staff learned about replacement programs. As indicated in one of the above change examples, one Chapter 1 director had been searching for alternatives to pullouts and found out about replacement programs after the local evaluator read the law and regulations. In two other districts, the Chapter 1 directors called the SEA and spoke with their Chapter 1 monitor, who told them about replacement programs.

In other districts in our sample, local staff were motivated to shift from pullouts to in-class arrangements because of staffing changes (e.g., a shift from teachers to aides). As noted in one of the above change examples, some of the staffing changes were motivated by teacher shortages. Others were motivated by budget concerns. For example, one very large Southern district began its in-class program in 1982-83 because it expected a 25% cut in Chapter 1 funds. Aides were cheaper and would allow the district to "maintain" its program. The latter finding confirms other studies that have shown that fiscal constraints resulting from Chapter 1 funding cuts appear to have encouraged districts to convert to in-class arrangements as a more cost-effective approach for Chapter 1 services (McLaughlin et al., 1985).

Shifts from Classroom Pullouts to Computer Lab Pullouts

Shifts from using classroom pullouts to using computer lab pullouts were motivated by (1) an interest in computers and the availability of appropriate software, (2) an ability to serve more students with fewer staff, and (3) as noted in one of the above change examples, the desire to revitalize a program that had been stale for a long time. (The use of computers in Chapter 1 programs is discussed in more detail in a later section.)

Shifts Away from In-Class Arrangements

Conservative interpretations of Chapter 1 regulations have been found to be a significant deterrent to in-class arrangements (Vanecko et al., 1980; Allington, 1985). In our sample, shifts away from (or restructuring of) in-class arrangements usually occurred as a result of pressure exerted by state monitors who were concerned about the use of Chapter 1 for general aid. One large district quickly responded to state pressure because the state monitor introduced district administrators to a language pullout program in a neighboring district that local staff liked and later implemented. In two districts, shifts away from in-class arrangements occurred after new district or school administrators were hired. In one district, the new administrator was especially concerned about compliance. In the other

district, the new administrator felt that shifting to a pullout format would strongthen the school's remedial program.

Factors Promoting Continuity

Often districts made only minor adjustments to their service delivery arrangements. In some districts, service delivery arrangements did not change significantly because district staff were satisfied with their current arrangements and perceived them to be effective. Other districts have used their current arrangements for a long time, and service delivery arrangements are not the focus of very much attention or discussions about program change. In a few districts, the lack of shifts was due to resistance to change by teachers and principals.

In some instances, the SEA also inhibited change in service delivery arrangements. Most district respondents said that their SEA did not "push" a particular delivery model, although several had to consult with their state monitor before introducing a replacement program. The SEA in one Southern state requires comparable services across a grade level within a district, and therefore was opposed to one district's proposal to pilot a new replacement program in certain schools. Eventually, the SEA allowed the phase-in. Additionally, the Chapter 1 director of a district in a Northeastern state said that he would like to use other models besides pullout, but because the SEA is very concerned about compliance, he felt that the SEA would not favor other approaches.

Summary

Our findings about the choice of service delivery arrangements for Chapter 1 programs can be summarized as follows:

(1) In our sample, most districts use more than one service delivery arrangement. At the elementary level, many districts use a combination of in-class and pullout arrangements. In our sample, replacement programs are less frequent at the elementary level, and large districts are more likely than medium or small districts to have

them. At the secondary level, pullout arrangements are common, and replacement programs are next most common.

(2) Within a school, delivery models sometimes vary by grade level and the type of student served (e.g., lowest achievers or not, limited English proficient or not).

The principal factors associated with the presence of the major type of service delivery model can be summarized as follows:

(3) In our sample, in-class arrangements are used because they lower the student/adult ratio; because they require less space, create fewer scheduling problems, and are less of a stigma than pullout programs; and because they tend to be cheaper than other arrangements (because they often use aides).

(4) Pullout arrangements are used because they are perceived to be effective, because of tradition, and because they are viewed as the best way to demonstrate that the district is providing services over and above what students would receive if they were not participating in Chapter 1.

(5) Replacement programs are used because they are viewed as an acceptable alternative to pullouts and because the concentration of services they provide is thought to be instructionally sound.

(6) Add-on programs are used primarily for prekindergarten and extended day kindergarten programs. The main reason for using these add-on programs is a belief that concentrating resources on young students will produce the greatest gains in achievement.

Patterns of change in service delivery models can be summarized as follows:

(7) Over the past 5 years, the service delivery arrangements changed in many districts in our sample, although often the changes were relatively minor.

(8) In our sample, there was a tendency for districts to shift away from pullout arrangements, although a few districts shifted from in-class to pullout arrangements. Also, some districts began using computer labs rather than resource rooms or classrooms for their Chapter 1 pullouts. Most of the replacement programs for elementary students represented relatively recent changes (or additions) to existing service delivery arrangements.

Regarding the factors that stimulated one or another kind of change, we found that:

(9) Shifts from pullout to replacement programs in our sample were due primarily to frustration with pullout programs. Shifts from pullout to in-class arrangements were due to staffing changes (e.g., a shift from teachers to aides) prompted by teacher shortages and budget cuts.

(10) In our sample, shifts from classroom to computer lab pullouts were due to an interest in computers, an ability to serve more students with fewer staff, and a desire to revitalize a program that had been stale for a long time.

(11) Shifts from in-class to pullout arrangements were motivated primarily by state pressure and local concerns about compliance.

(12) Inhibitors to change included program tradition, satisfaction with current arrangements, and resistance to change by teachers and principals.

VII STAFFING ARRANGEMENTS

Salaries for instructional staff represent the largest item in most Chapter 1 budgets and often imply multiyear commitments. Consequently, staffing decisions are a key component of Chapter 1 program design. Additionally, given resource constraints and preferences for different delivery models, there has been a debate over the years about who can best work with educationally deprived students--certificated or noncertificated instructional staff. In this section, we first describe current staffing arrangements in our sample and the motivations for choosing them. Next, we describe how staffing arrangements in our sample changed over the past 5 years. Finally, we discuss the reasons for change or continuity with respect to staffing.

Current Staffing Arrangements

In our sample, most districts use a combination of certificated and noncertificated instructional staff for their Chapter 1 program. However, often districts employ more of one type of staff than the other. The following is a description of the different types of instructional staff employed and their roles.

Certificated Teachers

Chapter 1 teachers mostly are used to provide direct instruction in either Chapter 1 pullout or replacement programs. Often they provide instruction with the help of an aide. However, in two large districts Chapter 1 teachers provide instruction in class at the same time as the regular teacher. In some districts, Chapter 1 teachers have dual teaching responsibilities because they are split-funded (half from Chapter 1 and half from

local or other special programs). Other Chapter 1 teachers are paid for entirely out of the general fund to satisfy matching requirements for Chapter 1 replacement programs. Occasionally, regular teachers are used as after-school tutors for Chapter 1 students.

Sometimes Chapter 1 teachers are used for noninstructional purposes. For example, in a medium-size Midwestern district, schools (depending on their size) typically have either a full- or half-time Chapter 1 teacher to oversee the Chapter 1 program. Chapter 1 teachers mainly are responsible for individual student assessment, as well as for the design of specific instructional services for Chapter 1 students. In one medium district, Chapter 1 teachers typically do not provide direct remediation. Instead, they are responsible primarily for training and supervising classroom aides and for planning with the regular classroom teachers.

Several districts employ teachers with specialized training (e.g., reading specialists, resource teachers) for their Chapter 1 program. Additionally, a few districts that have high concentrations of limited English proficient students use bilingual reading teachers. However, in most districts in our sample, Chapter 1 teachers are not required to have more formal education than are regular classroom teachers.

Often Chapter 1 teachers have been affiliated with the program for many years. Some district administrators feel that the long tenure of Chapter 1 teachers has benefited the program. Others feel that it is a detriment; for example, one district administrator commented, "The [Chapter 1] teaching staff in this district is stable, aging. They are nice ladies, but they haven't grown."

Noncertificated Staff

Noncertificated instructional staff, particularly aides, usually work with Chapter 1 students under the direction of a regular teacher in Chapter 1 programs with in-class arrangements or under the direction of a Chapter 1

teacher in Chapter 1 pullout or replacement programs. In most districts in our sample, noncertificated staff do not provide initial instruction. Instead, they work with students on a one-to-one basis or with small groups of students and primarily reinforce the instruction provided by the regular or Chapter 1 teacher. Additionally, noncertificated staff often are used in computer labs to monitor students while they work at terminals. However, in some districts noncertificated staff assume most of the responsibility for designing the services delivered to students and provide most of the Chapter 1 instruction. In two decentralized districts, veteran aides are used as site administrators to coordinate state and federal programs. Another specialized use of noncertificated staff is as home/school liaisons or parent coordinators.

Most districts' noncertificated instructional staff are classified as aides, although a few districts have intermediate job classifications (e.g., paraprofessionals, tutors) in addition. Often aides are required to have no more than a high school diploma. In some districts, aides had little (if any) teaching experience before participating in Chapter 1. For example, in one school in a medium-size district, the Chapter 1 teacher said that "baby-sitting" was her aide's only previous teaching experience. Nevertheless, many district and school administrators view Chapter 1 aides as highly skilled professionals as a result of their long affiliation with the program. Interestingly, one large district has specialized inservice training programs for Chapter 1 aides but not for Chapter 1 teachers.

Paraprofessionals or tutors typically have more formal education than aides (e.g., 2 to 4 years of college), but less than certificated teachers. However, in one small Northeastern district the tutors were reading or mathematics specialists. Consequently, when district administrators decided to shift from using a combination of tutors and teachers to using teachers only, many of the tutors reapplied and were rehired as Chapter 1 teachers. In a large Midwestern district, many of the Chapter 1 aides are certificated teachers who could not find other work in the district.

Other Types of Staff

Several large districts employ diagnosticians and guidance counselors who perform testing and placement functions. Also, a few districts with primary grade programs employ nurses and health clerks (and even bus drivers) for their Chapter 1 programs.

District Variation

In our sample, staffing arrangements relate more to grade-level focus and service delivery arrangements of Chapter 1 programs than to other district characteristics, such as student enrollment. Noncertificated staff are more likely to deliver instruction at the elementary level, particularly in the primary grades, than at the secondary level. One reason is that in-class arrangements are more common in elementary schools. In districts with pull-out or replacement programs where Chapter 1 resources are concentrated on the younger grades, Chapter 1 teachers are more likely to be provided with aides for assistance at the elementary level than at the secondary level.

The student/adult ratio varies across and within districts. Mostly, in-class and pullout instruction is provided on a one-to-one basis or to small groups of students (e.g., five or six). Replacement programs often have relatively few students (e.g., about 15) per class and are usually staffed by both a Chapter 1 teacher and an aide.

In several districts, schools differ in their staffing arrangements. Some of the school-to-school variation is due to district policy, such as the allocation of more teachers and aides to certain schools. In one very large Southern district, for example, most elementary schools have one reading teacher, one math teacher, one reading aide, and one math aide. In contrast, the high schools' Chapter 1 teachers often share aides because there aren't enough funds to have a one-to-one teacher-to-aide staffing.

School-to-school variation in other districts in our sample is due to staffing decisions made at the school level. In one medium-size Southwestern district, the pullout reading program in one school is staffed by one Chapter 1 teacher and one Chapter 1 aide. In the other two schools, the Chapter 1 programs are staffed by aides only because aides are cheaper and the principals in those schools prefer individualized to group instruction, which is made possible by the hiring of more (less expensive) aides instead of teachers.

However, school-level autonomy does not always result in school-to-school variation. For example, in one large Southern district, even though schools are given flexibility in determining what will work best for them, most schools use one teacher and several aides for their Chapter 1 programs.

Explanations for Choice of Staffing Arrangements

Various factors dictate the choice of staffing arrangements. We summarize below the principal factors associated with local preferences for certificated versus noncertificated staff.

Preference for Certificated Teachers

The main reason for relying on certificated teachers is a widespread belief that certificated teachers are more likely to provide consistent, high-quality instruction than are noncertificated staff. Moreover, because Chapter 1 students tend to be extremely poor achievers, skilled teachers are thought to be especially important in helping those students to overcome their educational deficits. Additionally, a few district administrators cited research that indicates the superiority of certificated teachers relative to noncertificated staff.

By contrast, several district administrators do not rely on noncertificated staff because they believe such staff are not very qualified to provide direct instruction. For example, the Chapter 1 director in a Northeastern

district said, "Aides? They're too limited. They do only what is prescribed by the classroom teacher. They can't bring innovative approaches to their teaching." Another Chapter 1 director in a medium-size Southwestern district said, "They [aides] don't feel comfortable without their canned purple dittos."

Local program staff in several districts said that certificated teachers lent stature to the Chapter 1 program, which is important for Chapter 1 students' self-image, for Chapter 1 parents who are concerned about the quality of their children's education, and for regular teachers who are ultimately responsible for Chapter 1 students' progress.

In another group of districts, the preference for teachers really represents a commitment to maintaining current staffing arrangements that are viewed as effective.

In several districts, Chapter 1 certificated staff are relied on because of the preference for pullout and replacement programs and the belief that noncertificated staff should not provide basic or unsupervised instruction. In one large district, the superintendent said, "It's hard for us to turn an aide loose without teacher supervision--we'd get a grievance from the teachers." Additionally, in one Midwestern state, noncertificated staff are not allowed to provide instruction unless a certificated teacher is present.

Interestingly, in several districts that use aides mainly to staff in-class programs, administrators place at least one Chapter 1 teacher in each school to facilitate coordination with the central office and to maintain district control over the Chapter 1 program. In those districts, Chapter 1 teachers serve not only as instructional resources but also as district "monitors" who discourage the inappropriate use of noncertificated staff and promote the director's philosophy of remediation.

Preference for Noncertificated Staff

When noncertificated staff are used in Chapter 1 programs, it is because they are less expensive than certificated staff and can be used to lower the student/adult ratio or to provide individualized instruction that would be too costly otherwise. For example, in one large Southern district, the same amount of money purchases one teacher or two aides. Noncertificated staff also are preferred in Chapter 1 programs that mainly involve drill and practice or are entirely automated (e.g., computer managed). In such programs, certificated staff are viewed as unnecessary. Additionally, some district administrators feel that certificated teachers would be frustrated or bored by the Chapter 1 curriculum. One said, "Even the aides think it's boring." In one large Southern district, the director said that Chapter 1 teachers are "second class citizens" because of the supplement-not-supplant regulations. Because they cannot assume the responsibility for their own program, they are reduced to the role of a helper, teaching the skills that the regular teachers specify as those that children need help on.

Aides may be used because of a shortage of regular teachers.

- In one site visited, there were simply not enough regular teachers to go around; Chapter 1 teachers were pressed into service, leaving the Chapter 1 program to be staffed by aides.

- In another district with a high concentration of limited English proficient students, bilingual aides are used because there are not enough bilingual certificated personnel in the area to staff the Chapter 1 reading programs. The assistant superintendent said, "The district has a preference for teachers, but it is difficult to attract certificated bilingual personnel.... We are encouraging regular teachers to take Spanish. Also, we are encouraging paraprofessionals to get their credentials."

Aides can also be trained for specialized roles fairly cheaply. A large Western district developed an inservice training program for aides, but not for teachers, on instructional techniques for limited English proficient students (because of an influx of Southeast Asian refugees). Consequently, the district has a whole cadre of fairly well-trained aides in the schools, while there are relatively few specially trained teachers. Additionally,

another large district (in the South) has an intensive training program for aides that increases the view of them as professionals.

As noted in the previous section on service delivery arrangements, aides are used in some districts because of the preference for in-class arrangements and because of teachers' reluctance to have another certificated teacher in their classroom. Finally, other Chapter 1 programs have a long history of using aides or a combination of teachers and aides, and the use of aides is not the subject of much discussion.

Change in Staffing Arrangements

Over the past 5 years, staffing arrangements changed in many districts in our sample. However, often the changes were relatively minor. In some districts, there was a slight increase in the use of certificated staff; in others there was a slight increase in the use of noncertificated staff. Only three districts made major staffing changes: one shifted from using teachers only to using a combination of aides and paraprofessionals, and the other two shifted from using a combination of teachers and tutors to using teachers only. A few districts said that the mixture of certificated and noncertificated staff did not change, but that they had improved the quality of Chapter 1 staff through attrition and selective replacement. Other districts slightly modified their use of teachers and aides.

The following two vignettes provide some examples of different types of changes in staffing arrangements and the processes by which they occur:

- A small Northeastern district's decision to shift from using a combination of tutors and teachers to using teachers only was precipitated by a state rule that programs could not hire both tutors and teachers because of the salary differential. The director explained, "We got away with tutors for a while, but then [the regional representative of the state Chapter 1 office] asked me, 'What's the difference between a teacher and a tutor?' I said, 'None.' He asked, 'Why pay one on one scale, one on another?' I had to agree with him. It was an ethical question--$30,000 per year versus $12,000 per year.... So I went to the superintendent and said to him that the state was going to come down hard on this one." The change was made to go with all teachers for several reasons. First, both the superintendent and

the Chapter 1 director were interested in a "professional," high-quality staff. Second, a quirk in the district's AFDC count meant that it received significantly more Chapter 1 dollars. Third, the director felt a commitment to existing teachers. Moreover, because the tutors were certificated, they were able to be rehired with a new job classification.

- In a large Southwestern district, staffing arrangements changed as a result of a change in service delivery arrangements precipitated by a state monitoring visit. Until 5 years ago, services for students in grades 1 through 3 were provided mainly in-class by Chapter 1 aides and resource teachers who worked with regular teachers. The district stopped in-class services after a state monitor expressed concerns about Chapter 1 funds being used for general aid. The state monitor encouraged the district to use a pullout program staffed by teachers that was developed at a local university and used by another large district in the same state. When the district shifted from in-class to pullout arrangements, it let some aides go and transferred others to different programs. Resource teachers received inservice training, and some additional teachers were hired for the new program. The Chapter 1 director had little difficulty gathering support for the new program because the district did not want to be out of compliance. Also, the teachers' union had lobbied against the use of aides, and both principals and teachers had complained that Chapter 1 aides were not very qualified to provide instruction. Additionally, the district already was using a pullout program staffed by teachers for students in grades 4 through 6.

Factors Promoting Change

As noted in the above change examples, different factors precipitated changes in staffing arrangements in our sample. Actual or anticipated changes in Chapter 1 funding levels were a key factor that precipitated a change in staffing. For example:

- One medium-size Northeastern district that used a combination of resource teachers and aides for its Chapter 1 program let go some (but not all) of its resource teachers as a result of a decline in Chapter 1 funding.

- In 1981-82, in anticipation of funding cuts, one large Southern district began using aides instead of teachers out of a desire to "maintain" the scope of its Chapter 1 program.

- In a Midwestern district, guidance counselors were not rehired because of anticipated funding cuts and because local program staff felt that they were largely ineffective.

- A small Midwestern district used to rely on a combination of teachers and aides to staff its Chapter 1 program, but eliminated most of its aides as a result of funding losses during the past few years.

- Conversely, one medium- size Southern district (that used to employ teachers only) started using instructional aides in 1983-84 because of additional funds in the budget, because district staff were favorably impressed by the use of aides along with teachers in other districts, and because district administrators though' they could keep aides employed even if Chapter 1 funds declined.

As noted in two of the above change examples, state pressure may directly or indirectly precipitate changes in staffing arrangements. Another example involves a large Southern district that used to place full-time aides in Chapter 1 kindergarten classes. For several years, state monitors expressed concerns about the use of Chapter 1 for general aid. Local program staff dismissed state concerns for a few years because full-time kindergarten aides were a high priority. Last year, as a result of more state pressure, local staff decided to keep aides in kindergarten classes for half-days only and to put them in grades 1 through 5 for the other half day.

Changes in staffing arrangements have occurred for a variety of other reasons. For example, one medium-size Southwestern district began to replace aides with teachers as a result of a districtwide needs assessment that included surveys of Chapter 1 parents and regular teachers. Respondents to both surveys rated Chapter 1 instructional staff and requested that the district hire more highly qualified staff.

A large Southern district started using aides and paraprofessionals for its Chapter 1 program after Chapter 1 teachers were recruited for the regular instructional program because of a severe teacher shortage. The decision was facilitated by a new federal programs director who wanted to make other changes in the Chapter 1 program to improve coordination with the regular instructional program. Because of the staffing change, he was able to justify a change in service delivery arrangements (from pullout to in-class) and to solve the coordination problem as well.

As noted in one of the earlier change examples, a large district changed staffing arrangements when it changed service delivery arangements (from in-class to pullout) for one of its Chapter 1 programs. Additionally, in two

decentralized Western districts, initiatives taken by principals resulted in staffing changes.

Factors Promoting Continuity

The driving forces behind continuity in Chapter 1 staffing are: the momentum of the current program, the implied or stated commitments to current staff, cost considerations, and collective bargaining arrangements. In many districts in our sample, staffing arrangements have not changed significantly because they were established years ago and because district administrators are satisfied with their existing arrangements. Additionally, changes in staffing arrangements are inhibited by commitments to existing staff (e.g., several districts have policies of not layirg off staff).

The cost of paying unemployment benefits inhibited two districts in our sample from laying off staff. One district, faced with budget cuts, chose to keep aides at 80% time and not to replace aides who left, rather than to lay off staff and pay unemployment benefits. Another district wanted to lay off staff to invest in computers, but because this would require paying unemployment, the district decided the plan was too expensive.

Collective bargaining agreements have inhibited other districts from making staffing changes. Two large districts (one in the West and one in the Midwest) are inhibited from firing aides as a result of strong aides' unions. In other districts, teachers' unions are a barrier to change. For example, in one large Southwestern district an administrator said, "[The union] has inhibited the hiring of bilingual teachers [for Chapter 1].... Senior staff are afraid they'll lose their jobs." Interestingly, the same district has gotten around collective bargaining agreements by developing the "new school" concept. The district declares a school a new school, puts in a new curriculum, and requires staff to reapply. The leverage for creating the new schools was a desegregation court order. In another district, a principal said that he got around seniority regulations by proposing to do away with aides in his school. His aides were reassigned to other buildings at the end of the school year. At the beginning of the next school year, the principal

revised his proposal to the district and hired new aides since his already had been reassigned.

Finally, in some districts shifts from using aides to using teachers are inhibited by limited or declining resources and a commitment to serving as many students as possible with Chapter 1.

Summary

Our findings about the choice of staffing arrangements can be summarized as follows:

(1) In our sample, most districts use a combination of certificated teachers and noncertificated staff (usually aides) for their Chapter 1 programs. Additionally, the staffing patterns reflect delivery model choices. In our sample, the great majority of districts use certificated teachers to deliver remedial education services in pullout or replacement programs. Where aides are used, they work under the supervision of Chapter 1-funded teachers or in-class under regular teachers.

We identified the following as key factors associated with particular staffing choices:

(2) District administrators often mentioned effectiveness as a reason for using teachers instead of aides, noting that more professional services can be delivered by a well-trained teacher than by an aide.

(3) The relative cost of aides versus teachers, a preference for in-class arrangements, and perceived effectiveness were mentioned as reasons for using aides.

Regarding change in staffing arrangements, we found that:

(4) In our sample, many districts did not significantly change their staffing arrangements over the past few years, although several districts somewhat increased or decreased their use of noncertificated staff. Changes in funding levels and state pressure (for a variety of reasons) precipitated changes in some districts. Changes in other districts were due to delivery model changes, teacher shortages, needs assessments, and (in decentralized districts) initiatives by principals.

(5) Commitments to existing staff, collective bargaining agreements, and resource limitations tended to inhibit staffing changes in our sample.

PART FOUR: OPTIONS FOR CURRICULUM, APPROACH, AND INSTRUCTIONAL SUPPORT

A district's Chapter 1 program design is composed of some combination of the basic design features described in Part Three. But regardless of the grades served, subject matter, choice of instructional staff, and delivery model, program planners have many options open to them in the design of the curriculum and the approach to teaching or reinforcing it. We now consider three of these options:

- The computer (Section VIII)
- An emphasis on higher-order thinking skills (Section IX)
- The use of parents in various instructional support roles (Section X).

Each of the three can be implemented incrementally in a single Chapter 1 classroom, in all the Chapter 1 activities in a school, or across the program as a whole. A "change" with respect to any one could mean a relatively small adjustment or a major shift in focus. Unlike the basic features examined in Part Three, these three represent options that may or may not be explicitly considered by local decisionmakers as they fine-tune the Chapter 1 curriculum (Summary Table 2 indicates the presence or absence of these design features in our sample). Thus we shift our analyses somewhat from a focus on change (e.g., from one delivery model to another) to adoption (e.g., the adoption of computers in a program that had none or a few before).

The three features we discuss in this part are not the only important options for the program's curriculum and approach that can be imagined, but they represent adjustments to Chapter 1 technology, content, and the relationship to the home setting that are of particular interest to the policymaking and compensatory education community. Computers, for one thing, are rapidly becoming a fixture in the regular program and in the society at large; moreover, they may be particularly well suited to the delivery of compensatory education. The inclusion of higher-order thinking skills in the

Summary Table 2

VARIATION AMONG SAMPLE DISTRICTS
ON OPTIONS FOR CURRICULUM AND APPROACH

State; District	Enrollment Size**	Use of Computers	Focus on Higher-Order Skills	Parent Involvement in Instruction
WEST/SOUTHWEST				
ARIZONA				
Site A	Very large	Yes	Yes*	Yes
Site B	Medium	Yes*	No	No
CALIFORNIA				
Site A	Very large	Yes	No	No
Site B	Large	Yes*	No	No
TEXAS				
Site A	Very large	Yes	No	No
SOUTHEAST				
FLORIDA				
Site A	Very large	Yes*	No	No
Site B	Large	Yes*	No	No
GEORGIA				
Site A	Very large	Yes	No	No
LOUISIANA				
Site A	Large	Yes*	No	No
Site B	Very large	No	No	No

* This feature represents a recent program design change.

** Enrollment ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Summary Table 2 (Concluded)

State; District	Enrollment Size**	Use of Computers	Focus on Higher-Order Skills	Parent Involvement in Instruction
CENTRAL				
ILLINOIS				
Site A	Small	No	No	No
Site B	Large	Yes*	No	No
KENTUCKY				
Site A	Very large	Yes	Yes*	No
Site B	Medium	No	No	No
MICHIGAN				
Site A	Medium	Yes*	Yes*	Yes
Site B	Large	Yes	Yes*	No
EAST/NORTHEAST				
MARYLAND				
Site A	Medium	No	No	Yes
Site B	Large	No*	No	Yes
MASSACHUSETTS				
Site A	Small	Yes*	No	No
Site B	Large	Yes*	Yes*	Yes

* This feature represents a recent program design change.

** Enrollment ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Chapter 1 curriculum may help to ensure that Chapter 1 students get help with more complex skills, as well as the fundamentals. Finally, parental reinforcement of lessons in Chapter 1 may strengthen the program's effects on student learning.

As with the basic features previously discussed, in each section we:

- Describe the feature and its variation within and across our sample sites.
- Discuss the kinds of changes (and lack of change) in the last 5 years.
- Explain the current design and variation in design across districts.
- Identify the factors that promote the adoption of new features or continuity of existing features.

As before, the reader should remember that the districts in our sample were selected to include examples of sites that had adopted computers, a higher-order skills emphasis, or a focus on parents in instructional support roles (sites without these emphases were also included). The incidence of these features among our districts, therefore, may not be typical of the way these features are distributed nationwide.

VIII THE COMPUTER

The movement to introduce new technologies into the classroom has mushroomed in this decade. There is evidence that disadvantaged students, along with the rest of the student population, are getting increased exposure to microcomputers, both in regular classes and in their Chapter 1 experiences (SRI, 1986; Reisner, 1983). Some districts are investing heavily in computer-managed and/or computer-assisted instruction for their Chapter 1 programs.

In this section we will outline our findings regarding the use of computers in Chapter 1. First, we will describe the extent of computer use in our sample, focusing on the range of typical practices and variations observed. Next, we will discuss the evolution of computer applications in the Chapter 1 classroom and the reasons for their presence. Finally, we will describe some of the factors that discourage Chapter 1 computer adoption.

Use of Computers in Chapter 1

The presence and use of computers in Chapter 1 programs--as either computer-assisted or computer-managed instruction--varies considerably from district to district, among schools within districts, and from teacher to teacher within the same school. Where computers are used, their use ranges from a daily part of all students' instruction to reinforcement for a limited number of students. Computers are typically used for drill-and-practice, as a motivational tool, and to aid program management. However, we also saw evidence in our sample of districts experimenting with other ways of using computers. For example, in some districts teachers are using computers as a word processing tool, as an instructional management device, as a way of extending staff capacity (e.g., by having aides work with students in computer labs), as a way of providing on-site services to nonpublic school students, and as a means of introducing higher-order thinking skills. In the

sections that follow, we will detail our findings about the ways computers are used in Chapter 1 instruction and the factors that influence their use.

The Extent of Computer Use in Local Chapter 1 Program Designs

Computer technology plays a variety of roles in Chapter 1 instruction in our sample, ranging from nonexistence or a minor addition to the materials at a teacher's disposal to a central feature around which other aspects of the program are organized. For example:

Nonexistent:

- In one small district, computers are virtually nonexistent. The district does not have a centralized computer plan. Each of the four schools in the district has one or two microcomputers available. Chapter 1 teachers have access to the machines approximately 10 days a year. Computers are viewed as a "frill."

- In a very large district, computers were present in one elementary Chapter 1 classroom in the six Chapter 1 schools visited. They were not Chapter 1-funded. The district was purchasing IBM PCs for regular classroom use. The administration was considering an expanded introduction of computers in the Chapter 1 program.

Small add-on:

- In another small district, there is an IBM PC available for Chapter 1 use in each school. However, use varies. According to the Chapter 1 director, the machines are "only as good as the teachers." They tend to be used in a limited way to reinforce the basic lessons. Students are involved in drill-and-practice exercises and occasionally games. The microcomputers are "primarily another instructional aid" used by some Chapter 1 teachers.

- In a large district, computers play a significant role in several program components. There are a few computer labs in the district and one writing-to-read program. But the Chapter 1 program is a staff program first. Computers are clearly supplementary components.

Significant feature of a multicomponent Chapter 1 program:

- In another very large district, microcomputers play a significant role in two components of the Chapter 1 program. At the secondary level, the Chapter 1 instructional program is computer-based. At the elementary level, the district is operating a higher-order thinking skills pilot program that operates on microcomputers. This pilot

program is highly regarded by district administrators and school staff and is receiving some national attention.

- A centralized minicomputer provides instruction by means of terminals throughout the district (including the nonpublic schools) in another large district. Computer labs are placed in several other schools, and a few Chapter 1 teachers are considered "high-tech junkies."

Thus, we observed a wide variety of commitments to the introduction of computers into the Chapter 1 program. Some Chapter 1 administrators are uninterested--occasionally describing computers as a frill that cannot be justified. Others have made a concerted effort to integrate computers into the Chapter 1 instructional day. Some districts have made central decisions about the use of computers in instruction, while others have taken a more decentralized perspective in which computer use varies considerably by school or classroom.

How Computers Are Used in Chapter 1 Instructional Designs

The typical computer in a Chapter 1 instructional setting is used for drill-and-practice exercises that support classroom instruction. This might include word recognition tasks, spelling drills, reading and answering questions, games, tutorials, etc. Computer-assisted instruction (CAI) occasionally gets much more complex. As students (particularly older ones) progress, they may use software that builds on simulations, or they may use text editors and work on other writing-related tasks. At the extreme, some Chapter 1 programs use computer-assisted higher-order thinking skills programs.

The percentage of instructional time that is computer-based varies considerably by district, school, and classroom. Some Chapter 1 programs use drill-and-practice exercises as a simple add-on. Students may use the computers only as a reinforcement for instruction that is provided mainly by teachers using other kinds of materials. Other programs use the computer extensively: students spend more than half of their Chapter 1 instructional time in individualized interactions with CAI packages.

However, the new feature of computer software packages that is particularly attractive to the Chapter 1 teacher and administrator is computer-managed instruction (CMI). New commercially available CMI software packages incorporate the functions necessary for student targeting and include various diagnostic and prescriptive components that fit nicely with the mode of instruction popular in many Chapter 1 programs. We observed several districts that used these capabilities to assist with student selection, to diagnose students' individualized needs, and to monitor students' progress. Computer-managed programs greatly facilitate this model of instruction by automating some of the diagnostic, monitoring, and assessment functions.

Curricular Focus of Chapter 1 Computer Use

Chapter 1 is primarily a reading program, but it frequently serves remedial math needs as well. Most districts provide some form of reading instruction or related service in Chapter 1. Many of these districts also provide some computer-related applications in the reading/language arts area.

- Several districts we visited use computers for structured reading support activities. Commercially available software packages are used to provide intensive instruction on specific areas of reading weaknesses. The instruction is primarily drill-and-practice in nature.

- Several districts also use commercially available software to assist students with their writing and reading skills. In the primary grades, software is occasionally used to assist students learning to read by teaching them to write words and phrases. Computers and typewriters are used because many of the students are not yet proficient at handwriting. The computers also serve as a motivational tool. Older students in middle schools or lower secondary grades may use word processing packages to learn writing skills, editing skills, and paragraph construction techniques. The software allows the students and instructors to manipulate existing text more easily.

Some districts that offer Chapter 1 math services use computers to provide or supplement this instruction. For example:

- One district is providing computer-assisted math instruction in Chapter 1 at the middle school level. Math teachers from the regular instructional program and Chapter 1 aides supervise students in a CAI environment in a lab setting. The software is primarily drill-and-practice. Chapter 1 students go to the lab during their elective

period for remedial instruction that is supplemental to their regular grade-level math class.

- A second district incorporated computers into its Chapter 1 curriculum as "a tool to get into progressively complex things." For example, they are using Logo* with their Chapter 1 math students to work on problem-solving skills. They are also doing lots of drill-and-practice work with their computers.

Explanations for Chapter 1 Computer Use

Some factors have facilitated or directly led to the adoption of computers in the Chapter 1 curriculum, while others have constrained efforts to do so. The influence of some factors has been explicit; other factors have only subtly influenced district administrators' decisions regarding Chapter 1 computer use. We shall first discuss factors promoting change and then discuss factors promoting continuity or inhibiting change.

Factors Promoting the Adoption and Use of Computers

Our analyses point to certain stimuli that act as driving forces and support the move to use computers in the local Chapter 1 program (e.g., an SEA administrator who is a vocal computer advocate). We also identified facilitating conditions that allow program administrators to consider adopting computers for Chapter 1 (e.g., available resources). We review both below.

Driving Forces--Three factors seemed to be current, prominent driving forces. The first we have labeled "the vendor effect." Computer hardware and software manufacturers have discovered the Chapter 1 program as a viable marketplace. Textbook publishers have even begun to market computer-related

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* Logo is a commercially available software package explicitly designed to expose the user to mathematical problem-solving skills and logical reasoning tasks.

software that is designed to go hand-in-hand with a basal reading or math series. We observed this vendor effect in several districts. For example:

> A major hardware distributor approached a large district located in the state capital about adopting a new computer-based writing/reading program. The vendor was attempting to establish demonstration sites in all state capitals on the premise that many other Chapter 1 administrators and/or teachers would visit the demonstration sites during trips to the SEA and would consider adoption. The vendor offered the requisite hardware to implement the program in one school. The district administration had only to pay for software and staff with Chapter 1 funds. The vendor even made arrangements with a local university to evaluate the program.

This same vendor approached another very large district we visited in the South and convinced them to adopt the computer-based writing/reading program as well. Evidence from other sites suggests that other computer vendors have shifted their marketing departments into high gear and are working hard to sell computer-based packages to Chapter 1 staff.

State testing has also been a driving force in Chapter 1 computer adoption decisions in some districts. Where state-mandated testing incorporates a section on computer literacy, Chapter 1 programs are likely to incorporate computers in Chapter 1 instruction. In one state we visited, the 7th grade minimum competency test directly assesses computer literacy. As we have noted elsewhere in this report, state tests are having enormous impacts on local instruction (e.g., see Sections V, XIII, and XIV). Districts frequently report that they are forced to alter their general curriculum because of these tests, in effect teaching to the test. It is not surprising that programs like Chapter 1 would follow the same course. The students most likely to fail state tests are those in need of remedial instruction. Although many district administrators reported that testing programs influenced various aspects of their Chapter 1 curriculum (e.g., higher-order skills), respondents in one district in the state noted above explicitly referred to the state test on computer literacy as a major influence on their decision to incorporate computers into the Chapter 1 program.

Another factor that has increased the likelihood of a district's adopting computers for its Chapter 1 program is the belief that computers can

add structure to program instruction. This was an especially important consideration in two districts of different sizes that were seeking to standardize instruction. Some computer applications are so structured that they force Chapter 1 teachers and aides to provide assistance and instruction in a prescribed, fixed manner. Thus, district administrators who are looking for ways to increase their control over the way instructional services are provided are likely to be pleased with the prospects of computer-assisted and computer-managed Chapter 1 instruction.

Still another driving force in decisions about Chapter 1 computer use is SEA influence. The high-technology bandwagon has so much momentum in certain states that local districts are forced to consider adopting computers. Some states also influence districts through workshops and conferences attended by Chapter 1 administrators and/or teachers. This occurred in two states we visited: in one instance, SEA Chapter 1 staff made numerous presentations at conferences about the virtues of computer applications in Chapter 1; in the other state, the SEA formed and sponsors a computer cooperative that provides technical assistance to member districts.

Finally, individual district and school staff are often a major force in decisions about computers. Acting as within-district "innovation champions," individual staff have often influenced school and district decisions regarding the use of computers in Chapter 1 instruction. Several examples illustrate this point:

- In one large district, the Chapter 1 director also chairs the districtwide steering committee on computer acquisition. Needless to say, he was a strong advocate for the integration of computers into the classroom. Given his position in the Chapter 1 administrative hierarchy, computers play a significant part in the Chapter 1 instructional program.

- State-sponsored workshops "fired up a number of teachers" from a small Northeastern district about the possibilities presented by the integration of computers into the Chapter 1 curriculum. Although the district administrators could not be characterized as computer proponents, they did support a move to add several computers to the Chapter 1 program in each participating school, in response to the pressure exerted by teachers who had attended the state-sponsored workshops. The degree to which computers are used depends on the teacher's interest. Some are using the machines to reinforce their

basic lesson plans; a few are doing some of their own program development.

On the other hand, in a larger district the Chapter 1 director had no enthusiasm for computers in the program. He felt that the early enthusiasm for computers in schools was a fad that lacked substance. As in the example cited immediately above, several teachers clamored for computers in the remedial program. To quiet the confrontation, the Chapter 1 director purchased a number of Timex Sinclair computers for the program. It represented a minimal investment and the teachers had their machines. However, the machines were hard to use, there was little software available, and most machines were quickly relegated to a position on the closet shelf. But the superintendent is now a computer advocate. He has introduced computer labs in three elementary schools, other buildings will soon follow, and the Chapter 1 program may eventually incorporate this districtwide trend.

As can be seen from these examples, staff in various roles have a significant influence on many district or school-level decisions to incorporate computers into the Chapter 1 curriculum. Some advocacy efforts are more successful than others, but in all cases an internal advocate or champion plays an important role in the decision-making process. Administrative support is necessary, but the initial stimulus can come from anywhere in the district.

Facilitating Conditions--Although they do not act as powerful stimuli for computer adoption, the following conditions enable the district to consider and implement such a decision.

Chapter 1 administrators' decisions about computers reflect the availability of resources, as do any decisions about capital equipment purchases. Computers seem to be more prominent in Chapter 1 programs where districts have not experienced severe resource reductions in recent years. Slack resources were cited on several occasions as instrumental in the purchase of computers. For example:

In one medium-size district in the Midwest, the state and federal programs director anticipated a large funding cut and budgeted his Chapter 1 program accordingly. When he discovered that these budget cuts was not going to be realized, it was too late to make major program revisions. The resulting pool of unanticipated funds was then used to make initial moves into Chapter 1 computer-assisted and -managed instruction.

A second facilitating condition is the prevailing approach to instruction within the district and the Chapter 1 program. For example, in districts where the educational philosophies of administrators and teachers match their beliefs about what computers can do in the educational arena, computers are more likely to play a significant role in the assistance and management of instruction.

District commitment to high technology in the regular instructional program can also establish a precedent for the use of computers in Chapter 1, although in our sample the precedent was not always followed.* In several districts, as district administrators expanded the use of computers in regular classrooms, they began introducing them in the Chapter 1 classroom as well. Conversely, computers tended to be absent from Chapter 1 classrooms in districts where there was little commitment to the integration of new technologies into the regular instructional program. In other districts, the Chapter 1 director's skepticism about computers or other factors overrode the developments in the surrounding educational program. Some administrators still view computers in Chapter 1 as a frill and feel that Chapter 1 is a more intense, staff-oriented program.

Factors Inhibiting Computer Use or Adoption

As the preceding discussion has implied, the converse of the factors that promote computer adoption makes it less likely that Chapter 1 designs will feature this technology. Thus, in districts with little exposure to

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* On the other hand, Chapter 1 programs occasionally lead the way in introducing computers into the instructional setting. In several large and small districts, computers in the Chapter 1 curriculum preceded district trends to incorporate new technology into the instructional program. This kind of instructional leadership may reflect the fact that Chapter 1 teachers and administrators may be more heavily involved than their colleagues outside the program in professional organizations and attend more conferences where they are repeatedly exposed to these ideas.

computer vendors, no pressure from the state in this direction, no local advocates, etc., Chapter 1 programs tend not to include computers. Several other factors also seem to play a significant role.

Chapter 1 has a history of being a program that provides students with increased staff attention. Local Chapter 1 programs typically reduce the student/teacher ratio by either introducing aides into the classroom, replacing regular instruction with smaller remedial classes, or pulling students out of the regular classroom and providing instruction in small groups or one-on-one (see Section VI). Several district administrators described their programs as "staff programs." They felt that the program was designed to provide more individualized attention and that machines, whatever their benefits might be, would reduce the personal attention students receive. Such district administrators tend not to support proposals to incorporate computers into the Chapter 1 curriculum.

As the example below implies, commitments to staff can generate cost considerations that decrease the probability of introducing computers into the Chapter 1 curriculum. Districts that do not have slack resources available (as in the example cited here) tend not to invest heavily in computers.

- One large district has several computer components in its Chapter 1 program, but not as a major focus. The gradually shrinking sum of funds available to run the Chapter 1 program has left Chapter 1 program administrators with staff commitments that require most of the program's resources. To purchase computers with Chapter 1 funds, they would have to reduce their staff, which would result in the district's paying expensive unemployment benefits. In short, they would be paying for staff and not receiving services in return. District administrators feel that this is an unreasonable alternative; consequently, they have not moved into computers in a big way.

Finally, from the perspective of some local staff, it makes little sense for districts to invest heavily in computers if good software is not available. This perceived shortage of good remedial software discouraged computer purchases in several of the districts we visited. One district bought computer hardware for which adequate software was not available; most of the machines ended up in closets. However, as noted in several other districts, this situation is becoming less of a problem, particularly in light of the

vendor effect (noted above) and the move to develop and market relevant software packages (e.g., some publishers of frequently purchased basal series are now preparing computer-based supplemental material appropriate for Chapter 1 instruction). This situation, of course, implies that computer use in Chapter 1 will be more likely in the future.

Summary

We can extract several major findings from our analyses of computers in Chapter 1. First, regarding the extent of their use in the Chapter 1 curriculum, we found that:

(1) The extent of computer use in Chapter 1 program designs varies considerably. Some districts do not use computers in the Chapter 1 curriculum at all; some districts use computers as an add-on component; and other districts have computers as a central feature of the Chapter 1 program.

(2) Among our sample districts, computers in Chapter 1 are used primarily for drill-and-practice. However, there are some examples of computer-based instructional models that focus on higher-order thinking skills in Chapter 1 settings.

(3) Chapter 1 programs among our districts feature either computer-assisted or computer-managed instruction, or both. Computer-managed instruction is especially attractive to many Chapter 1 decisionmakers because of its natural fit with diagnostic-prescriptive teaching approaches.

(4) Computer applications related to math, reading, and writing are operating in local Chapter 1 programs.

Regarding factors promoting the adoption and use of computers in Chapter 1, our data suggest that one or more of the following influences are the driving forces behind computer adoption:

(5) Aggressive marketing by computer vendors has convinced some Chapter 1 programs to initiate computer components.

(6) Where state-mandated testing addresses computer literacy, this testing has generated a new remedial need that Chapter 1 programs are likely to address, using program designs that feature the computer prominently.

(7) The highly structured nature of many computer applications has strong appeal to Chapter 1 programs that are seeking to standardize or structure their programs more fully.

(8) The high priority placed on incorporating high technology into instruction in certain states has a powerful effect on local Chapter 1 computer adoption.

(9) Individual district and school staff, acting as "innovation champions," are a primary force behind the initiation of computer components in Chapter 1 program designs.

Other factors facilitate the introduction of computers, but provide less impetus to these decisions:

(10) The availability of slack resources influences the decision to incorporate computers in Chapter 1, by making adoption or implementation feasible on a wider scale.

(11) Some approaches to instruction (e.g., structured, diagnostic-prescriptive approaches) are especially compatible with current computer applications.

(12) The presence or absence of computers in the regular instructional program sets a precedent affecting the Chapter 1 administrators' decisions regarding computer use, although other factors may override the precedent.

Finally, several factors (in addition to the converse of the above) reduce the probability of a local Chapter 1 program incorporating computers in instruction:

(13) Chapter 1 has a long history of being a "staff program." District administrators are often committed to this notion in general and to specific staff in particular. Reducing the amount of time children spend interacting with adults, or even replacing some of the staff with computers, is not a viable option for such administrators.

(14) Commitments to staff can create cost considerations that constrain a district's ability to make significant purchases of computers.

(15) The apparent lack of high-quality software available to the schools has led many decisionmakers to consider options other than computers.

IX AN EMPHASIS ON HIGHER-ORDER THINKING SKILLS

Attention has been focused recently on the extent to which public education teaches children "higher-order thinking skills" (e.g., Sternberg, 1985; Sadler and Whimbey, 1985). The concern has been voiced by educators and policymakers at local, state, and federal levels in discussions of the ways schooling should be improved. Not surprisingly, the issues have surfaced in the compensatory education community. There, educators worry that children receiving compensatory education services will be left behind--that is, taught only the "basics" and never given the chance to develop analytic or reasoning skills. One of our respondents put the matter forcefully:

> "If you meet a Chapter 1 kid's needs at his own level [remedial], you're programming him for failure. He needs to know what he needs to survive in society. If you teach him at grade level, he's frustrated and fails again. Higher-order skills [in the Chapter 1 program] allow instruction to include both components."

In this section we describe the way these concerns are expressed in the design of Chapter 1 programs. First, we examine the range of meanings held by local Chapter 1 staff for the elusive term "higher-order thinking skills." Following that, we describe the form that a higher-order emphasis takes in the districts within our sample, noting the types of changes that have come about in the course of establishing this emphasis. Our description distinguishes cases in which Chapter 1 program staff explicitly describe their programs in higher-order terms from others in which this skill emphasis is addressed implicitly and still others in which there appears to be no attention to higher-order skills whatever. Then, we explore the explanations for the presence or absence of a higher-order skills emphasis and associated change processes. We conclude with several observations about the consequences of this design emphasis for instructional practice.

The reader must remember that our sample of districts, a quarter of which claimed to address higher-order thinking skills in some fashion, is not a statistical representation of the nation's Chapter 1 programs. For reasons that will become clear in discussing inhibiting factors, the proportion of the nation's school districts with Chapter 1 programs aimed at this skill level is probably smaller.

Meanings of Higher-Order Thinking Skills

Among local Chapter 1 staff, if not among educators more generally, the term "higher-order thinking skills" resists clear definition. Although definitions that emphasize the cognitive skills required for complex problem solving or analysis exist in the literature (e.g., Chipman and Segal, 1985), it is more useful for purposes of this study to examine what Chapter 1 staff believe the term to mean, especially in relation to their instructional programs.

When queried on the subject, Chapter 1 staff in our sample districts approached the issue in one of three ways: (1) they recognized the term and explained their definition for it, which often corresponded to an explicit emphasis within their programs; (2) they stopped to think about what the term meant and gave (or responded to) a definition of it, acknowledging its presence in some aspect of their instruction; or (3) they expressed confusion over the meaning of the term.

It was not unusual to find respondents aware of the matter as an important (or, at least, popular) instructional design issue but also unclear about its meaning or implications for Chapter 1. The Chapter 1 director in a small, rural site remarked:

> "Thinking skills--that's something we should have been doing. We will be. We're on the writing kick around here now.... Some English teachers are now using logical thinking and analogies in their lessons.... I suppose it fits [into Chapter 1], but to what degree I'm not sure. I'm kind of confused."

Some respondents pointed out that the higher-order versus lower-order distinction is far from simple and perhaps misleading because, at all levels of curriculum, a capacity for abstract thinking can be cultivated in children by the way skills of any kind are taught.

The most common terms the Chapter 1 staff used to discuss higher-order thinking skills were the following: "critical thinking," "problem solving," and "drawing inferences." These terms were used almost as synonyms for higher-order thinking skills. On closer examination, local definitions of the term appear to refer to one or more of the following intellectual operations:

- Analyzing problems or situations logically: that is, breaking down a problem into its component parts in such a way that the relationship among the elements can be demonstrated.
- Drawing inferences from a set of facts or from written material.
- Forming and testing hypotheses about how certain variables are related to one another, how a problem situation can be resolved, etc.
- Applying knowledge to new situations, especially those encountered in life outside the classroom.

Among districts in which Chapter 1 staff claimed to be emphasizing higher-order thinking skills, the definitions span a range from those that involve a number of these elements and are more explicit about the skill components that can be considered "higher-order" to those where only one of the elements is emphasized, often in vaguer terms. One program at the more explicit end of the continuum set out, for example, to teach students to "think about thinking," through interactive work with computers and a variety of exercises in hypothesis testing, idea formulation, and the like. Having set more modest goals, staff in other sites contented themselves with an explicit attempt to teach students how to draw inferences about what they were reading. Several sites put the emphasis on "thinking," without reference to a higher-order/lower-order distinction.

In other districts, program designers professed to have no explicit emphasis on instruction in higher-order thinking but, once they began to reflect on the matter, acknowledged that they are doing many of the same

things that take place in the preceding sites. In Chapter 1 reading instruction, for example, students in these districts are asked to interpret and comment on what they read as a way of encouraging reading for understanding and the application of reading to other uses. In Chapter 1 mathematics classes, students in these districts are often asked to solve problems in which mathematical reasoning and logic are necessary to arrive at reasonable answers.

In a third set of districts, there was no evidence that there was a higher-order dimension to Chapter 1 instruction or that this dimension has ever been considered. In these cases, students do phonics drills, learn spelling, memorize new vocabulary words, practice arithmetical computation, and engage in a variety of other skills thought to underlie reading or mathematics, but without the analytic exercises involved in higher-order skills instruction.

The Programmatic Form of Instruction in Higher-Order Thinking Skills

Whatever the particular definition used, local Chapter 1 programs have included higher-order thinking skills instruction in one of three ways: as a gradual sensitizing process (carried out through inservice training, for example), as a systematic pilot test, or as a programwide orientation toward instruction. We present vignettes illustrating each of these three modes below, to demonstrate what the change process looks like, and show some of the forces driving the adoption of this orientation.

- Sensitizing process. In a large district located in a moderate-size Midwestern city, the Chapter 1 program recently began a series of inservice workshops on ways to focus instruction on the acquisition of higher-order thinking skills. The application of higher-order thinking ideas to instruction is left up to the teachers. Some have apparently experimented with different approaches to asking reading questions, for example; others have so far done little. The impetus for these workshops comes from two sources: a statewide push to expose teachers to the effective schools approach and related research (including the topic of higher-order skills) and the most recent version of the statewide competency testing program, which includes items intended to test higher-order thinking. This testing program is adhered to, in part, because results are released by district and school.

- Systematic pilot test. A large urban district in a Southwestern city was approached several years ago by a professor in a nearby university who had developed a prototype program intended to improve the higher-order thinking skills of disadvantaged students. The program is an ambitious attempt to address a range of analytical and problem-solving skills through interactive computer-based exercises. Some of the Chapter 1 staff had already been especially interested in developing a computer-based dimension to their instruction, and took to the new program naturally. Two Chapter 1 elementary schools adopted the professor's approach on a trial basis; others are watching the progress of the program in these schools with interest, and are considering its application to their schools as well. The Chapter 1 program's leadership and instructional managers within the district are more cautious. Because of the high cost of the higher-order skills component, as well as its unconventional approach, they are waiting until more definitive results are in before endorsing the project for widespread implementation in the district. The university professor has continued to be involved with the project as it progresses, both by providing inservice for the affected teachers (and others who are interested) and by helping to evaluate the experiment.

- Programwide orientation. The Chapter 1 program in another large urban district in a different state has for a long time emphasized higher-order skills, locally referred to as "thinking skills," at all levels of the K-12 program. The emphasis takes a different form at each level of the program. For elementary students, Chapter 1 instruction aims at "thinking skills" through a variety of reading comprehension exercises. In the middle school grades, program recipients receive what is described as "an introduction to the thinking process." High school Chapter 1 students participate in "seminars on thinking," in which they practice solving mysteries and discuss the application of ideas learned in Chapter 1 or other aspects of their schooling to their lives outside of school. The impetus for this orientation is hard to trace, but among the most important factors lie the convictions of the Chapter 1 program director and staff that instruction in "thinking" is as central a part of any child's compensatory instruction as any other aspect of the school experience. The director notes that the statewide reading association and its network have placed some emphasis on this orientation over the years.

Explanations for the Adoption of a Higher-Order Skills Emphasis in the Chapter 1 Program

Concentrating first on districts that make some kind of higher-order thinking skills an explicit focus of the Chapter 1 program, we can identify several forces that encourage or discourage this orientation.

Factors Promoting Adoption of a Higher-Order Skills Emphasis

As the three vignettes above suggest, forces external to the school district have tended to push the issue of higher-order thinking skills into the public eye and onto the agenda for either Chapter 1 or the regular instructional program, or both. The most powerful of these external forces seems to be state educational reform movements and associated testing programs, especially where these are accompanied by measures that enforce accountability. Several states in our sample illustrate this process. One state, alluded to in an example above, has been most forceful in its efforts to bring higher-order skills to the attention of school district planners as part of a more general approach to stimulating school improvement; the fact that the state's competency tests now include a set of items that purport to assess higher-order thinking skills has been especially instrumental in promoting this skills emphasis within Chapter 1. Another state has made higher-order skills a part of its reform initiative in a similar manner: beginning next year, district-level curriculum supervisors will observe classroom teaching methods, and one component of the review will examine whether teachers incorporate higher-order thinking skills into their instruction.

A second force derives from the professional networks in which Chapter 1 staff participate, especially the networks of curriculum specialists from which Chapter 1 people draw ideas for reading and mathematics instruction. In curriculum circles, higher-order skills have received a good deal of attention in recent years (Segal et al., 1985) as educators and reformers have wrestled with questions of excellence in schooling and how this can be promoted. Professional networks, centered in universities, professional societies, and the publishing industry, have stimulated some Chapter 1 programs to focus on higher-order skills in one of several ways:

- By providing models. The previously cited example of the systematic pilot test is the clearest example of this. The model created by the university professor in that district was exciting, unconventional, and widely disseminated. The influence of this particular model has been felt in at least two other sites we visited, one in the same state (from which staff have visited the pilot test district to see the program in operation firsthand) and the other in a distant state (where the Chapter 1 director heard of the model program through

professional meetings and possibly the state technical assistance center). Although neither of these districts had adopted the model project at the time of our visit, interest in doing so was high.

- By setting professional expectations and fashions. There is no question that higher-order thinking skills are to many of our respondents a "fashionable" thing to consider, if not a professionally advanced addition to the instructional program. One teacher we interviewed commented, "It's the thing to do." A clue to the influence of this professional trend is the recency of adoption of the higher-order emphasis in a number of the programs we visited.

- By structuring the materials commercially available to Chapter 1 program staff. In several districts we visited, some emphasis on "higher-order thinking" has suffused the materials used by Chapter 1 staff. In one site, the basal reading series includes questions that purport to give students practice in these skills. In another site, a different series has sections in its high school readers devoted to "drawing inferences" from reading. Because readers have for many years had portions devoted to "reading comprehension," it is difficult to say how much these features of the published reading materials differ from readers that make no reference to higher-order skills (the phrase has obvious marketing value, given the current professional trend). But to the extent that there are differences in these materials, the inclusion of this new skill emphasis in materials used by Chapter 1 students can alter the emphasis of their instruction.

These broad forces--emanating from the state and professional circles--do not lead every district, or even most districts, to focus their instructional programs on higher-order skills. Our analyses suggest that several facilitating conditions play an important role. First, because higher-order thinking skills typically represent a new dimension in Chapter 1, this orientation is more likely to appear in districts with Chapter 1 directors who are more innovative or more attuned to current curricular issues. Such people are more likely to want their programs to be in the vanguard of professional trends or educational reform. In one of these districts, the federal and state programs manager described the Chapter 1 program as the "focal point... for change in the whole district" (higher-order skills have not yet been incorporated into the district's core academic program). By contrast, the director of another Chapter 1 program, who is more traditional, has not yet seriously considered a higher-order skills focus, although he is aware of the issues (and aware that one of his teachers uses a reading series with sections dealing with higher-order skills).

Second, the larger the district, the more likely that some aspect of the program will focus on higher-order skills of some kind. This follows, in part, from the simple fact that larger districts have more components, more schools, and more staff. Unless the district-level Chapter 1 administrators rigidly control variation in the program across schools and components or insist that all aspects of the program adhere to a single philosophy that precludes a higher-order focus, it is more likely that some part of the program will become exposed to the professional or reform trends that are bringing higher-order thinking skills to the attention of educators. Other features of large district Chapter 1 programs contribute as well: unlike small programs, they are likely to have at least some slack resources in their budgets and are more likely to be in the vicinity of universities, professional association headquarters, or other nodes in the professional network. Finally, the sheer amount of funds spent on materials makes larger districts a prime target for the marketing efforts of commercial publishers.

Third, program planners and teachers seem more inclined to initiate or experiment with a higher-order skill emphasis with older students. In one Chapter 1 program serving grades K-12, for example, high school students participate in "thinking seminars" while younger students do not. In other programs, upper elementary children are more likely than younger ones to be given learning activities that purport to provide higher-order skills. This tendency may reflect the conventional wisdom among compensatory educators that, at the youngest levels, Chapter 1 students need basic building blocks (e.g., phonics) for future skills. The tendency may also be due to a more practical fact: older students have developed more capacity for reasoning (and less tolerance, perhaps, for repetitive drills).

Factors Discouraging an Emphasis on Higher-Order Skills

There are substantial barriers to the adoption of a higher-order skills emphasis in Chapter 1, however. The strongest counterforce comes from within the program and its traditions. Chapter 1 is almost universally described as a "basic skills" program, in which remedial needs are systematically identified--typically in terms of the component skills of reading or

mathematics. Many of the missing pieces in the lower-achieving students' repertoires are very simple skills that have little to do with higher cognitive functioning by almost anyone's definition.

Given this fact, it is not surprising that many Chapter 1 program planners have either never seriously considered a higher-order skills emphasis or else have done so and rejected it, because they believe that the students need the prerequisite building blocks before they can "handle" higher-order anything. This philosophy has been deeply rooted in some Chapter 1 programs since the days of Title I. The Chapter 1 director in one Southern urban district responded to our questions about higher-order thinking skills with a simple statement: "We're into basic skills here." Another put it similarly: "We're talking strictly basic skills here". By these phrases, the directors meant that the program concentrates on fundamental deficiencies at early grade levels (one district has recently initiated a prekindergarten program, for example, and has phased out its Chapter 1 services in the middle and high school grades). People such as this think of higher-order skills as "nonbasic" skills.

A second major barrier is lack of awareness. Within our sample, Chapter 1 directors in at least two districts have never given the matter any thought, as far as we could tell; the term has little meaning for them. In several other sites, although the term connotes something, local staff lack models or ideas about what a higher-order skills emphasis would look like. The pattern in these districts confirms the importance of professional networks, because most of these districts are located in rural areas and tend to be more isolated from professional developments than the larger, usually urban districts.

A third major barrier is the nature of the Chapter 1 instructional staff. In those districts where aides or paraprofessionals are the sole providers of remedial services, the Chapter 1 program has nothing to do with higher-order skills. There, as pointed out in Section VII, staff are perceived as relatively inexpert and are assigned instructional duties that require less professional expertise.

The state and district context can powerfully reinforce the effects of a Chapter 1 philosophy emphasizing basic skills, the absence of awareness or models of alternatives, and the lack of staff to implement a higher-order skills approach. The principal instrument of state influence is the competency test. In the same way that some states encourage higher-order skills in Chapter 1 by including higher-order skills items on the competency tests, others discourage this orientation by not including items of this sort. The emphasis of many state testing programs is on minimum competency, which often leads inexorably to the kind of "basic skills" philosophy and approach described above. One respondent observed, "This is a basic skills state," in reference to the newly instituted testing programs and performance standards required for promotion to the next grade. In that district there is no question about addressing students' analytic or reasoning competence. The state test does not demand it, but rather expects evidence of a command of spelling, phonics, vocabulary recognition, and the like.

Whether or not the state underscores the importance of basic skills, districts can also do so. In several districts we visited, the superintendent or other instructional leader has made it clear that improvement in basic skills (conservatively defined so that most conceptions of higher-order skills would be excluded) is a top district priority, extending to the special services like Chapter 1 as well as the regular instructional program. Policies about the connection between Chapter 1 and the regular instructional program (see Section XIII) make it even more likely that Chapter 1 will move to the beat of the same drum. In some districts, the program does not have a prescribed curriculum, but instead acts strictly as a reinforcement for regular program lessons; in these instances, when the regular program is oriented toward "the basics," Chapter 1 has little chance to address higher-order skills of any kind.

Consequences for Instructional Practice

Although we did not set out to study the consequences of the program's intended skill emphasis for Chapter 1 instructional practices in the classroom, we learned enough about this topic to make a few concluding

observations, which help to keep the findings from the preceding analysis in perspective.

Not all districts that purported to emphasize higher-order thinking in the Chapter 1 program gave evidence that this emphasis made any difference for students or classroom-level instruction. For example, teachers in several such districts explained that, although they had intended in previous years to cover material related to higher-order thinking skills toward the end of the semester, they usually did not get to the topic. This gap between the district's program design rhetoric and actual practice seemed most pronounced in sites where the higher-order thinking skills were less central to the basic design of the program or where Chapter 1 staff had less exposure to this emphasis than in other districts (because of a lack of staff expertise or the newness of the approach).

Conversely, in other districts, regardless of the fact that the skill emphasis of the Chapter 1 program did not feature higher-order thinking, individual staff, by the nature of their teaching, encourage some form of higher-order thinking in their students, although they didn't describe the instruction in these terms. In short, "good" teachers (to the extent the judgment can be made on the basis of one site visit) find ways to make their students think and problem-solve, in addition to imparting the rudiments of reading or arithmetic.

Summary

Our findings about the presence and adoption of a higher-order thinking emphasis in Chapter 1 programs can be summarized as follows. First, with regard to the way local staff define the concept and translate it into practice, our analyses suggest that:

(1) Local Chapter 1 administrators and staff approach questions about higher-order thinking skills with various degrees of certainty over what is meant by the term and whether it is part of what they teach. Local meanings for the term differ, and a good deal of confusion persists about it.

(2) Among districts that explicitly address higher-order thinking skills in the Chapter 1 program, local definitions of the term typically include one or more of the following intellectual operations: breaking a problem or situation into logical components, drawing inferences from a set of facts or written materials, formulating and testing hypotheses, and applying learning to out-of-school situations.

(3) Districts in which the Chapter 1 program does not explicitly address higher-order thinking skills may still be incorporating some of this emphasis into instruction, often at the individual-teacher level. Otherwise, where there is no evidence of this emphasis in instruction, program staff either have consciously rejected the concept or have little idea of what it means.

(4) Higher-order thinking skills take programmatic form in three ways: as a gradual sensitizing process among program staff (e.g., through inservice training), as a systematic pilot test, and as a program-wide orientation toward instruction.

Regarding the forces and conditions that encourage an emphasis on higher-order thinking, we found that:

(5) The most important forces driving the appearance of higher-order thinking skills come from outside the school district: (1) where state reforms and associated testing focus on these skills, or (2) where higher-order thinking has become a "hot topic" in the professional networks in which Chapter 1 staff participate (or has influenced the materials commercially available to the program).

(6) Other conditions facilitate the adoption of this instructional focus: the presence of innovative instructional leaders in Chapter 1 programs, and the larger size of some programs, which offers more opportunities for experiments with higher-order thinking skills to be tried. Also, higher-order thinking skills seemed more likely to be tried with older Chapter 1 children (e.g., upper elementary in programs serving K-6; high school students in programs serving K-12).

Our analyses identified various barriers to the adoption of this emphasis:

(7) The strongest force opposing the adoption of a higher-order thinking skills focus is the belief, widely held among Chapter 1 staff, that their students can't handle higher-order skills yet, or else that these skills are "extras"--not as fundamental as the "basic skills" that all agree the students needed to acquire. Lack of awareness and adequately trained staff (e.g., in programs emphasizing aides) are also significant barriers.

(8) State and district context help to inhibit the emphasis on higher-order skills, chiefly by placing heavy emphasis on the improvement of "basic skills." Minimum competency testing is one instrument that reinforces this emphasis.

Regarding the consequences of a program design emphasis for student practice, we found that:

(9) The fact that a district's Chapter 1 program espouses higher-order thinking skills is no guarantee that these skills will make their way into classroom practice, at least not in the short term.

(10) Regardless of program design, some teachers encourage higher-order thinking of some kind in their students (even though these teachers may not use the term when describing what goes on in their classes).

X PARENTS IN INSTRUCTIONAL SUPPORT ROLES

Parental involvement in the Chapter 1 program traditionally has assumed two broad forms: parents as advisors and parents as partners. In their advisory role, parents participate on councils, providing input into decisions concerning the design and administration of the Chapter 1 program. Proponents of parent involvement in councils argue that such participation ensures program accountability and may lead to better programmatic decisions. Earlier in this report, we addressed the issue of parents in advisory roles in our discussion of decisionmaking (see Section IV).

In their partnership role, parents participate directly in the educational process, either as helpers in the classroom or at home with their own children. Proponents of this form of involvement argue that direct parent participation in instruction results in improved student performance. The recent concern with improving educational effectiveness has raised again the question of the potential efficacy of involving parents directly in instructional roles (Henderson, 1981; Epstein, 1984). In this section, we examine the extent to which our sample districts actively involve parents in instructional activities.

Patterns of Parental Involvement in Instructional Support Roles

The general picture of parent involvement in instruction that emerged in our sample districts was one of extreme differences. We found three basic patterns:

- Active in-school involvement: Organized program of parental participation components, resulting in active involvement of Chapter 1 parents in the school and classroom, typically in a volunteer capacity.
- Out-of-school involvement: Intensive efforts to get parents to assist their children outside the formal educational process, which achieve varying degrees of response of parents.

- Noninvolvement: No apparent involvement of parents in instructional support, resulting from low-intensity (or nonexistent) efforts to involve parents, e.g., occasional workshops or parent nights.

We describe each in turn.

Active In-School Involvement

In a few cases (which we had deliberately sought out) districts have organized active programs for the participation of parents in the instructional process. In these districts, parents play a meaningful and apparently helpful role in school activities structured to use the services of parent volunteers. At the same time, these districts appear to enjoy high levels of participation, prompting one superintendent to estimate the number of volunteers in his district of 17,000 students to be "in the thousands."

In our sample districts with the most highly active parent involvement components, parents rarely are directly involved in in-class instruction. Rather, direct parent participation in schools usually involves providing administrative support. For example, the district with "thousands of volunteers" has set up a math program that is run by parents. Here parents help teachers to put together supplementary materials, correct papers, and post students' test results. In another highly active district in the same state, parents' major role in the schools involves designing and producing helpful bulletin boards.

A major exception to this pattern of noninvolvement in direct instruction is a Southwestern district that has established both preschool and kindergarten Chapter 1 programs that virtually require parent participation in the classroom. Nearly every parent with a child in the program either comes to class twice a month or sends a substitute in his or her place. The instructional program is designed to take direct advantage of the assistance of students' parents. Another district periodically allows parents to come into the early grades to read to students during reading periods.

Out-of-School Involvement

Somewhat more common in our sample are programs that actively work to get parents to assist their children outside of the formal educational process. In one district, for example, parents help out in after-school homework sessions. A number of districts run educational/training programs to prepare parents to help their children at home. The most effective of these parent education programs require regular participation, are based in the specific curriculum of the child, and are accompanied by a series of supportive mechanisms, such as follow-up assistance for certain families. Other districts have chosen less formalized ways of fostering and assisting home tutoring. One district funds home-school aides who bring instructional materials to parents' homes, while others have established parent lending libraries at the school site. One district has gone so far as to support a computer-lending program with the intention of further fostering student/parent educationally related interaction.

Noninvolvement

Most districts in our sample, however, have no organized programs for involving parents in the instructional role. Where parent involvement occurs, it is ad hoc, driven, for example, by the initiative of an exceptional teacher. These districts run occasional parent/teacher nights or have an annual workshop that focuses on ways to help your child at home. An individual teacher here or there in the district might successfully involve parents in his or her classes. Yet the districts have no structured programs that lead to the regular and organized participation of parents, either in the classroom or at home. In these districts, parents may be assisting their children, but no one in the schools is aware of it. In short, most instruction carried out in the Chapter 1 programs in our sample districts does not involve parents.

Change in Practice

Change in participation patterns during the last 5 years has been rare among our sample sites. In general, the most active districts have enjoyed strong parent involvement components over a long period. Similarly, most districts that have no organized involvement by parents in the instructional process have never had successful programs. In the few instances where change occurred, it was driven by external factors. For example, one district suffered extreme allocation reductions and consequently had to lay off all noninstructional staff. These cuts eliminated all home-school liaisons, effectively undermining the structure that had supported parent involvement in instruction. Conversely, a new state push for parent involvement in another district led to the hiring of new staff and the establishment of an organized program for getting parents involved in their children's education.

In a small subset of our sites, ECIA's elimination of the federal requirement for advisory councils has indirectly affected the extent of district efforts to involve parents in instruction. In these districts, administrators have reduced organized activities for parents, including in some cases educational and parenting workshops. These changes represent reductions in district activities, however, not in the extent of parent involvement in instruction. None of the districts that substantially reduced efforts because of changes in legislation ever had enjoyed effective programs for involving parents directly in instruction.

Explanations for Current Practice

In a few of our sample sites, parent involvement activities in instruction can be traced to specific state actions. In one case, the state educational agency assisted the district in developing an effective schools program. The new educational thrust includes a renewed emphasis on getting parents actively involved in the educational process. In two other states, state regulations preclude noncertificated personnel from instructional tasks in the schools. In general, however, the extent of organized participation

appears to depend on local educational philosophies and the extent of organized structures that abet the involvement of parents.

Attitudes About the Value of Parent Involvement

Administrators and teachers in districts with highly active, well-organized parent involvement in the instructional program hold to the philosophy that the participation of parents is a crucial component of the educational process. These administrators do not perceive Chapter 1 parents' lack of formal education and poverty as a liability; rather, they believe that parents' educational deficits may hinder student progress and therefore constitute the central reason for staff making every effort to bring them into the schools. Without the active involvement of parents in instruction, these administrators contend, the effectiveness of the compensatory education program is threatened.

An administrator in one district with a highly active parent component stated that parent participation is simply "the cheapest and most effective way of increasing student achievement." This district has adopted a preventive approach to remedial education, focusing its efforts on the earlier grades and trying to build home support for education early in the child's career. Educators in another district that all but requires parents in its preschool and kindergarten classes to come to school regularly noted that parents' presence in the classroom fosters better self-images among children and that this is one basis of better educational achievement. In another district, involving parents in the educational process is understood as a basic tenet of the district's "whole child approach" to education, and as a basic contributor to the success of the educational process.

In contrast, administrators in our less active sites did not perceive parental involvement in instruction as a basic requirement of program success. At one extreme, administrators questioned the efficacy of involving parents in the instructional process. One Chapter 1 director noted,

"Parent volunteers are limited like aides. What can they do? ... They can help run off things, oversee a behavioral checklist, or be a cafeteria monitor. But one day of that and they run out the door."

From this perspective, parents of Chapter 1 students are seen as possessing limited skills to assist in their children's education.

Such a philosophy is implicit among many district administrators who have refocused their efforts on more effective programming. In these districts, Chapter 1 staff, following much of the school effectiveness literature, do see a need for positive school climate and strong community support for the schools. Consequently, they work to foster parental support for the program. Educational improvement, however, is understood to be the province of professional educators. There is a trend in these districts, then, not only to deemphasize parental involvement in instruction, but also to move away from the use of aides and to focus increased resources on certificated personnel.

Moreover, administrators in most districts with small or nonexistent parent involvement components point to the nature of Chapter 1 parents as a reason for the lack of participation. One Chapter 1 director noted, "Getting these parents to come out is like pulling teeth"; another said, "With these types of students, I get little cooperation from parents." In these districts, the low educational levels of parents, the fact that in many families both parents work, and the transiency of the communities all pose seemingly insurmountable barriers to the establishment of strong parent involvement components. We should note that, while these views may be used to rationalize lack of concern or effort, we found more often than not that Chapter 1 staff had tried hard--and failed--to overcome the acknowledged difficulties of involving students' parents.

Finally, few administrators and teachers, even in highly active districts, strongly support direct involvement of parents in the instructional process in the classroom. With a few exceptions, district and school staff argued that in-class instruction was best left to professionals and that direct involvement by nonprofessionals was taken care of by paid aides who were provided some training.

Development of Supportive Structures and Services

Districts with active parent involvement in the instructional process are also characterized by a series of supportive structures and services established to facilitate the participation of parents. In these districts, staff do not wait for parents to come to them; rather, they actively encourage parent involvement through home visits, workshops, clear and well-structured programs for parents in the educational process, and noninstructional support services. Perhaps most important, these districts all fund staff positions that hold clear responsibility for fostering effective parent involvement.

The extent to which our most active districts support parent involvement is truly astonishing. In one district, for example, four of eight Chapter 1-funded staff hold as their main responsibility oversight of the program's parent involvement component. These staff members organize workshops, help schools organize parent participation, assist in setting up child care arrangements for parents working in the schools, organize field trips for parents, and generally coordinate all parent activities. Another active site, which virtually requires semimonthly parent attendance in its preschool and kindergarten programs, also requires teachers to visit each child's home at least once a month.

In a few districts, staff have recognized significant needs of parents that compete with their ability to take part in the educational process and so have established specific social welfare programs to assist parents. In one district, for example, Chapter 1 staff not only run a parent lending library, which allows parents to check out books relevant to their children's studies, but individual staff members have organized a clothes bank, and one aide solicits contributions of Christmas gifts for poor families.

Our less active sites stand in sharp contrast in the extent to which they have established specific structures to facilitate the involvement of parents in the Chapter 1 program. A number of districts place a low priority and expend no resources on encouraging parent involvement in instruction. More frequently, districts have taken active steps in the past to recruit

parents into the schools, but have become discouraged and have ceased any organized, district-level efforts. A number of other districts continue to fund some supportive structures, such as a library that lends instructional materials and computers to parents or a part-time parent coordinator, but these efforts have proved insufficient in the face of the difficult job of bringing predominantly poor and uneducated parents directly into the instructional activities of the schools. In short, in none of the districts in which parents play a minimal or nonexistent role in the educational process have districts established and maintained the organized, interdependent network of supportive services that we find in our highly active districts.

Summary

Our findings concerning the participation of parents in the instructional components of Chapter 1 can be summarized as follows. First, with regard to general patterns of participation:

(1) Some of our districts had active involvement of parents either (a) in school, typically in volunteer capacities (although not in direct instruction), or (b) out of school, typically in a homework help capacity, or (c) some combination of the two.

(2) More typically within our sample, the Chapter 1 program had no organized and regular involvement of parents of Chapter 1 students in instructional support roles.

(3) We more frequently observed districts that retained organized parent council structures (in spite of the elimination of the requirement for them in the Chapter 1 law) than that had ongoing and effective participation in the instructional process.

The general pattern of noninvolvement of parents in instructional support roles is not surprising given two basic barriers to that involvement in the districts we visited:

(4) Instruction constitutes the main business of schools. Maintaining organized programs to include parents in their children's instruction, especially at the school site, necessitates altering the instructional process to some extent.

(5) The nature of many parents of Chapter 1 students--poor, not highly educated, transient, and faced with competing pressures for their time--establishes barriers to their integration into the schools.

Regarding the characteristics of districts that do involve Chapter 1 parents in instructional roles, we found that:

(6) These districts perceive the involvement of parents in the instructional process to constitute a central thrust of the schools' educational program, not an adjunct to regular instruction.

(7) These districts have allocated substantial financial and personnel resources to establish structures and services to support the involvement of parents in the instructional process. In the face of this commitment and these supportive structures, the barriers of parents' background and competing commitments fail to deter the establishment of effective programs for the involvement of parents in instructional support roles.

(8) More often than not, the involvement occurs in the home after school hours, not in the classroom.

Regarding the characteristics of districts that do not have active parent participation components in their Chapter 1 programs, we found that:

(9) Districts tend not to commit resources to parent involvement components (e.g., full- or part-time staff).

(10) District administrators tend to feel that parents have limited capabilities in the instructional role--they often view aides in a similar light.

PART FIVE: CHANGE IN ARRANGEMENTS FOR SPECIAL GROUPS OR SITUATIONS

In this part, we describe our findings regarding change or continuity in:

- Arrangements for nonpublic school students (Section XI)
- Arrangements for schools with high concentrations of poor children, in response to Chapter 1 regulations governing "schoolwide projects" (Section XII).

Sample variations on these instructional-design features are outlined in Summary Table 3. These features differ greatly, both in the substance of the design arrangement and in the dynamics of change. Each represents an adaptation of a basic design in response to key contingencies that prompt an alternative structuring of the design.

These are not the only special populations or situations that present program planners with important design issues (high concentrations of limited English proficient students, for example, are a major challenge to instructional design in certain Chapter 1 program settings). However, they capture two of the most salient design issues that are likely to be raised in reconsideration of the Chapter 1 law.

As in the previous two parts, we first describe current designs and recent changes, then explain why these arrangements appear that way in our sample, and finally identify the stimuli for, and barriers to, change. The reader should remember that we sampled for variation on the two features discussed in this part; our sample thus does not necessarily reflect the way these features are distributed nationwide.

Summary Table 3

VARIATION AMONG SAMPLE DISTRICTS
ON ARRANGEMENTS FOR SPECIAL GROUPS OR SITUATIONS

State; District	Enrollment Size**	Special Groups or Situations: Schoolwide Program	Special Groups or Situations: Services for Nonpublic School Students
WEST/SOUTHWEST			
ARIZONA			
Site A[1,5]	Very large	No	Private school site and rectory*
Site B[1]	Medium	Yes*	Extended day*
CALIFORNIA			
Site A[1,2,4,5]	Very large	No	Suspended*
Site B[1]	Large	No	Van in purchased parking slot
TEXAS			
Site A[1,2,4,5,6]	Very large	No	Remote computer*
SOUTHEAST			
FLORIDA			
Site A[1,5]	Very large	No	Remote computer and vans*
Site B[1,3]	Large	No*	In nonpublic schools (1 year SEA dispensation)
GEORGIA			
Site A[1,2]	Very large	No	Temporarily dropped*

* This feature represents a recent program design change.

**Enrollment ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Summary Table 3 (Continued)

State; District	Enrollment Size**	Special Groups or Situations: Schoolwide Program	Special Groups or Situations: Services for Nonpublic School Students
SOUTHEST (Continued)			
LOUISIANA			
Site A[1]	Large	No	Busing*
Site B[1,2,4,5]	Very large	No	Temporarily dropped*
CENTRAL			
ILLINOIS			
Site A	Small	Functional equivalent	None*
Site B[1]	Large	No	Public site*
KENTUCKY			
Site A[1,6]	Very large	No	In nonpublic schools (local restraining order)*
Site B	Medium	No	Van*
MICHIGAN			
Site A[1]	Medium	No	Remote computer*
Site B[1,5]	Large	No	Busing*

* This feature represents a recent program design change.

**Enrollment ranges: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Summary Table 3 (Concluded)

State; District	Enrollment Size**	Special Groups or Situations: Schoolwide Program	Special Groups or Situations: Services for Nonpublic School Students
EAST/NORTHEAST			
MARYLAND			
Site A[1,2]	Medium	No	None
Site B[1,5]	Large	No	Temporarily dropped*
MASSACHUSETTS			
Site A[5]	Small	No	Busing*
Site B[1]	Large	No	Public site and extended day

1 - Site overlap with district survey sample (REA).
2 - Site overlap with telephone follow-up sample (REA).
3 - Site overlap with targeting sample (SRA).
4 - Site overlap with school survey sample (Westat).
5 - Site overlap with Cumulative Effects Study or Title I District Practices Study.
6 - Exemplary Projects (participation in ED recognition project).

* This feature represents a recent program design change.

** Enrollment ranges: very large = 25,000 or more; large = [illegible]9; medium = 2,500 to 9,999; small = less than 2,500.

XI SERVICES FOR NONPUBLIC SCHOOL STUDENTS

Arrangements for serving nonpublic school students have always been an important special case under Title I and Chapter 1. Including nonpublic school students as recipients of compensatory education services was critical in achieving the passage of Title I in 1965 (Bailey and Mosher, 1968; Advisory Commission on Intergovernmental Relations, 1981). Chapter 1 follows the Title I provisions for serving nonpublic school students. Sec. 557(a) requires districts to provide special educational services and arrangements for educationally deprived children residing in Chapter 1 attendance areas who attend nonpublic schools. Services for nonpublic (and public) school students must meet statutory requirements concerning the uses of funds; needs assessment; student selection; size, scope, and quality; parent and teacher consultation; and evaluation. Public and nonpublic per pupil expenditures must be equal, taking into account the number and needs of these students. Historically, local districts usually served nonpublic school students by sending public employees into nonpublic schools to teach eligible students.

On July 1, 1985, the Supreme Court issued a ruling that required dramatic changes in the ways that districts provide Chapter 1 services to students enrolled in parochial schools. Specifically, the Court determined that the Title I program operating in New York City with its attendant supervisory system to monitor operations "inevitably results in the excessive entanglement of church and state" (Aguilar et al. v. Felton et al., 1985), thereby contradicting the Establishment Clause of the First Amendment.

The Court ruled that the "excessive entanglement" resulted because public school officials supervised public school employees teaching on parochial school premises. The Supreme Court's judgment meant that districts had to remove from sectarian schools Chapter 1 teachers involved in instructional activities. At the same time, the law still requires districts to provide Chapter 1 services to educationally deprived children enrolled in eligible nonpublic schools. School districts have had to fashion modes of

service delivery that would fulfill both the Court's mandate and the existing law.

As part of this study, we learned about the actions taken after Felton (also see U.S. House of Representatives, 1986). Our research, conducted in the middle of the 1985-86 school year, focused on the arrangements that districts derived to implement the Supreme Court's ruling. Because studying this topic was merely a small part of our research, we rely almost exclusively on reports and documents provided by district staff; only rarely do we have information from nonpublic school officials. Other studies and surveys in the Chapter 1 National Assessment address different aspects of post-Felton activities, including federal and state administration and guidance, and national estimates regarding the numbers of students served and locations of services.* In the subsections below, we review district responses to the Supreme Court's decree, the processes used to reach decisions, explanations for local responses, and consequences of the Felton ruling.

Responses to the Supreme Court Decision

Three of the 20 districts in our sample were not affected by the Supreme Court's ruling. In these districts, nonpublic school students have not received Chapter 1 services for many years, if ever. Chapter 1 has not been provided because either (1) no nonpublic school students are eligible for

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* Previous research provides a baseline for the changes we are discussing. Large numbers of school districts were affected by the Felton decision. Research on practices during 1981-82 estimated that of the districts with nonpublic school students receiving Chapter 1 services, most (81%) offered the compensatory education program in the nonpublic schools. But other means of providing Chapter 1 to nonpublic school students were also in place during the 1981-82 school year: 22% of the districts surveyed furnished a part of nonpublic school students' Chapter 1 services at sites other than a nonpublic school, most often through summer classes at a public school. Some districts served nonpublic school students at public schools during the regular school term. Across the country, 4% of the districts served nonpublic school students at neutral sites (i.e., buildings that were not the property of the public school district or a nonpublic school), and 2% used mobile vans (Jung, 1982).

Chapter 1 (i.e., there are none who live in a Chapter 1 attendance area and are low achieving) or the number of eligible students has been so small that services were never delivered, or (2) the schools they attend refuse to participate in federal programs. Public school officials can sometimes discourage possible nonpublic school interest: the Chapter 1 coordinator in one district with no nonpublic school students in Chapter 1 said that he has been "successful at getting nonpublic schools to not participate in the program." Pointing to a stack of documents about 3 feet high he said, "We send them these papers to fill out each year and they all decide it's not worth participating."

In the remaining 17 districts, Chapter 1 nonpublic school students were served on their schools' property before the Felton decision. In almost all of these districts, reaction to Felton was swift: most immediately pulled public school teachers from their assignments at religiously affiliated nonpublic schools and began to search for alternatives to on-site Chapter 1 services.* School districts subsequently devised several methods of providing Chapter 1 services to nonpublic school students; the practices we found in our study are listed below:

- Mobile vans or classrooms. Some districts have purchased mobile vans or classrooms that are parked outside the nonpublic school. Students are pulled from their classes, go to the mobile van, and receive Chapter 1 instruction from a public school teacher. In one place we visited the district purchased part of one nonpublic school's parking lot and placed the van on that spot.

- Services in public schools. In some cases, Chapter 1 students from nonpublic schools now walk to nearby public schools to receive instruction. In other situations, nonpublic school students are bused to public schools for Chapter 1 classes. One district has both: students from one nonpublic school walk to a nearby school, while the district buses students from two other nonpublic schools to public schools. Another district offers after-school programs in public schools for nonpublic school students.

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* The Felton ruling affects only Chapter 1 public school instructional staff at religiously affiliated nonpublic schools. In our sample sites the only nonpublic schools with Chapter 1 students are parochial schools.

- Computers. Some districts we visited took advantage of their existing computer-assisted instruction for Chapter 1 public school students and extended the service to nonpublic school students. In these instances, the districts were already using prepackaged computer-assisted instruction; they installed "dumb" terminals at the participating nonpublic schools. Dumb terminals cannot be programmed, nor do they allow any software. The packages are set up so that a student initially logs on and takes some diagnostic tests. Computer assignments are based on the results of those tests. The software for the programs is housed in a minicomputer located on public school grounds.

- Multiple methods. Some districts, attempting to accommodate different needs and preferences, offer more than one option for nonpublic school students. One district we visited has an after-school program and students bused to public schools; another is using both a mobile van and computer-assisted instruction.

- Services on nonpublic school premises. A few districts we visited continue to provide Chapter 1 services to nonpublic school students as they always have--on the nonpublic school premises. These districts are operating under local judicial restraining orders or have received special dispensation from the SEA to continue with existing service delivery models for a period of 1 year.

- No services. One very large district considered and tried a number of different options, but none proved satisfactory. Services for nonpublic school students have ceased; public and nonpublic school staff are looking for alternatives to attempt next year. Another district, a small one, offered Chapter 1 at a public school, but not enough nonpublic school students enrolled to justify the program.

Decisionmaking Processes

Because the Felton decision posed a unique challenge to local program managers, we describe the decisionmaking process in some detail.

In every site we visited, district-level staff decided where and how to serve nonpublic school students. Two reasons account for the centralized decisions: (1) districts, not schools or other agencies, must provide Chapter 1 to nonpublic school students, and (2) the Felton ruling affected an issue that is sometimes emotionally charged and politically salient. The Chapter 1 coordinator was usually responsible for designing solutions, but in a number of cases other high-level officials became involved, such as the superintendent and school board members.

There is no question that responding to Felton was a big headache in many districts. Many people had been following the case, but few had expected the Supreme Court to rule as it did. Individual philosophies about serving nonpublic school students with public funds were irrelevant in the search for solutions: all the coordinators we interviewed believe that their job is to observe the law, regardless of their own convictions. Many also work harmoniously with nonpublic school officials because they recognize that they are in the same business of educating students.

In the typical district, a coordinator met with nonpublic school officials to work out an acceptable method for providing Chapter 1 services. The purpose was to negotiate a mutually suitable settlement, and the tenor of these meetings was generally amicable.

We found some coordinators who were not making special efforts to accommodate nonpublic school staff preferences about Chapter 1 services. In one district where three nonpublic schools participated last year, the district administrators "spent about 2 minutes considering the options" and offered to bus nonpublic school students to a public school. The coordinator said:

> "Things were working fine before--it's too bad this decision had to affect the program in this way for so many kids. But it's not the district's fault. We can't dump all our resources into this situation because of some Supreme Court decision. Many of the alternatives, such as purchasing vans, would cost us too much up front."

Typically, however, most district coordinators worked diligently with nonpublic school staff to identify and implement off-site services. The coordinator in a large district (with one participating nonpublic school), who is personally opposed to Chapter 1 services for nonpublic school students, reflected the sentiment we found in several sites about complying with Felton: "It needs to be done that way [and] I really respect [the nonpublic school principal] as a fellow administrator." We learned of the following procedures in a small district with one participating nonpublic school; similar ventures were repeated in numerous other places:

> The decisionmaking process took the form of negotiating sessions between the Chapter 1 director and the nonpublic school principal in which they explored options that represented as little disruption to the school's schedule as possible. Together, the director and principal rapidly exhausted possibilities other than busing nonpublic school children to the public school. They set up a schedule and notified parents.

The director appears to have been diligent in his efforts. He said, "In the first few months of this year, I was in [the nonpublic school] more than in the last 5 years. I call [the principal] frequently. When they do follow up on this one, I don't want them to say I didn't try everything to make it work."

For a number of reasons, districts responded in various ways to the Supreme Court's verdict. In the next section, we examine some of the factors that affected program design decisions.

Explanations for Local-Level Responses

Countless studies have shown that federally imposed program changes are often slow and incremental (e.g., Berman and McLaughlin, 1975; Yin, Heald, and Vogel, 1977), yet the Felton decision had immediate effects in most sites we visited. Response to this federal directive was speedy for several reasons. First, the action required was unequivocal (i.e., no Chapter 1 teachers could deliver instructional services on parochial school premises). Second, some districts in the country had previously served nonpublic school students with methods other than on-site instruction, so people had some knowledge on ways to proceed. Third, and most important, the Supreme Court issued the ruling, and the Court's determination is paramount (Murphy, 1964). A Chapter 1 director, located in one of the few districts that have continued to serve nonpublic school students in their own buildings, voiced discomfort with the district's lack of change and signified this doctrine: "I thought that when the Supreme Court ruled, you acted."

The specific methods that districts devised to serve nonpublic school students incorporate factors unique to each district's situation. We have

identified four major classes of factors from our field research: (1) existing relationships with nonpublic schools, (2) guidance (or lack of it) from the SEA and organizations outside the district office, (3) costs, and (4) other practical considerations. For clarity, in the discussion that follows we discuss each of these separately, although in practice a given district may have dealt with more than one factor.

Existing Relationships with Nonpublic Schools

Districts that have harmonious relationships between public and nonpublic schools have strong incentives to keep them that way. Districts without a history of working successfully with nonpublic school officials had to either forge new alliances or watch unpleasant situations degenerate further.

The districts in our sample vary widely in the quality of their associations with nonpublic schools. In some cases a high degree of interaction is usual: one site we visited transports public school students to a nonpublic school in the district so they can attend religion classes, numbers of district staff and teachers send their children to nonpublic schools, and nonpublic elementary school students usually enroll in the public secondary schools.

Clearly, the nature of existing relationships affected the energy, tone, and occasionally the outcomes of efforts to comply with Felton. A district in our sample had long parked a van on the street outside a nonpublic school to provide services for handicapped students; public and nonpublic school staff found it easy and sensible to serve Chapter 1 students in the same way. Similarly, nonpublic school students in another district walked one or two blocks to a public school for speech therapy. Having Chapter 1 students now do the same was a logical choice.

In other sites, uncomfortable histories repeated themselves in the search for solutions to Felton. In one of our sample's very large districts, little contact ever takes place between the public and nonpublic schools. For example, the coordinator mails about 100 letters annually asking

nonpublic school principals about Chapter 1 participation. Only six usually respond. The results of efforts to serve nonpublic school students after Felton seem an almost foregone conclusion in this district with a record of poor communications and practices:

> Initially, the superintendent announced--without consulting the Chapter 1 director--that the district would purchase mobile vans to serve nonpublic school students. The state Chapter 1 coordinator, however, did not allow the purchase. According to the local director, "he didn't want the motorized classrooms on his inventory. He said the [district] should purchase them and he would approve the upkeep costs. I asked if we could spend $60,000 a year for upkeep, which happened to be the cost of the motorized classrooms. He told me to find something for $1,000 to $1,800."

The district then negotiated plans to serve nonpublic school students in nearby public schools or neutral sites. Problems began immediately. One nonpublic school principal wanted a public school aide to cross the street, pick up students from the nonpublic school, walk them across the street, then return them when classes were over. The aide and the district balked, and the nonpublic school principal declined to provide an escort for the students. In another nonpublic school students would have to walk about 1/2 mile to the nearest public school. Again, according to the local director, this did not work out: "The superintendent didn't think that asking little children to walk half a mile was any big deal. He jogs 5 miles a day. But no one else thought this was a good idea." At the time of our site visit, services to nonpublic school students were on hold in this district, pending further discussions.

Guidance from the SEA and Other Organizations

The description above contains a second factor affecting local districts' decisions and practices: advice or instructions issued by the SEA. We found instances where another organization outside the district--in one case, a diocese--provided ideas and served as a communication channel.

Some SEAs granted their districts a 1-year grace period to implement the Felton decision. SEA staff saw that the ruling came during the summer when

most districts had already confirmed their plans for the following school year; changing plans would cause too much upheaval. They were also bolstered by the Secretary of Education's announcement shortly after Felton that ED would support state efforts to delay implementation by a year (Hertling, 1985), though he soon backed off from that position. We visited districts in states where the SEA allowed a 1-year waiver:

- A Chapter 1 coordinator in one district "chose not to believe" the SEA's statement and established two types of services for nonpublic school students (mobile vans and computer-assisted instruction); both will be evaluated after an 18-month experiment.
- Another district in the same state accepted the SEA's position and continues to provide on-site services. Public and nonpublic school staff are reviewing options for next year.
- In another state the SEA told a very large district, which was not in our sample, that changes could wait 1 year. Staff in a medium-size district we visited, although they had heard about the SEA's guidance, decided they could serve nonpublic school Chapter 1 students in the same way they serve nonpublic school handicapped students. The solution was obvious, and it was put into operation.

Many district Chapter 1 directors reported that their SEAs shared facts about the Supreme Court case and ideas about alternative modes of service. The following are examples from our sites:

- The SEA notified districts that practices would have to change and supplied suggestions.
- The SEA helped districts think through options.
- One SEA was initially of no help, but later suggested a method of service the district eventually adopted.
- An SEA pressured districts to respond swiftly.

In one site we learned that staff from a diocese performed similar functions. (We suspect that diocesan staff were involved in other districts, but we did not investigate this systematically.)

Costs

ED's nonregulatory guidance, although not binding on state and local officials, declares that transportation, space, and administrative costs must be taken off the top of a district's entire Chapter 1 allocation. That is, local staff may not divide the Chapter 1 grant into per pupil stipends, aggregate the amounts for nonpublic school students, and then designate charges to the nonpublic school student portion. This stipulation has affected the services that districts have chosen to offer Chapter 1 nonpublic school students. Simply stated, some of the options are very expensive. Selecting them would leave substantially less money for instructional services to both public and nonpublic school students.

Among the costlier items are mobile vans or classrooms, which may run between $10,000 and $60,000 each. Vendors have been calling on school districts to promote their merchandise, noting that the mobile van is a plausible solution to Felton. We heard of the "vendor effect" in several places; apparently, district size is not a factor in the salesman's decision to stop by:

> One of our sample's small sites has a total enrollment of fewer than 2,000 students. Some 200 public school students and 15 nonpublic school students received Chapter 1 services last year. The district's Chapter 1 allocation this year is around $147,000, paying the salaries of six teachers. This year, a mobile van salesman offered his product. The local coordinator and the principal from the district's nonpublic school decided this was not a reasonable purchase.

Earlier in this section we noted that some districts extended their existing computer-assisted instruction to nonpublic school students. No district we visited initiated new computer-assisted instruction to serve nonpublic school students, although this may change as more districts become aware of the option (Snider, 1986).

We believe that price is one reason why districts have not introduced computer-assisted instruction in response to the Felton decision: purchasing a minicomputer and dumb terminals could be expensive. One district that did expand its computer instruction to nonpublic school students is leasing the

machines. The coordinator explained that this approach minimized outlay and also protected the district against excess equipment in case the program is discontinued (for example, if nonpublic school staff--or the courts--determined that it is not adequately serving students).

Practical Considerations

The Felton decision caused many districts to scramble for solutions. Chapter 1 coordinators had to balance ED guidance, SEA directions, nonpublic school staff preferences, local officials' inclinations, costs, and personal opinions with the very practical realities in their own districts. Coordinators contemplating the purchase of mobile vans, for example, had to think about the following:

- Where a mobile van would be parked--on a public street, in a nonpublic school's lot? If the latter, does that choice violate Felton?
- What if no parking places were available (not a trivial problem in many cities)?
- Where would the van be housed overnight--in a depot, left at a nonpublic school?
- Who would drive the van?
- How would insurance costs be covered?
- How would the electricity be hooked up--to the nonpublic school, to a portable generator?
- How would telephones be connected--to a pole close by, to the nonpublic school, or should mobile phones be purchased?

Similar issues confronted staff who intended to serve nonpublic school students in public schools: whether students would ride buses or walk, who would drive or escort students, and when classes would be scheduled. Several sites we visited looked into serving nonpublic school students in neutral sites but abandoned the idea when it did not prove practical. In one case, staff thought about using a bingo hall midway between a public and a nonpublic school; they discarded the notion because the structure was owned by an ethnic group closely affiliated with the local Catholic church. In other

cases, insurance questions and building code requirements eliminated neutral sites from the list of possibilities.

Even when questions were addressed and an alternative form of service delivery was chosen, procedures did not always last long. For example:

> One district has approximately 50 students from each of two nonpublic schools participating in Chapter 1. After hearing from the SEA about Felton, the district staff began reviewing their options. School board members indicated that they thought nonpublic school students should walk to neighboring public schools. State and district staff met with nonpublic school staff and discussed serving students at the public schools. The nonpublic school principals were opposed to the idea, citing safety factors, time lost, and concerns that students would become distracted.
>
> After a second meeting with nonpublic school officials, the district purchased one mobile van. It was parked at one school for 2 days, then driven to the other school for the rest of the week. This arrangement lasted about 5 weeks. The Chapter 1 teachers voiced numerous complaints: the van was too small and too hot. Also, teachers said that because the vans were parked on the street people kept knocking at the door to find out what business they were in. One teacher said that some people thought they were selling drugs or engaging in prostitution.
>
> The Chapter 1 director contacted the SEA, and the state program specialist came to assess the situation. The SEA ended up granting a 1-year waiver, but encouraged the district to find a "neutral" site in the parochial schools to serve nonpublic school students. At one school the Chapter 1 teacher is using a bingo room. At the other, the teacher moved four times and is now using the same classroom as before Felton. Next year, the district plans to purchase two larger vans and park them in the lot at each nonpublic school.

Consequences of the Felton Decision

The Felton ruling has had deep ramifications. One is that far fewer nonpublic school students are receiving Chapter 1 services.* We saw decreases in several districts because of the following factors:

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* ED staff estimate that the number of nonpublic school students receiving Chapter 1 aid has fallen by one-fourth to one-third since last year (Richburg, 1986; Snider, 1986).

- Some districts and nonpublic schools are still in a state of flux and have not yet worked out solutions.

- A handful of district officials had always resisted serving nonpublic school students, welcomed the Felton decision, and provided unappealing options.

- Some nonpublic school officials declined the service delivery alternatives for various reasons, such as not wanting their students to leave the nonpublic school premises, scheduling difficulties, parental resistance to instruction from a public teacher (which is more obvious now), and dissatisfaction with the choices provided by the school district.

Public schools have also been adversely affected by Felton. Many local Chapter 1 directors report that they spent phenomenal amounts of time trying to resolve service options and balance competing interests. Some also said that relationships with the nonpublic school community have seriously deteriorated. Many directors do not look forward to defending their districts' choices to the SEA, auditors, or the public.

Summary

The Felton decision is the only example we found of a federal factor that forced many districts to adopt significantly different practices. In general, the early upheaval that numerous districts experienced had settled by the time we visited, especially in districts where public and nonpublic school staff worked together toward a common end. Regarding the effects of the Felton decision on district practices, we found that:

(1) Most districts we visited reacted swiftly to the decision and altered the manner with which nonpublic school students received their Chapter 1 instruction.

(2) A few of the districts we observed were not affected by the Supreme Court decision because they had not been serving nonpublic school students or because the number of students served had not justified sending a public school teacher to the nonpublic schools anyway.

(3) A couple of districts in our sample continued instructional services in nonpublic schools in the 1985-86 school year; they are considering changes for future years.

(4) One district we visited, unable to develop a satisfactory solution, dropped Chapter 1 instructional services entirely for the 1985-86 school year.

Regarding the decisionmaking process that district administrators employed to determine what alterations to the nonpublic student component of local Chapter 1 program design we discovered that:

(5) Most decisions involved upper-level district administrators (e.g., the superintendent)--even if they had not been heavily involved in previous decisions concerning Chapter 1 nonpublic student instruction.

(6) Many districts we visited involved representatives of the nonpublic schools early in the decisionmaking process.

(7) A few district administrators we spoke with stated that they decided on the most efficient alternative from the perspective of the district and offered nonpublic school administrators limited options.

(8) The nature of existing relationships with the nonpublic schools and community politics often influenced the ease with which suitable alternatives were considered and implemented.

(9) Cost considerations figured heavily in deliberations.

Regarding current program designs that have resulted from the Felton decision, we discovered that:

(10) Three alternatives seemed to be the most likely solutions considered by the districts we visited: mobile vans or classrooms, services in the public schools, or the use of computer terminals at the nonpublic schools.

(11) Many particulars are still being resolved (e.g., where to park the vans).

(12) In the districts we visited, fewer nonpublic students seem to be participating in Chapter 1 programs during the first year after the Felton decision.

XII SCHOOLWIDE PROJECTS

Although the original version of the Chapter 1 law did not mention the schoolwide projects provisions that were included in Title I, almost identical provisions were added to Chapter 1 by the 1983 Technical Amendments, P.L. 98-211. The schoolwide projects provisions are intended to enable schools with high percentages of economically disadvantaged students to provide more effective remedial programs by serving all of their students, not just those eligible for Title I or Chapter 1.

Any school serving an attendance area where at least 75% of the students are from low-income families may use Chapter 1 funds for a schoolwide project--that is, to upgrade the entire educational program of the school. Before implementing a schoolwide project, the LEA must develop a plan (for SEA approval) that describes (1) how the needs of all students in the school will be assessed, (2) how the instructional program of the school will be designed to meet the special needs of all students in the school, and (3) the nature of proposed evaluations and how they will be used periodically to improve the instructional program of the school. Additionally, an LEA must satisfy several financial requirements, including the following:

- Each school selected for a schoolwide project must receive the same amount of Chapter 1 dollars for each Chapter 1 eligible pupil as the other Chapter 1 schools in the district receive.
- For every child in the schoolwide project who does not meet the regular local criteria for Chapter 1 eligibility, the district must allocate extra state or local funds equal to the amount of Chapter 1 funds that the school receives for each eligible child.

Theoretically, schoolwide projects enable schools to plan and deliver remedial services more effectively (e.g., by simplifying school administration, by permitting school staff and other resources to be used more effectively, and by eliminating disruptive practices, such as pullout programs).

Nevertheless, schoolwide projects have never been a common design choice (NCES, 1981).* A study of schoolwide projects under Title I (Rubin and David, 1981) found that schoolwide projects are rarely adopted for the following reasons: few districts have schools that meet the 75% low-income eligibility requirement; districts that have eligible schools often find it difficult to provide the supplementary funds required for their non-educationally-deprived students; and districts with long-established compensatory education programs sometimes view the costs of implementing a new comprehensive plan for a schoolwide project as greater than the expected benefits.

In this section, we first discuss awareness of the schoolwide project provisions among local Chapter 1 staff. Next, we describe the nature of schoolwide projects that have been implemented or planned. Finally, we discuss explanations for adopting and rejecting schoolwide projects.

Awareness and Consideration of Schoolwide Projects Provisions

In our sample, about half of the districts have schools that are eligible for schoolwide projects. In most of these districts more than one school is eligible. In one very large urban district, more than half of the 120 schools are eligible for schoolwide projects. Additionally, several other districts in our sample have schools that are "almost" eligible (e.g., 70% to 74% of the students in the school receive a free or reduced-price school lunch) or that were eligible until recently, but are no longer eligible because of slight fluctuations in the poverty level.

In most of the districts with eligible schools, program staff are familiar with the Chapter 1 schoolwide project provisions. However, in some

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* According to the 1979 Fast Response Survey conducted by NCES, an estimated 626 districts, or 5% of districts that applied for ESEA Title I funds during the 1979-80 school year, had at least one school that had 75% or more Title I eligible children and therefore were eligible for school ide projects. Of these, only 25 schools had or expected to have a Title I schoolwide project during the 1979-1980 school year.

of these districts, local staff did not learn about the concept until recently, even though they had been involved with Title I/Chapter 1 programs for many years. For example, in one large district the Chapter 1 director said that she learned about schoolwide projects only after she read the Technical Amendments for Chapter 1. An administrator in a medium-size district said that he learned about schoolwide projects a few years ago from the program specialist in the state Chapter 1 office.

Additionally, district staff members' awareness does not ensure school-level awareness of schoolwide project provisions. For example, in one very large Western district where the administration of Chapter 1 is decentralized, the director of state and federal programs said that he "feared the day" when principals find out about schoolwide projects because of the increased likelihood of noncompliance. He said, "If they knew that the federal government allowed schoolwide projects, principals would go ahead and run them without regard to the regulations."

In most districts in our sample that have eligible schools, district administrators not only are familiar with schoolwide projects, but also have considered adopting one. Nevertheless, only two of the districts in our sample implemented a schoolwide project in the past 5 years. Furthermore, one of these districts closed the school that had had the schoolwide project, and the other district is considering abandoning its schoolwide project.

In a third district, the director of state and federal programs developed a plan for a schoolwide project that was rejected by the district's administrators. Program staff in a fourth district are planning to implement a schoolwide project in 1987-88. The remaining districts that considered adopting a schoolwide project rejected the idea before developing any formal plans to implement one.

Nature of Adopted and Planned Schoolwide Projects

The following are descriptions of the two schoolwide projects in our sample that have been implemented and the two that were or are planned.

One schoolwide project was implemented in an elementary school in a medium-size Southwestern district. The elementary school has an enrollment of about 350 students, 84% of whom receive free and reduced-price school lunch. Moreover, three-fourths of the school's students score below the 50th percentile in reading, language, or math. Before adopting a schoolwide project 2 years ago, the school used Chapter 1 funds to pay for one teacher and two aides, who ran two pullout programs. One of the pullout programs concentrated on oral language development and was held in a resource room. The other focused on reading and language skills, was held in a lab, and employed computer-managed instruction. Additionally, Chapter 1 funds paid for a third aide, who provided in-class remedial services to kindergarten students.

When the school adopted a schoolwide project, the school started a content-based reading program in science and hired a full-time science teacher (which other elementary schools in the district do not have). The science teacher developed the new curriculum, held inservice training sessions for regular and Chapter 1 teachers, and conducted science classes. Additionally, the school retained the Chapter 1 programs (and staff) that it had before becoming a Chapter 1 "total" school. The district contributed $50,000, or about 30% of the cost of the schoolwide project.

The other schoolwide project was implemented in an elementary school in a large Southeastern district 2 years ago. Eighty percent of the approximately 125 students in the school were from low-income families. Chapter 1 and district matching funds were used to reduce the student/teacher ratio in the school to 15/1, which was lower than the ratio in other schools in the district. Additionally, the school started a remedial class for students who failed the 5th grade minimum competency test. Chapter 1 funds paid the salaries of four teachers, and local matching funds paid for five teachers and one aide.

In a third district in the Midwest, the Chapter 1 director decided to implement a schoolwide project in the district's elementary school with the highest concentration of Chapter 1-eligible students. During 1984-1985 she began developing a plan for the schoolwide project. Chapter 1 funds and

local matching funds were to be used for a computer lab and an extra pre-kindergarten teacher. However, the associate superintendent and assistant superintendent rejected the plan as too costly.

In a fourth district, the Chapter 1 director is planning to implement a schoolwide project in one junior high school in 1987-88. The school has an enrollment of about 400 students, 80% of whom receive a free or reduced-price school lunch. Currently, Chapter 1 funds pay for one reading teacher, a half-time bilingual reading teacher, and two instructional aides to staff replacement reading classes. The plans for the schoolwide project include reducing all class sizes, hiring resource teachers, and providing inservice training sessions for regular teachers.

Although we have relatively few examples of schoolwide projects that have been either planned or implemented, the schoolwide projects have a few common elements. In each case, the district (without help from the state) provided (or planned to provide) the matching funds required for the schoolwide project. Also, each school planned to use Chapter 1 and local matching funds to hire additional school staff. In other respects, the schoolwide projects are not very similar.

Adoption of Schoolwide Projects

Schoolwide projects came about in response to external and internal stimuli. State encouragement prompted two districts to plan a schoolwide project; other districts were motivated by pedagogical concerns and other more idiosyncratic reasons.

The medium-size district in the Southwest that currently has a schoolwide project was encouraged to implement the project by a program specialist from the SEA. According to the district's assistant superintendent, "The state brought this to our attention. I wasn't sure what this would do for the district. We got a lot of assistance and support. Without the state, we wouldn't have done it."

The elementary school that was made into a Chapter 1 schoolwide project had participated in the state's school improvement program. As part of its participation in the program, the school conducted a needs assessment that was submitted to the SEA for review and guidance. The SEA then sent representatives to the district to work with school staff to develop a plan for the school to become an "effective" school. The plan became the basis for the schoolwide project.

The large district that we visited in the same state was planning to implement a schoolwide project in 1987-88. Although eight elementary schools and two junior high schools are eligible, currently the district does not have any schoolwide projects. In December 1985, the state program specialist conducted a monitoring visit, and in his report to the district, he encouraged local staff to start a schoolwide project. The deputy superintendent said that the district had discussed schoolwide projects for several years, but that "the right situation had never been there." The director of state and federal programs said that a schoolwide project has not been planned before because most eligible schools are part of the district's desegregation plan and already receive extra resources. Nevertheless, because of state encouragement and because district staff feel that concentrating resources is educationally sound, the district is now planning its first schoolwide project.

Unlike the previous two districts, the large Southern district that used to have a schoolwide project was neither encouraged nor discouraged by the SEA. Instead, the Chapter 1 director in that district was motivated to start a schoolwide project because she favored the low student/teacher ratio, the more intensive curriculum, and increased inservice training made possible by combining Chapter 1 and local matching funds.

The Chapter 1 director in the large Midwestern district who developed a plan for a schoolwide project (which was later rejected) did so after reading the Chapter 1 Technical Amendments and not as a result of state encouragement. Apparently, most of the students in the elementary school that was to have the schoolwide project were very low achievers and were eligible for Chapter 1 services anyway.

All the districts that adopted schoolwide projects were, comparatively speaking, financially sound--that is, were able to make local funds available to meet the matching requirements.

Rejection of Schoolwide Projects

In districts that have eligible schools but no schoolwide projects, such projects usually are not adopted because the local-funds-matching requirement is prohibitively costly or runs counter to local philosophies of resource distribution among schools.

In our sample, several district administrators said that they did not adopt a schoolwide project because they could not come up with local matching funds; even though some of them had been encouraged by state administrators to adopt a schoolwide project, the SEA had not volunteered to help with the local-funds-matching requirement.

The large Southern district in our sample that used to have a schoolwide project did not start another one after it closed the one school because the superintendent is "jaded" about providing local matching funds for state and federal programs. (Apparently, the state compensatory program also requires a local match.) The superintendent described his district as "property tax poor" and said that he would institute another schoolwide project if he could use Chapter 1 basic funds only. Additionally, the one medium-size district in our sample that still has a schoolwide project is considering abandoning it because of the district's declining fiscal condition. Conversely, a large district whose financial situation is "marginal" is considering adopting a schoolwide project, partly because it has received a "windfall" from the state for a new school improvement program.

Some district administrators said that schoolwide projects have not been adopted because their philosophy is to spread Chapter 1 services rather than to concentrate them. One administrator explained, "The district has a strict policy of equal allocations to schools."

The reasons for not wanting to concentrate Chapter 1 resources in a few schools or in one school (as in a schoolwide project) vary. For example, the superintendent in a large district with a voluntary desegregation plan (which includes busing) gave the following reasons for not concentrating Chapter 1 resources in a few schools: "[By spreading resources] Chapter 1 can follow the children wherever they attend school. We have uniform remediation programs. We have eliminated the labeling of schools as poor or affluent." A board member in the same district said, "There's a constant push to concentrate on people who need the most.... We're not just talking about Chapter 1.... But the superintendent's philosophy is, don't take from one to give to another." The Chapter 1 coordinator in the district gave a different reason for wanting to put Chapter 1 resources into each school: "It gives the district a foot in the door and legitimizes our presence in all schools."

In one small Midwestern district, three of four schools are eligible for schoolwide projects. The one school that is not eligible has 68% low-income students. In this case, decisionmakers believe that it does not make sense to take local resources from the one ineligible high school to concentrate resources in one or more of the elementary schools when most of the students in the high school are eligible for Chapter 1 services anyway.

In several districts, administrators said that concentrating resources and schoolwide projects, in particular, are not "equitable," but did not elaborate why. Administrators in other districts felt that concentrating resources was pedagogically sound but would not be politically acceptable. This was particularly true in a large district with a powerful DAC and several strong advocacy groups. Conversely, another large district's desegregation consent decree gave administrators the "political" justification they needed to target particular schools for extra resources and to plan a schoolwide project.

Another reason for not implementing schoolwide projects is that some administrators do not perceive such projects to have many benefits. Schoolwide projects are thought to increase the administrative burden rather than to reduce it because of the planning required to implement them. The schoolwide projects that were planned or implemented are intended for schools in

which most students are eligible for Chapter 1 funds anyway and, therefore, schoolwide projects are not viewed as a way to undo categorical constraints.

Several districts have schools that used to be eligible for a schoolwide project but are no longer eligible because the poverty level dropped. Had these districts started a schoolwide project, they might have had a problem because of the fluctuations in eligibility.

Interestingly, administrators have implicitly accepted the correlation between high poverty and low achievement: they did not mention the disparity between income and poverty as a reason for not implementing a schoolwide project.

Setting up a schoolwide project, as defined by federal regulations, is not the only way for a district to meet the special needs of schools with high concentrations of poor students. Districts can arrange alternatives, often simpler for this situation. Several large districts in our sample, for example, do not have schoolwide projects but allocate extra local money to their schools with the highest concentration of Chapter 1-eligible students (e.g., to reduce class sizes, for resource and other special teachers, and for computers and other extra equipment) because of their desegregation consent decrees. In one of these districts, the Chapter 1 director said that this practice is still cheaper than doing a schoolwide project, while it serves a similar function and is politically more acceptable.

Another large district in a Western state has a number of de facto schoolwide projects. For example, a school will pool its funds from several state categorical programs (not including state compensatory education funds) and from Chapter 1 and place aides in all classes in the school. These aides work with all students. Federal Chapter 1 funds may be focused on certain grades in the school, or the school may "split-fund" aides (pay them from various sources, including Chapter 1). In both cases, however, all students in the school are served with compensatory education funds. The existence of these unofficial schoolwide projects can be traced to: (1) the availability of state funds to complement federal compensatory education funds, (2) the superintendent's philosophy that "no one ever went to jail for trying to help

kids," (3) the power of principals relative to the district Chapter 1 staff, and (4) the existence of heavily impacted schools that are (or are nearly) eligible to be schoolwide projects anyway.

Summary

Our findings about the adoption and rejection of schoolwide projects can be summarized as follows. Regarding eligibility, awareness, and the degree to which this option is considered, we found that:

(1) In our sample, many districts do not have any schools that are eligible for schoolwide projects, and the eligibility of schools in some districts changes from one year to the next as student populations change.

(2) Program managers in most of the districts in our sample that have eligible schools are familiar with schoolwide projects and have considered whether to adopt one; in some cases, they have only become aware of this since the passage of ECIA, despite long-term involvement with Title I.

(3) Awareness at the district level is no guarantee that school staff know about schoolwide projects options.

Regarding the factors influencing adoption or rejection of schoolwide projects, our analyses indicate that:

(4) Encouragement by the state Chapter 1 office and local concerns over the poor quality of instruction in the affected schools, as well as several more idiosyncratic factors, are the primary motivating forces behind adoption of schoolwide projects.

(5) The adoption of schoolwide projects presumes a favorable fiscal situation in the district--i.e., that sufficient funds are available to meet local matching requirements--and that alternative schoolwide improvement efforts are not underway in the eligible schools.

Our findings about the rejection of the schoolwide projects option parallel the conclusions of research cited earlier in this section:

(6) In those districts that have eligible schools but no schoolwide projects, such projects tend not to be adopted because of their cost to the district and district preferences for spreading resources widely among schools, rather than concentrating on a few particularly needy schools.

(7) Even though they may reject the schoolwide project option, districts frequently consider and sometimes make other arrangements for serving students in schools with high concentrations of poor students. These arrangements, often a byproduct of other actions (e.g., desegregation plans), are typically cheaper and/or simpler than projects conforming to federal requirements.

(8) The availability of flexible special program resources, school autonomy in program design, lack of local concern about compliance issues, and the existence of specialized school improvement plans (including those derived from desegregation actions) all contribute to the presence of alternatives to schoolwide projects that are functionally equivalent.

PART SIX: CHAPTER 1 PROGRAM DESIGN IN RELATION TO OTHER EDUCATIONAL PROGRAMS AND INITIATIVES

Up to now, we have concentrated on how Chapter 1 services themselves are arranged, although we have referred to the local context as a source of influences on these services. At this point, we look at Chapter 1 programs in a broader educational context--specifically, that of the other instructional programs in a district and of the initiatives for educational improvement that may be affecting the district. We address these topics in two sections:

- Connections with other instructional programs (Section XIII).
- Chapter 1 program design and initiatives for educational improvement (Section XIV).

These issues are partly a question of design--that is, how to set up the Chapter 1 services to foster connections with other programs, or how to implement within Chapter 1 a districtwide mandate for reform. But these issues also lie partly beyond the reach of Chapter 1 decisionmakers, because these issues reflect the relationship between Chapter 1 and outside programs or initiatives.

Thus, in this part, our analyses address more directly the fact that the Chapter 1 program is only a portion of a broad range of schools' and districts' educational activities. The influences of that broader context on Chapter 1 are important to this study for a variety of reasons. First, the quality of the relationship between Chapter 1 and regular program instruction can have positive or negative effects on a participating student's learning. These students receive only a fraction of their schooling through the Chapter 1 program, and policymakers and educators have long been concerned with the possible fragmentation of instruction resulting from the categorical

nature of the program (e.g., Kimbrough and Hill, 1982; Allington, 1985). Second, decisions related to Chapter 1 can be either constrained or made possible by specific contextual factors. Few decisions are made without some consideration of their implications for the local context. Third, major forces that affect educational change are frequently broader in scope than remedial instruction. Consequently, a complete examination of Chapter 1 program design decisions must be grounded in a full understanding of the instructional and administrative context in which it coexists with numerous other educational thrusts. Finally, the relationship of Chapter 1 to other programs and initiatives has grown in importance as Chapter 1 has evolved and similar or complementary program initiatives have sprung up around it.

We must warn readers again that this study did not gather evidence on educational effects, a fact that limits what we can say about the relationships among programs and initiatives. We focus here on the design and structure of services, changes in these, and the reasoning that underlies them. To make final judgments about the appropriateness or payoff of the relationships we describe, student outcomes must be examined.

XIII CONNECTIONS WITH OTHER INSTRUCTIONAL PROGRAMS

Chapter 1 usually provides instruction for a relatively small part of the student's day, and its relationship to other services offered during the day is thought to have an important bearing on its overall effectiveness. Because Chapter 1 services are required to add something extra (or supplemental) to the student's education, there has always been a risk that these extra services will be unconnected to the regular program and will fail to reinforce it. More broadly, critics of the structure of federal categorical programs have claimed that multiple programs offering supplemental services can breed "fragmentation" in the school (Kimbrough and Hill, 1982). On the other side of this issue has been the argument that students who fall far behind their classmates need a program that is quite different from regular instruction.

In this study, we investigated the existence and nature of connections between Chapter 1 and other parts of the overall instructional program. In speaking of connections, we refer to several possible links: service to the same schools, grades within schools, or students; use of related materials; and communication among instructional staff members, including joint planning. Districts may have discretion about the schools or grade levels that receive services under state compensatory programs, and decisionmakers may choose to separate these programs from Chapter 1. They may effectively prevent students served by special education from participating in Chapter 1. They may either encourage or forbid Chapter 1 instructors to use materials that are closely related to basal materials. Various planning mechanisms can be required at the district or school level so that staff members who share responsibility for the same student will communicate systematically about the student's needs and progress.

This section discusses these and other decisions about connections between Chapter 1 and other programs. Because the issues differ so much from program to program, we discuss separately the connections with the regular

program, with state-funded compensatory education, with special education, and with bilingual or English-as-a-second-language (ESL) programs.

Connections with the Regular Instructional Program

Although the extent of connections between Chapter 1 and the regular instructional program varies considerably within our sample of districts, administrators in most of these districts say they want Chapter 1 services to be closely related to the instruction that students get in their regular classes. We discovered several mechanisms intended to affect this relationship, and we investigated their implementation. We also analyze changes in the connections between Chapter 1 and the regular program and factors promoting or inhibiting them.

Mechanisms for Connections at the School Level

Our sites have a variety of rules and procedures that either promote or discourage close ties between Chapter 1 and regular instruction.

- Supervisory arrangements. In a district that has no certificated teachers in the Chapter 1 program, classroom teachers supervise the aides who deliver Chapter 1 instruction--an arrangement that builds in connections to classroom instruction on a daily basis.

- Requirements for joint planning time. Chapter 1 teachers in some sites are required to meet at regular intervals with the classroom teachers whose students they serve. In our sample, one district requires such meetings at least every 2 weeks, one at least twice a month, and another at least once a month.

- "Coordination sheets." In two of the sites just mentioned, the Chapter 1 teachers have been given forms called "coordination sheets" or "coordination forms" that standardize the information they are to exchange with the classroom teachers. For example, the Chapter 1 teacher enters on the form the objectives he or she will address with the student during that month, and the classroom teacher writes comments. In other sites, the classroom teacher uses "communication forms" to designate the skills that should be worked on.

- Planbook requirements. A closely related mechanism is the requirement that the planbooks of Chapter 1 instructional staff must reflect communication with classroom teachers. In one state, monitors from

the SEA scrutinize the Chapter 1 aides' planbooks for evidence of joint planning. In another state, which has recently developed detailed goals for each grade level, the Chapter 1 teachers at one site we visited must say in their planbooks which state goals they are teaching.

- Use or nonuse of basal materials. Whereas the mechanisms listed above are all intended to tighten the connections between Chapter 1 and the regular program, requirements concerning the use of basal materials in Chapter 1 can work to either increase or decrease these connections. In our sample, the former was more often the case: for example, when two districts chose their basal series in reading or math, one criterion was that supplemental materials for use in Chapter 1 instruction should be available as part of the basal package. Several other sites also used basal supplements in their Chapter 1 classes. On the other hand, another site forbids Chapter 1 teachers to use materials from the basal series because of concerns about supplanting.

Actual Connections Reported at the School Level

Naturally, implementation of the procedures designed to connect programs often falls short of their designers' intentions. At the same time, teachers and aides in a number of schools have worked out their own habits of frequent communication, resulting in strong connections between programs whether or not the central Chapter 1 office has formally addressed this issue.

We found variation within districts and schools on the extent to which Chapter 1 and regular instructional staff work collaboratively. In some cases, communication is reportedly more common in the elementary schools than in the high schools, either because the high schools have a highly structured Chapter 1 program, because of their departmentalized structure, or because so many regular teachers instruct the Chapter 1 students--91 in one high school we visited. In another district, though, the high school reading program is more closely connected to the regular program than other components of Chapter 1; it follows the regular English curriculum, while the elementary and most middle school components of Chapter 1 are self-contained programs.

Most commonly, though, the amount of communication varies with the individuals involved. In several sites, Chapter 1 staff described for us their different relationships with individual teachers in the same building

and at the same grade level. A typical example is the elementary Chapter 1 teacher who says she works very closely with one classroom teacher, planning the curriculum together and making frequent decisions about whether children should be pulled out or served in class, but has found that the other teacher is not interested in joint planning. In several other sites, the amount of collaboration between Chapter 1 staff and classroom teachers varies with the preferences and styles of the individuals, and sometimes also with the extent to which the principal encourages joint planning.

Changes in Mechanisms for Connecting Programs

Some districts in our sample have introduced new mechanisms for connecting Chapter 1 and the regular program. A large district in the Northeast is an example:

- In response to the SEA's interest in documented communication between teachers, the district has developed a "coordination form" on which the classroom teacher comments on Chapter 1 objectives. The district is also expanding its use of team meetings for all the staff members who work with a particular student--the Chapter 1 teacher, counselor, nurse, and classroom teacher. Pilot tested in three schools last year, the team meetings are being used in six schools this year. Neither of these mechanisms is without problems. Classroom teachers consider the coordination form burdensome, so the Chapter 1 teachers are redesigning it. The team meetings are hard to schedule and therefore do not take place regularly.

The use of basals that come with supplemental materials has also increased in our districts over the past few years. Furthermore, several districts have introduced or expanded services using the replacement model. In this model, Chapter 1 and regular instruction are essentially merged.

Explanations for Strengthening the Connections

We found several factors associated with districts' decisions to connect Chapter 1 more closely with classroom instruction. These factors include the structure of the central office, where Chapter 1 administrators often work closely with the administrators responsible for the regular instructional

program, and recent developments in local or state policy in the direction of fostering more connections. However, the most important factor emerging from this research has been a set of changes in the regular program. We discuss each factor in turn.

In the central offices of our sample districts, Chapter 1 directors and their staffs (if any) are organizationally located close to the administrators who have responsibility for the regular instructional program. In one district, the Chapter 1 director has line authority over several principals. More commonly, the director is one of several instructional administrators who do not supervise principals but who work together on matters cutting across the instructional program. The specific arrangements vary by district size, reflecting either a divisional structure in larger districts or the assignment of responsibilities to one person in smaller districts.

- In the large districts in our sample, it is common for all categorical programs (except special education in one district) to be in the same division. In one district, the head of this organizational unit meets monthly with the regional superintendents, and the deputy superintendent credits this person with creating "a lot of crossover between regular and special programs with respect to programmatic concerns."

- In one of the smallest districts we visited, the Chapter 1 director only spends part-time on Chapter 1 matters while also supervising a component of the regular instructional program.

In some cases, bringing Chapter 1 into closer alignment with classroom instruction has been a conscious priority for program managers. Especially in districts with many special programs, administrators of both the regular program and Chapter 1 have become concerned about "fragmentation" of the students' educational experience. They have addressed this issue by working to increase communication between Chapter 1 and classroom teachers and by making objectives and activities under Chapter 1 correspond more closely to what students do in the regular classroom. Also, a few SEA Chapter 1 offices in our sample have made a point of encouraging such connections in recent statewide meetings.

A more striking finding in our sample, however, was that in many districts Chapter 1 has become more closely connected to the regular program as

a byproduct of changes in regular instruction. Generally in response to testing or some other standardization of objectives, the regular curriculum has become more tightly specified and more focused on the achievement of a predetermined sequence of skills--sometimes fairly low-level "minimum competencies." This means that a supplementary program can easily pursue the same skill sequence, and a close relationship to regular instruction becomes virtually automatic. Moreover, when the standardization is driven by a focus on test scores, there is pressure to make the student's whole instructional program serve the aim of improving his or her performance on the tests. Some examples can illustrate how similarly this process works across several of our sites, each of which now structures both regular and Chapter 1 instruction around the same objectives:

- A very large urban district has a standard set of skills that students must master before being promoted out of each elementary grade. Most of the connection between Chapter 1 and classroom instruction is due to the fact that students are working on these skills in both programs, often on the same schedule.

- A large Southern district in a state that requires students to pass competency tests in 3rd and 5th grades has a local instructional management system that sets the goals for both regular and Chapter 1 instruction.

- Another Southern district responded to a state mandate by developing objectives-based curriculum guides for each grade level. These guides now form the basis for both regular and Chapter 1 instruction.

On the whole, standardization of the regular curriculum is a stronger driving force for connecting Chapter 1 with regular instruction than the concern about fragmentation, although the latter issue has been prominent in research on categorical programs for several years (Knapp et al., 1983; Kimbrough and Hill, 1982). Although fragmentation is still a topic that comes up in interviews with researchers, the action taken to address it tends to be some relatively mild requirement like semimonthly meetings between teachers. A standardized curriculum, on the other hand, imposes a whole sequence of objectives on the Chapter 1 program and thus sets its basic framework.

We found that curricula in many of our districts have become more closely tied to preset objectives. The trend seems most pronounced in the

Southeast, but it is also found elsewhere--reflecting the fact that it is sometimes, but not always, a response to state-level testing or curriculum mandates. It affects districts of all sizes.

In some sites we could see indications that the lack of connection between programs was coming into focus as a problem because of testing:

- Classroom teachers in a large district with a new state test are feeling the pressure of accountability for their students' performance. Their resulting unwillingness to let the students leave their classrooms is one reason the district is considering changing from a pullout to an in-class design.
- Classroom teachers in another large district, whose students also face a state test, are critical of the "whole language" approach used in Chapter 1 because they do not see how it will help their students demonstrate minimum competencies.

Explanations for Weaker Connections

We also found that some forces can weaken the connections between Chapter 1 and regular instruction. First, structural features of the Chapter 1 program can tend to isolate it from regular instruction. In a large district that has different degrees of connection in different components of Chapter 1, the elementary reading labs operate more independently because of their self-contained curricula and structure. Another large district recently shifted from an in-class to a pullout design, one result being that the Chapter 1 aides are now supervised by reading teachers rather than classroom teachers. Their contact with the classroom teachers has diminished considerably.

Second, individual staff members who like to work autonomously can weaken the overall connections between programs. We talked with many classroom teachers, Chapter 1 teachers, and even Chapter 1 aides who prefer to concentrate their attention on their own interactions with students rather than spend time adjusting the alignment between two streams of instruction. Even when their districts place priority on tightening program connections, these people are not motivated to devote their planning periods to conferring with other staff.

Third, the Chapter 1 program may be organized around an independent set of objectives. We heard in some districts that Chapter 1 instructors base their lesson plans on students' pretest results, which identify the particular areas that need work, and that they have difficulty accommodating the objectives of the school or the classroom teacher within this instructional framework.

Connections with Other Special Programs

An issue of concern to federal policymakers has been the relationship between Chapter 1 and other special programs intended to serve similar populations. Much of the concern revolves around targeting: one policy aim is to ensure that students get every service for which they qualify, while another aim is to avoid paying for the same type of service twice. So long as the "right" students get into each program, both aims can be achieved. But the issue of targeting also implies a design issue: each special program should be designed to offer a distinctive set of services so that each student can appropriately be classified into one or more programs.

In this section, we discuss decisions about the connections between Chapter 1 programs and other special programs operating in the districts. We begin with state or local programs of compensatory education, which present a special set of issues because their aims are often virtually identical to those of Chapter 1.

State or Other Compensatory Programs

In general, we found a tendency for other compensatory programs to permit a wider extension of Chapter-1-like services. This finding is based on the 14 of our 20 sites that have programs of compensatory education funded by the state, representing 8 of our 11 states. Another state mandates but does not fund special services for students who perform poorly on a test administered in high school; we visited one district that offers these services, and in this discussion we will treat that district as a 15th site with a state

compensatory program. Two of the districts with state-funded compensatory services also use some Chapter 2 funds to support small compensatory or remedial programs.

Because the design of state compensatory programs varies around the country, it may be helpful to describe how these programs are targeted, whether by the state or the district, and how their target population overlaps that of Chapter 1 in the sample of sites we visited. Ten of the 15th sites have programs for which the state specifies the grade levels; 8 of these, in 4 states, are targeted to the elementary level, while 2 in 2 states are targeted to the secondary level. The upshot of both the state and (where permitted) local decisions is that 9 sites have state compensatory services only in the elementary grades, 2 only in the secondary grades, and 4 at both levels.

The extent of overlap in targeting between state compensatory programs and Chapter 1 varies widely in our sample, but we found many instances of district decisionmakers using the two programs to reach more schools, grades, or students than Chapter 1 alone would serve. Several sites offer services at the identical grade levels under the two programs but place the state program in the lower-poverty schools that Chapter 1 does not serve. Other sites have chosen to place all state-funded compensatory services at grade levels that they do not serve with Chapter 1.

In eight sites we visited, at least part of the state program operates in the same schools and grades in which Chapter 1 operates. The way these districts handle the overlap between programs appears to be driven by state factors. In fact, this is the only instance in our study where we found that the two sites sampled in each state behave like each other but differently from the sites in almost every other state. We found the following types of connections between Chapter 1 and state compensatory programs:

- Complementary student targeting. One state has just introduced compensatory services in two primary grades for students who fail a state test. In the districts we visited, the services funded by the state go to the students with the lowest scores on that test; Chapter 1 uses the same test for selection and simply picks up where the state program leaves off (e.g., in one school the state program serves the 1st through 20th percentiles, while Chapter 1 serves the 21st through 30th).

- Uncoordinated coexistence. Another state that funds compensatory services for primary students who fail a state test has not achieved connections between these services and Chapter 1. Students who fail the test in the spring must receive 70 hours of state-funded remediation, focusing on the parts of the test they failed, either that summer or in the next year. During the next year, some of the same students are working in their Chapter 1 program on a curriculum geared to that year's classroom instruction.

- Concentration in different grades. One state in which we visited two sites has two state-administered special programs, one for primary grades and the other--a compensatory education program--left to district discretion. Both districts have handled the potential overlap with Chapter 1 similarly. They place the discretionary state program in the high schools, apparently because it has no supplement-not-supplant requirement and therefore poses fewer problems in the design of secondary services. Chapter 1 provides extra help for one or more of the primary grades served by the other state program but is mostly concentrated in the upper elementary grades. Thus, each site consciously uses the different funding sources in its decisions about allocating amounts and kinds of service by grades.

These examples show that most decisions about the connections between state compensatory programs and Chapter 1 are those that pertain to who is served--that is, they revolve around grade levels, schools, and criteria for student participation. The districts in our sample most often choose to reduce the potential overlap in student participants.

Once they have worked out the targeting issues, districts often design and operate the two programs in a highly unified fashion--hiring similar types of staff and using the same delivery model, or varying the delivery model only because different ones seem suited to different grade levels. This preference for similar services is illustrated by the exception--sites in which the state prescribes a particular design for its compensatory services; Chapter 1 staff members complained about this design, which differs from the one they have chosen for their programs.

No one in our sample districts expressed concern about the possibility of supplanting that arises when a state requires remedial services and Chapter 1 supports such services. Although this may become an issue for districts in the future, it is not one now.

Chapter 1 and Special Education

Ever since schools began to implement P.L. 94-142, the Education for All Handicapped Children Act, federal policymakers have been concerned about the relationship between services under that program and Chapter 1 services. A major issue of interest at the federal level has been understanding how district staff choose the right services for the students who might qualify for either program--for example, are services being duplicated unnecessarily (Birman, 1979; GAO, 1980)?

In the districts we visited (which were not selected for any particular feature of their special-education programs), the only issues of connections between Chapter 1 and special education concern student selection, and these issues are thought to have been fully resolved almost everywhere. Briefly stated, hardly any students receive services under both programs, although the decision rules that result in this outcome vary somewhat from district to district.

Although districts have no formal process of asking, "Should Chapter 1, special education, or both serve this student who could qualify for either program?" they have the opportunity to make this choice in the course of the Chapter 1 selection process. Selection for special education is a complex process that can take as long as 2 years in our sites. Once students qualify for special education services and have individualized educational programs (IEPs), they are most often effectively disqualified from Chapter 1 services. The district policy might be, for example, that students in special education can receive Chapter 1 services only if they are not receiving special education reading or math, or only if Chapter 1 staff participated in the IEP process and there are empty Chapter 1 slots in the students' school. Other districts simply state that no student can be served by both programs.

We visited one district in which students' Chapter 1 status could affect their selection for special education. In that district, where administrators believe they have too many students in special education now, a

principal told us that the selection team would "think long and hard" before placing students in special education when Chapter 1 is already serving them. In our other districts, though, the process virtually always works the opposite way.

In most districts, deciding not to serve special education students in Chapter 1 is such a long-standing routine that people did not give us any particular rationale for it. We learned, however, that it sometimes arose from a state policy and sometimes from a local concern that students should not be pulled out of class for too many special programs.

Probably because so few students participate in both programs, connections between the services they receive in Chapter 1 and special education are a nonissue in our districts. We found one instance in which the Chapter 1 program was a resource for a few special education students:

- In a high school, about six special education students are mainstreamed into the Chapter 1 English class. The school staff--a counselor and Chapter 1 teacher--worked out this arrangement with the supervisor of special education. The Chapter 1 supervisor does not like the idea, saying that these students have ample services of their own, but has not intervened to stop it.

Chapter 1 and Bilingual Education

A few sites we visited have enough students of limited English proficiency (LEP) so that the districts make efforts to connect the services received under Chapter 1 and bilingual or ESL programs. For example, a very large district in the Southwest has some bilingual resource teachers who are jointly funded by the two programs; this joint funding may enable a school to hire such a teacher when neither program alone could have afforded one. In another very large district, many schools have Chapter 1 teachers with certification in bilingual education. Students who qualify for Chapter 1 and need bilingual instruction are assigned to these teachers. Still another district uses Chapter 1 as a transitional service for students in their third year of bilingual education; members of the bilingual staff work with the Chapter 1 staff members to prepare them for serving this group of students. Finally,

in a state with many special programs, several of these programs (including the one for LEP students) provide a unified pool of funds with Chapter 1 to support instructional staff.

We found some indications that local educators may be concerned about the legality of serving students in two programs. In a very large district, the bilingual coordinator said that when a student participates in both that program and Chapter 1, "This must be documented at the school level. Otherwise it would not be legal." This was not a major concern, however; nor did it interfere with services that district staff want to deliver.

Orchestrating Multiple Programs

A few districts we visited have devised overall strategies to strengthen the connections among all the special programs that could serve the same students. This was most pronounced in one state that has encouraged districts and schools to use all their special resources in this way. In the districts we visited in that state, schools commonly combine their special funds to pay for aides who work in the classroom as an adjunct to the regular teacher's program. District staff handle the accounting in such a way as to meet federal and state fiscal requirements, but the effect in the schools is that of a single pool of funds. Many students are served by more than one program, either working with split-funded staff or receiving special help in more than one setting.

A very large district in another state instituted an elaborate placement process 3 or 4 years ago because of local concerns about the educational fragmentation that could result from multiple services. This process is the means of determining what type of Chapter 1 program will serve a particular student. For example, students who get bilingual services are placed in Chapter 1 pullout settings staffed by teachers because the bilingual program provides in-class aides and the district tries to minimize the amount of instruction a student receives from aides.

All these districts are in geographic areas with sizable LEP populations and in states that have funded compensatory programs for many years. Thus, the sheer number of services potentially available for a student may be one factor that eventually causes many districts to set up some umbrella structure for special services.

Little change is evident in these connections over the past 5 years in our sites; one of the few exceptions is one district's relatively new placement process (discussed just above). Otherwise, either the districts' practices have remained unchanged (in the case of the older state compensatory programs and special education, for which policies and procedures were worked out long ago), or the change has been the introduction of a set of policies to go with a new program that did not exist before.

Although district staff do not think of their day-to-day decisions about multiple programs as constituting policy determinations, in fact they add up to a relatively consistent policy: that of using multiple funding sources to allow services to more students. There are exceptions, of course. One district with a state compensatory program in the elementary grades also concentrates its Chapter 1 services there. Several districts do permit some students to receive both special education and Chapter 1 services. In other sites, though, we can identify a choice to use additional funding sources as a way of extending services to additional students.

Many design decisions are logically connected to districts' targeting decisions. If a state compensatory program operates at one grade level and Chapter 1 at another, they may for that reason have different designs. In several of our sites, though, district decisionmakers have arrived at an overall model for compensatory services, and both the state program and Chapter 1 are administered in accordance with that model. This explanation applies to most of the sites that have full or partial overlap in grade levels between the two programs, including the districts that place the state program in the schools that do not qualify for Chapter 1.

A few districts that have sizable LEP populations use both bilingual and Chapter 1 resources in a coordinated way to meet these students' needs. In

particular, they work with the resources and staffing designs of the two programs in an effort to place qualified staff in the schools where students need bilingual or ESL services.

Summary

The analyses reported in this section were organized by the kind of program to which Chapter 1 might be related. Regarding connections with the regular instructional program, we found that:

(1) Although some strengthening of connections with the regular instructional program can be attributed to local concerns about "fragmentation," the most powerful influence in our sites has been standardization of the curriculum districtwide, often in response to mandated testing.

(2) The central offices of the districts we visited often have Chapter 1 managers placed in positions where they have extensive contact with the regular instructional program and other special programs (often with the exception of special education). District staff sometimes cited this as a factor promoting other connections among programs.

(3) Districts have set up some formal mechanisms for Chapter 1 staff and classroom teachers to communicate about students' needs and progress, including special forms for written records of such communication. The actual amount of communication varies, chiefly according to the preferences of the individual staff members involved.

The connections between Chapter 1 and other special needs services tended to be less extensive in the districts we visited than with the regular instructional program. Specifically, we found that:

(4) Although arrangements for the targeting and design of state compensatory programs vary extensively among our sites, most districts have been able to make choices about the connections between these programs and Chapter 1. In our sample, they have commonly designed the services to be very similar to those of Chapter 1 but to serve different schools, grades, or students.

(5) There are no programmatic connections between Chapter 1 and special education, and districts overwhelmingly act to minimize any overlap in students between these programs.

(6) Districts have worked out a few connections between Chapter 1 and bilingual or ESL programs, often with the aim of placing bilingual staff members where decisionmakers think they are needed.

Under certain conditions (e.g., where the state has made a big issue of it), districts try to orchestrate and interrelate all special needs programs. We found that:

(7) The orchestration of multiple programs for special needs takes various forms--split-funding of special program staff and coordinated student placement among them--often designed to spread services to as many students as possible. This form of overall coordination seems especially likely where there are diverse student populations (including LEP students) and a large number of special programs, where there is simply more to coordinate.

XIV CHAPTER 1 PROGRAM DESIGN AND INITIATIVES FOR EDUCATIONAL IMPROVEMENT

Throughout the 1980s, the nation's schools have undergone a period of intense public scrutiny and conscious internal reform. To varying degrees, this reform movement has found its way into nearly all of our sample districts. In most cases, improvement efforts have been driven by state mandates or encouragement; in a few districts, local administrators have initiated reforms. In this section, we explore the effects of these reform activities on local Chapter 1 program design.

In general, reform efforts in our sample sites are designed to affect the entire educational program. The Chapter 1 program, schools in which it operates, and students served by it are influenced as a byproduct of these general efforts. In some cases, the effect is direct, as districts choose to use the Chapter 1 program to bolster areas of reform focus. More often, reforms affect Chapter 1 indirectly, as improvement efforts filter through the regular instructional program.

Our research uncovered two elements of the recent reform campaign that have particularly strong effects on Chapter 1 program designs: testing and state or local school improvement programs. We discuss each of these topics below. Following that, we examine the Chapter 1 program itself as a source of ideas and strategies for educational improvement. (State compensatory education programs, which might also be considered reform initiatives, were discussed above in Section XIII.) We note at the outset that the nature of our data does not allow us to address whether reform efforts have adversely or beneficially affected the educational achievement of Chapter 1 students.

Testing

As noted throughout this report, many of our sample states and districts have added tests to their educational programs. Some have adopted minimum competency tests for high school graduation; some now have tests that assess students' basic skills; and some have made student promotion from one grade to the next contingent on passing tests. These new test requirements--regardless of their source and regardless of the motivation behind them--have had a marked effect on Chapter 1 program design considerations. We visited several sites where central programmatic decisions, in both the regular and the Chapter 1 programs, seem to be test-driven.

A number of districts have shifted allocation of Chapter 1 resources to follow or precede those grades in which tests are scheduled. For example:

- One district has a pupil promotion plan that affects students in grades 1 through 5. At the same time, the state requires that high school students pass a minimum competency test, first administered in the 9th grade, before they can graduate. This year the state has added a competency test at the 4th grade. Here, Chapter 1 services are offered in grades K-12, but the program focus has shifted to concentrate on grades 1, 2, 3, and 9.

- In a second state, all students were subjected to a new state basic skills test. Although test scores determine neither graduation nor promotion, district results are publicized. One district we visited in the state now uses Chapter 1 services in the "problem" grades revealed through test scores.

Test results can also lead to a fine-tuning of the Chapter 1 program. In one site, for example, poor math scores on a new state test caused the district to add Chapter 1 math services for middle school students, while another district's decision to cut out a middle school math program was supported by high scores.

Tests can also have an explicit effect on Chapter 1 curricula. In two districts, for example, the Chapter 1 curricula have been expanded to include efforts to improve students' deductive and analytical skills as a result of the inclusion of a higher-order skills component on state-mandated tests. In another site, the state test will soon contain a section on computer

literacy. The district has recently added computers to its Chapter 1 program, hoping that, at a minimum, student exposure to the machines will help them later.

Competency or skills tests also have more indirect effects on Chapter 1 curricula. It is usually the regular curriculum that is initially affected as districts modify existing instructional practices to ensure that students receive sufficient exposure to topics covered on the examination. On occasion, school systems may even adopt new textbooks that are designed to cover the tested material more thoroughly. As the regular curriculum changes, so too does that of the Chapter 1 program. One Midwestern state has gone so far as to force local districts to establish curricular objectives that correspond to a newly revised state test. One district we visited in this state was selecting a new basal series that will also serve as the basis of most of the instruction in the Chapter 1 program.

School Improvement Programs

At least six of the states in our sample have school improvement programs as a part of their reform packages. Two of the states have had such projects for several years; the other four have new initiatives. Although program components differ across these states, most center on raising student achievement. In addition, some of the school improvement efforts provide extra funds for special programs and some offer technical assistance to local districts.

These school improvement projects are generally designed to affect the entire educational program; their effect on the federal compensatory education program is indirect. For example, in two sites, state school improvement teams have come into the districts and helped them develop potentially more effective general educational strategies:

- In one case, the state team assisted the district in identifying its weaknesses and setting goals to improve reading scores, to reduce the dropout rate, and to improve school attendance. As a part of its

efforts to meet these goals, the district has added a Chapter-1-funded remedial English program for 9th graders. Chapter 1 pullout programs were eliminated from the middle school and a new delivery model was developed. Chapter 1 teachers serving elementary school students now color code their lesson plans to indicate which basic skills they are addressing. And all teachers in the district (including Chapter 1 teachers) are instructing students in test-taking skills.

- In the second site, several schools chose to participate in a state-sponsored effective schools program. As part of the program, the schools conducted a needs assessment using a state-developed form. After state personnel studied the assessment, they met with the schools' and district's administrators to develop an "action plan" to follow in establishing and maintaining effective programs. As a result, district staff decided to use local funds to establish a Chapter 1 schoolwide project in one of its poorest-achieving schools.

A 9-year-old school improvement program in another state has had different types of effects on the Chapter 1 program. Here the state finances general improvement efforts in the schools. To receive funds, schools must fulfill a series of process requirements: they must form site councils with staff and parent members, perform needs assessments, write detailed plans based on the assessments, and evaluate subsequent activities. In the two sites we visited in this state, the strong state presence has led to a total integration of federal and state categorical programming. In fact, in some cases, state and not federal requirements determine certain program design features. On the other hand, the state has been involved in efforts to improve local educational practice for so long that many district and school administrators have accepted state requirements as part of routine operations--they are no longer thought of as state mandates. In these districts, staff do not have frequent contact with state staff, but the cumulative experience of 2 decades of progressive state education policies and programs--and the attendant state scrutiny in past years--sets the parameters for the way many Chapter 1 programs are designed.

In addition to these state-initiated school improvement projects, two local districts have implemented less formal reform efforts that have affected the Chapter 1 program. In one site, a new superintendent undertook an active reform program to shake up the district. As part of his overall plan, the new leader decided to implement a prekindergarten program, and

used Chapter 1 funds to do so. In the second district, administrators claim that their reading of the effective schools literature led them to decentralize decisionmaking in the district, providing for more building-level leadership. Consequently, major decisions concerning the Chapter 1 program were also decentralized. Partly as a result of this move, what once were fairly uniform compensatory education programs across schools began to vary in both their curricular and grade-level foci.

Chapter 1 as a Source of Educational Improvement

In a few sites, it is difficult to pinpoint the origin of reform because the Chapter 1 and regular instructional programs are so well integrated that they basically constitute a single educational thrust. In general, however, it is clearly state or local reforms originally directed at the regular instructional program that affect the Chapter 1 program. Nevertheless, in a few of our sites, improvements originating in Chapter 1 clearly ended up "reforming" the regular instructional program. In some cases, this spillover effect took place at the individual teacher level; in others, effective practices in the Chapter 1 program were transferred into the regular program or served as models for the development of new strategies.

In three of our sites, especially able Chapter 1 teachers were the source of new and innovative instructional ideas that spread into other classrooms in their schools. A teacher in one of these districts, for example, successfully used a new reading curriculum, which is now being disseminated into the regular curriculum. In a number of districts, Chapter 1 was on the forefront of educational innovation, apparently because program administrators had discretionary reserves. For example, in one of our sites, Chapter 1 staff have been at the forefront of training in the teaching of higher-order skills--again because of the availability of discretionary resources for staff development. In another district, the Chapter 1 program initiated the use of computers in the schools. Regular program administrators were also interested in purchasing computers but did not have the resources to do so. At the other extreme, because of tight

resources, Chapter 1 administrators in still another district were adding computers (which are cheaper than staff salaries), but the regular educational program has not.

In some cases, particularly effective Chapter 1 practices have been transferred into the regular program. In one district, a Chapter-1-developed math curriculum was later adopted by the regular teachers because of its clear basis in objective competencies. In another district, specific instructional techniques (e.g., the use of manipulatives) developed in the Chapter 1 program have been picked up and used effectively by regular program staff. In still another district, administrators have turned to Chapter 1 for models as they try to implement needs assessment and objective evaluation of the regular program and to provide effective staff development strategies.

Yet even though the local Chapter 1 program may be structured to stimulate wider educational reform, it may in fact not do so. In one district we visited, the Chapter 1 director conceives of resource teachers as a source of instructional ideas for the whole school staff, but we found no evidence that resource teachers actually played this role. One resource teacher is new and is trying to prove to classroom teachers that she can effectively test students and schedule students; another resource teacher is overwhelmed by the school's educational problems; and a third is well respected and probably could serve as an instructional leader, but none of the faculty we interviewed said she did.

Summary

In this section, we have reviewed the effects of reform activities on Chapter 1 programs. Specifically, we found that:

(1) Testing programs appear to have a direct effect: district staff may revise the program's focus and curricula to concentrate on tested grades and subjects.

(2) School improvement programs, initiated either by state agencies or the district, affect Chapter 1 programs less directly, their effects varying with the extent of technical and financial assistance.

(3) Under certain circumstances, reforms originate in the local Chapter 1 program and spill over to the regular educational program, either at the individual teacher level or at the level of curricula or program models.

With regard to the scope and extent of reform influences on Chapter 1, we found that:

(4) Although our research has uncovered clear effects of reform efforts on Chapter 1 program design features, the extent of these effects should not be exaggerated. These changes in Chapter 1 practice have been a byproduct of reforms directed at the general educational program. In no site we visited did state or local educational agencies systematically target the Chapter 1 program for major reforms. Rather, reforms designed to alter the regular education program resulted in specific modifications to Chapter 1 practice.

(5) Moreover, changes in Chapter 1 occur at the margins, a shift in grade-level focus or the adoption of new curricular materials, for example. In no case among our sample districts was the basic thrust of the Chapter 1 program altered in response to improvement efforts. All sites retained the categorical nature of the program, targeting resources on low-achieving students in schools with relatively high poverty levels. All districts continued to focus programmatic resources on providing supplementary services in the basic skill subjects: reading, language arts, and, in some cases, math.

The maturation of the Chapter 1 program may be the most important factor in determining the relationship between general reform efforts and the program. On the one hand, as compensatory education has become an accepted part of local educational practice, Chapter 1 appears to be less isolated from districts' general educational thrusts than it may have been in the past. Consequently, changes in the basic program spill over into the Chapter 1 program. Moreover, some educators appear to employ the program consciously as one weapon to use in meeting new educational objectives. On the other hand, programmatic maturity has also meant that local educators have accepted the categorical nature of this federal program. As a result, regardless of the nature of reform initiatives or the political pressures driving them, local educators have not considered altering the basic thrust of the Chapter 1 program--supplementary services in the basic skills areas for eligible students.

PART SEVEN: EXPLAINING DESIGN CHOICES AND CHANGES

Having discussed our findings on the reasons for particular types of local decisions on program design, we now provide a summary analysis of the influences at work in local Chapter 1 program design. We divide these influences into two general categories: those that do not originate primarily in the legal or budgetary framework of Chapter 1, such as local educational philosophies, professional trends, or local resources; and those that result directly from the fact that Chapter 1 is an intergovernmental categorical program, such as funding levels, legal requirements, and SEA oversight.

Within each category we discuss influences on districts' current program designs and on local decisions to change designs. These are not always separable, since the current design represents the sum of past changes.

We present our discussion of these influences in two sections:

- Influences associated with the local setting (Section XV).
- Influences associated with Chapter 1 as an intergovernmental categorical program (Section XVI).

Finally, in Section XVII, we present some overall conclusions about the influences on Chapter 1 design and decisionmaking. We sum up the influences that are most important, distinguish the ones that federal or state policy may affect, and reflect on the program's responsiveness or resistance to change at this stage in its history.

XV INFLUENCES ASSOCIATED WITH THE LOCAL SETTING

This chapter analyzes the influences on local program design of factors that are not primarily traceable to the legal framework or allocation levels of Chapter 1. We call them factors associated with the local setting, although we recognize that they also reflect various sorts of outside influence, such as professional trends or state reforms.

We discuss five categories of influence roughly ordered by the strength of their influence on design decisions (however, we recognize that certain categories of influence weigh more heavily on certain types of design decisions than others):

- Local Chapter 1 program tradition
- Professional beliefs and trends
- Local environment for educational improvement and reform
- Local resources and political constraints
- Implementation experience.

The relationship among these factors and their effect on design choices are shown in Figure XV-1.

Local Program Tradition

For the most part, this year's Chapter 1 program in a district looks like last year's program. This reflects the fact that the program is ongoing and has a momentum of its own. When changes do occur, they represent a departure from an established way of doing things. Unless decisionmakers have reason to believe that the program is not working or learn about promising alternative practices, they have little incentive to change the program, or even to consider changes.

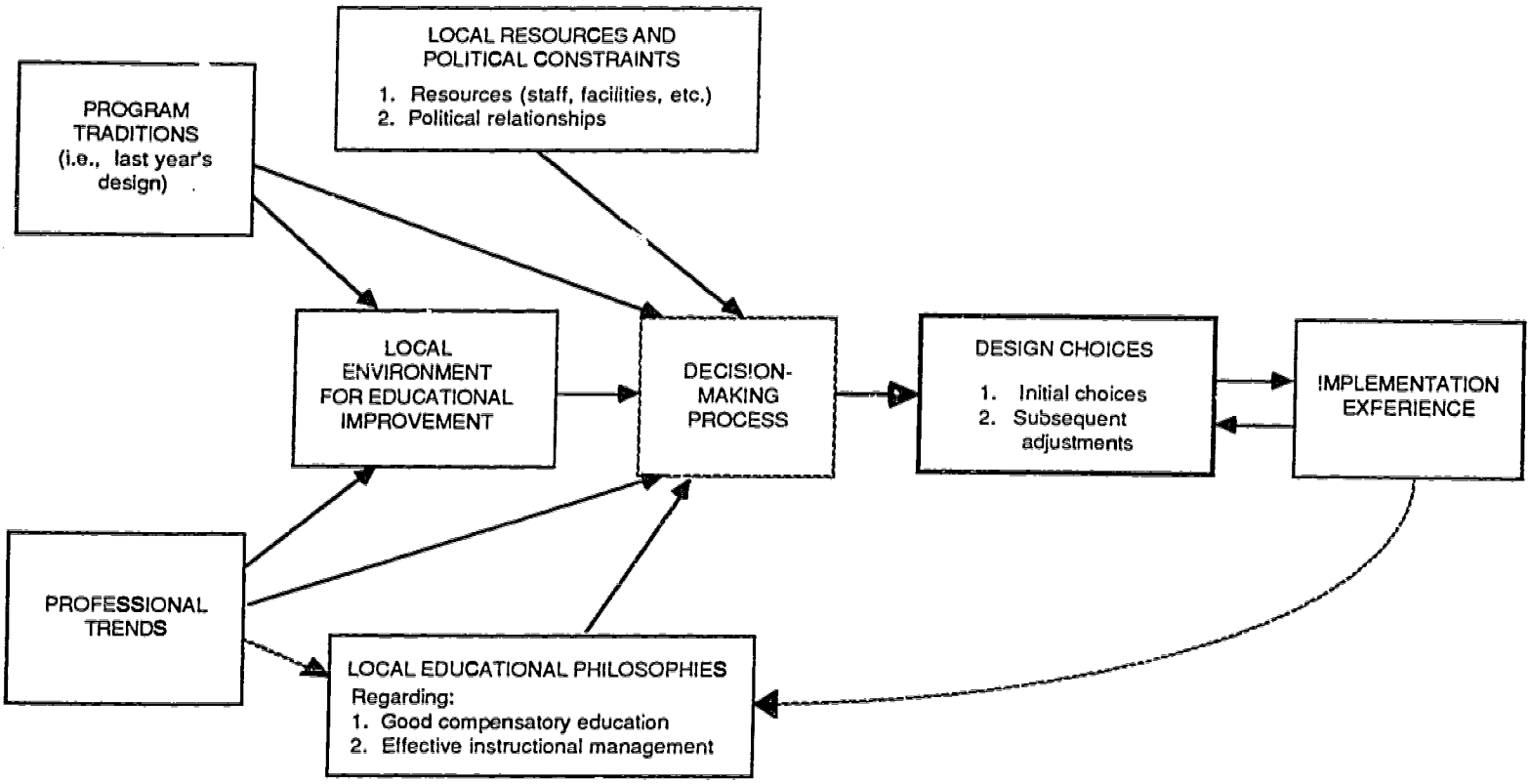

FIGURE XV - 1 INFLUENCE ON LOCAL PROGRAM DESIGN CHOICES FROM OUTSIDE THE INTERGOVERNMENTAL CHAPTER 1 POLICY SYSTEM

Moreover, even though our sample was intended to include examples of change--more, perhaps, than one might find in a random selection of districts--the typical scope of change in our sites is not wide. Most often in these sites, program directors change one feature of the program, either in response to a problem or opportunity, or because of their own conviction that it is time to make a change. We did not find instances of managers saying, in effect, "While we're shaking up the program anyway, let's go ahead and change one or two other things at the same time." Nor did we find them having said, "This program is not working; we need a whole new model."

In larger districts, we did find that more than one change occurs at the same time. However, this typically reflects the fact that these programs have multiple components. These sites did not have coordinated change across the whole program.

The fact that districts in our sample do not overhaul their whole programs at one time does not mean that their changes are always small or incremental. Within a particular design feature, the change might be sweeping and dramatic, such as a complete abolition of in-class services. Also, decision-makers may consider a number of design changes over time. Over the past 5 years, most of our sites made or seriously contemplated changes in three or more of the nine design features we examined (note that this is not a statement of tendency across the nation--we selected sites for the presence of one or another change). Across a period of years the Chapter 1 program might undergo considerable alteration, although at any one time, most of it stays the same.

This pattern of one change at a time probably derives from several factors. First, the program has been around a long time without major or sudden fluctuations in either the funding or regulatory framework. With few exceptions, an accepted and expected pattern of program activity has developed in each site we visited. Given this situation, there is little reason to perform major surgery on different aspects of the program simultaneously. Second, local program administrators are busy people, in smaller districts often attending to much more than the health and welfare of the Chapter 1 program, in larger districts managing a complex, multicomponent enterprise

with a budget in the millions of dollars. The time and attention of such staff are scarce resources. The possibility of doing things a different way must compete with many other things for administrators' time. One significant change at a time is more manageable than many.

Professional Beliefs and Trends

A key influence on design choices is the educational philosophy of decisionmakers, especially the program director. These include beliefs about effective practices in compensatory education, about the appropriate use of local staff, and about ways of keeping the regular instructional program strong. These beliefs may change over time as decisionmakers hear about the design and effects of alternative program models. We have no evidence on the correctness of any of these beliefs because we did not independently investigate program effectiveness. However, our findings clearly point to the importance of local educational philosophy and professional trends as determinants of program design.

Beliefs About Good Compensatory Education

Although no nationwide consensus exists on the details of effective practices for Chapter 1 and similar programs, the managers of the programs we visited have their own convictions about what works, and acting on these convictions is probably their foremost guiding principle in decisions about program design. The following examples show how a philosophy about the right way to design services for compensatory students can be a factor in local decisions--and how these philosophies differ among districts:

- All the districts we visited deliver at least some of their services in the elementary grades, and program managers generally told us that a key purpose of Chapter 1 is to correct educational problems before they become too long-standing and severe.

- Some program managers strongly advocate the inclusion of higher-order skills in their programs, saying that these skills are essential in preparing students for later life. Other program managers are equally vehement in their argument that what Chapter 1 students need is an intense dose of basic skills without any extras.

- Some districts adhere to a standardized design in which each student's program for the year is determined by the pretest results or some other diagnostic procedure within the Chapter 1 program. Although decisionmakers may regret that this design precludes closer coordination with the regular classroom, they believe it is educationally appropriate.

Readers may wonder how we can be sure that statements of educational philosophy did not simply represent after-the-fact rationalizations. Our evidence suggests that convictions about educational effectiveness do play a major role in local thinking about program design. For one thing, program managers frequently told us that their current design was not the one they would consider most effective, and that they hoped to change it. (For example, administrators of programs that are heavily staffed with aides often told us that they would prefer to use teachers for educational reasons but have been unable to make the change.) Also, program managers frequently invoked evidence, usually in the form of evaluation results, and commonly something as specific as, "Our gains have been better in the early elementary grades than anywhere else in the program." Comments like these seem to reflect habitual attention to the results of different design features, suggesting in turn that decisionmakers like to act on their perception of what works.

General Beliefs About Instructional Management

As district administrators, local Chapter 1 decisionmakers often address the same educational considerations that are important in administering other instructional programs. Our study shows that the program managers' considerations of instructional management are important in Chapter 1 design decisions. Just as they have convictions about what is educationally effective, the Chapter 1 decisionmakers in our sample usually have well-defined views on what constitutes appropriate responsibilities and good working conditions for instructional staff. They also tend to be respectful of the regular instructional program, and usually try to design Chapter 1 so that it does not detract from the regular program.

Staff Responsibilities and Working Conditions--Most critical decisions about Chapter 1 program design are concerned with what instructional staff will do and the circumstances under which they will do it. Thus, administrators' observations about the capabilities and preferences of their instructional staff are crucial elements in design decisions. Program managers engage in the following types of reasoning about what the instructional staff should do, want to do, or can do:

- Some managers want to staff their programs with teachers because they believe teachers are the only ones equal to the educational challenge involved. On the other hand, others see Chapter 1 as a highly standardized program of reinforcement for regular lessons that is better suited to a less skilled staff.

- In one district we visited, more services may soon be offered in class because of the districtwide sense that classroom teachers must retain the responsibility for their students' learning (which the state has just begun to test).

- The use of a pullout design tends to imply a staff of teachers and an in-class design implies a staff of aides--and vice versa--for two reasons. First, in thinking about staff responsibilities, many program managers prefer not to let aides work in a separate setting where they are not supervised by a teacher. Second, looking at the effect on teachers' working conditions, program managers often do not want to put two teachers in the same classroom because they know that many teachers dislike working that way.

- The capabilities of the district's current Chapter 1 staff are sometimes a factor in program managers' thinking about whether to introduce higher-order skills or rely more heavily on computers in instruction.

In short, program managers' familiarity with what their existing staff can do, where their strengths and weaknesses lie, and how instructional staff members (including non-Chapter-1 classroom teachers) prefer to work informs their decisions in a number of ways.

Keeping the Regular Program Strong--We were struck by the respect that the regular instructional program commands in the thinking of Chapter 1 directors. Alongside their concern with the quality of their own program is a concern that the district's regular program should not suffer--and in fact should be strengthened--by the decisions they make. Rather than seeing themselves as the rulers of Chapter 1 fiefdoms, they recognize that regular

instruction usually makes up most of "their" students' educational experience. Moreover, whatever the personal views of Chapter 1 directors may be, their superiors in the district hierarchy keep an eye on Chapter 1 decisions to ensure that these will not cause problems for the regular program. The result, then, is that local program designs for Chapter 1 often reflect judgments about ways of strengthening the overall instructional program:

- Bolstering student performance at grade levels where districtwide testing shows weaknesses is a common rationale for expanding Chapter 1 services into new grades.
- On the rationale that Chapter 1 students were missing too much work in subjects like science and social studies, several districts have switched to the replacement model of service delivery.
- Shifts from pullout to in-class arrangements are often supported by the reasoning that pullouts may disrupt regular instruction and that in-class services can provide more direct reinforcement for that instruction.

This finding is surprising given the disjuncture between Chapter 1 and the regular program that was identified in previous research on local practices under Title I (e.g., Hill, 1979; Kimbrough and Hill, 1982). However, we found considerable sensitivity among Chapter 1 decisionmakers to the relationship between their program and the other educational experiences of their students. This is not to say that the local program designs we observed are successfully coordinated with their counterparts; some are, others are not. But the intention to connect with or avoid interfering with the regular instructional program is often an important factor in the design equation.

Response to Professional Trends

The philosophies of education and management we learned about were partially a reflection of the decisionmakers' personal values and experiences. But in part these philosophies derived from currents of thought among the professional circles in which they moved. As ideas about what was instructionally effective or desirable came into fashion, local decisionmakers took notice and often responded by considering the implications for program

design. Some examples from the analyses in preceding sections of this report include:

- Higher-order thinking skills have just recently come to the attention of some of our respondents.
- In some districts the idea of adopting computers in the curriculum derives from their convictions that technology is "the wave of the future."
- The shift away from aides in several sites seems to reflect a desire for increased professionalism in the teaching staff and is related to broader trends in the field.

Professional trends not only contribute to a general climate of opinion affecting design choices, but also are a source of specific ideas for change in design. These ideas reached decisionmakers in our districts through several channels, in particular (1) professional networks maintained by meetings, journals, and the like, and (2) the coming of new staff to the district.

Through professional networks, both those maintained under Chapter 1 auspices (e.g., meetings of Chapter 1 coordinators in a state) and informal contacts between Chapter 1 staff and colleagues outside the district, designs that have gained the reputation of working well may come to decisionmakers' attention; for example:

- In a small, rural Northeastern district, teachers who attended a state-sponsored workshop on the use of computers in Chapter 1 came back "all fired up"; subsequently they were able to persuade a reluctant Chapter 1 director to purchase several computers for their use.
- In a larger district in the same state, local staff heard of an experimental program to instruct students in higher-order thinking skills, at the time being pilot tested in a Southwestern state. The reports of the experiment piqued the curiosity and interest of the Chapter 1 director, who is considering its application to his district.

Ideas from the professional grapevine have more to do with features that might be added to the program--such as the computer or a new curriculum--than with decisions to subtract something or keep it the same (e.g., the decision to drop a middle school component or to retain aides).

Whether they come to leadership roles within the Chapter 1 program or to instructional management positions in the district as a whole, new staff are another "external" source of ideas. These individuals come with different perspectives and, often, new ideas about the Chapter 1 program and how it might be designed. New staff set change in motion when they come with an agenda or personal philosophy that differs from what went before. The new superintendent in a small rural site who came to town with "guns blazing" exemplifies this. In larger, more complex situations, the interaction required to make anything happen and the increased complexity of the design issues make it more difficult for new staff to enact substantial changes in the program, but the same basic principle applies.

Local Environment for Educational Improvement

Related to broad professional trends are the more specific initiatives aimed at educational improvement, particularly from the state level, that were discussed in Section XIV. As the analysis in that section demonstrated, these reform initiatives can significantly influence all instructional programs at the local level, including Chapter 1. In effect, state reform efforts shape the local environment, supporting educational improvement throughout the district by drawing attention to issues, setting new standards or goals toward which programs are aimed, and putting into place mechanisms such as tests that make it difficult to ignore reform goals.

There is no need to repeat the discussion of Section XIV here other than to summarize the key implications, at the local level, for Chapter 1 program design choices:

- Testing programs direct attention to the remedial needs of particular grade levels, to deficiencies in certain subject areas, and to particular kinds of skills.
- In a few instances, school improvement programs focus efforts on the coordination of resources (including Chapter 1) within particular school settings, with possible alterations in delivery models and relationships among services.

- Reforms change the regular program that Chapter 1 is intended to supplement, sometimes in fundamental ways: new curricula, materials, and teaching approaches in the regular program potentially alter the direction or approach in Chapter 1.

Local Resources and Political Constraints

Various other factors particular to the local setting provide opportunities and constraints that can have major effects on design choices. We concentrate on two categories that emerge from our data as especially influential: local resources (staff, space, etc.) and the interplay among political interests within the district.

Local Resources

Local resources, such as space, staff availability, and occasionally local dollars, can affect choices about program design. For example, a school cannot operate a pullout design if it has no empty space where instruction might take place. Considerations of space and other logistics are also important in arrangements for serving nonpublic school students. In some sites, the question of where to park a mobile van is so vexing as to make this a less attractive option for serving nonpublic school students--either because parking spaces are hard to find or because teachers object to delivering services on a street with interruptions from passersby. Also, the proximity of public schools or neutral sites to nonpublic schools can determine whether children can feasibly walk from their nonpublic school to receive services and, in turn, how the problem of serving them is solved.

A shortage of teachers in the local labor market can drastically affect Chapter 1 staffing: we visited a district in which Chapter 1 teachers have been reassigned to the regular program and replaced with aides and paraprofessionals. (There were other reasons for making this change, but the crisis created by the teacher shortage helped precipitate it.)

The availability of local funds has very little bearing on most types of decisions about the Chapter 1 program, but it does affect the decision to implement a schoolwide project. District administrators must decide whether to invest funds out of the regular operating budget to cover the services provided to non-Chapter-1 students in these schools. We found that they have been reluctant to do so, a major reason being an aversion to singling out one school to receive extra funds.

Local Political Constraints

The inevitable differences in philosophy, position, or access to resources among decisionmakers mean that local political factors come into play in program design decisions. This was most evident in our sample districts where competition for resources was at issue, as in the case of decisions about grade levels served, staffing, or specialized arrangements such as the schoolwide projects. Some examples of the importance of these political forces include:

- The decision to continue high-school-level services in one district--despite a cutback in funds and needs assessment evidence that high school services had lowest priority. The decision was made by a local program committee heavily influenced by high school staff, who wished to keep some Chapter 1 services at their school.
- The decision not to adopt a schoolwide project because the disproportionate share of local resources given to the school in question (due to federal matching requirements) would cause bitterness among other school principals, who felt they weren't getting their fair share.
- The decision to use in-class models because school principals and teachers "lobbied" for extra classroom help.
- The decision to institute Chapter 1 prekindergarten learning centers in schools that otherwise had to be closed (as part of a desegregation plan), to appease angry community members.

None of the decision outcomes in these examples was "purely" political in the sense that the relative power alone tipped the balance. Questions of educational and management philosophy entered into the debate, as did simpler resource constraints. Nonetheless, the essential pattern is that the outcome

emerged from a struggle among competing viewpoints or, put another way, was aimed at resolving the competition in the most amicable way.

One consequence of political competition in the process of making program design choices is that decisionmakers tend to opt for a resolution that gives something to everyone rather than concentrating resources for maximum impact on a smaller number of targets (e.g., schools). It was always politically easier to spread resources, for example, by using limited equipment funds to purchase one computer per school (and no software) rather than equipping a few schools adequately.

Implementation Experience

Once a design choice is made, reflecting all the factors discussed above, the initial experience with a change in program design can influence the way the design subsequently evolves, and this influence can happen either inadvertently or deliberately. Sometimes district administrators scarcely recognize that teachers are modifying the direction of a planned change. On the other hand, administrators often make conscious efforts to learn from the early implementation of a change.

In our study, we found some planned changes in which school-level implementation has taken unexpected turns. Computer use, for example, often varies greatly within a district or a school. Some teachers do little to carry out a plan for computer-based services. Other teachers become fascinated with the potential of the computer and take its applications farther than program managers expect them to.

Connections among instructional programs must be forged at the building level, and often they are not. Although districts have devised special forms that teachers are supposed to use in joint planning, this does not guarantee implementation. In one district that recently introduced such forms, the teachers judged them a paperwork burden and did not use them. Now the Chapter 1 teachers have begun to redesign the forms, so the revised forms may at some point play a part in communication about student needs. Furthermore,

in most districts that place a priority on connections between programs, we found that the actual connections vary by building and especially by individual.

One district introduced a change in delivery model, only to have it founder in early implementation. The superintendent of a very large district ordered a shift from pullout to in-class services. The teaching staff reportedly disliked the new arrangement; within a few months the superintendent withdrew his directive and almost every school shifted back to its previous model.

There is considerable evidence from our sites that Chapter 1 staff learn about the effects of their instructional designs and partially base subsequent decisions about changes in design on what they have learned. The learning process is not necessarily systematic or comprehensive. More often than not, Chapter 1 decisionmakers (typically, the Chapter 1 director) receive impressionistic information about the implementation of a program component from school staff--Chapter 1 staff, principals, etc.--in the form of complaints, enthusiastic reports, or suggestions. However, the larger the change, the more likely that a variety of types of information are brought to bear on the final decision; for example:

- In one large rural district the decision was made to phase out the relatively new middle-school component of the program, following a decrease in funding that made some reduction in services necessary. Information about the implementation and effects of the program had a significant influence on key participants in the process. The Chapter 1 director was swayed by observations of the poor implementation of the program in the middle schools (which tended to confirm some of his misgivings about launching this component anyway). The director of curriculum and instruction was influenced more by the superior evaluation results from Chapter 1 in the earlier grades.

Decisions about the addition of new program components are often made in a sequential fashion with some form of pilot test arranged to try out the new idea. For example:

- After the state and federal programs coordinator in one urban district heard about a packaged program called Programmed Tutoring, he did a site visit and decided to pilot test the program. He set up some of the district's most difficult students to teach in a summer Chapter 1 program for delinquent students. The results were

"phenomenal"; the program was then tried on more typical Chapter 1 students and it continued to be successful. At this point, the program development specialist in the state and federal programs office became an advocate for the approach, and it rapidly was adopted in all 1st and 2nd grade Chapter 1 classes in the district.

The results of the program design in question--that is, its measurable outcomes in terms of student performance--are not always the most important thing to learn about a program, from the point of view of local program administrators. Equally important in many cases is its operational success: how well it satisfies external compliance concerns, how it is received by the school staff, how it fares in logistical terms, how much it costs.

Summary

This section has discussed the influences on Chapter 1 program design that stem primarily from the local setting, although they in turn are affected by developments outside the district, such as trends in educational thinking or state reform initiatives. An example is the influence that last year's program exerts on this year's program; local decisionmakers tend to modify only one program feature at a time, leaving most design features undisturbed. (We recognize, though, that last year's design reflects a mixture of local and nonlocal factors.)

Another important set of influences on program design is associated with local educational philosophies. Decisionmakers look for the program designs that they believe can be effective for Chapter 1 students, given the capabilities and preferences of their staff and in light of what students are expected to learn in the regular program. Although the resulting designs display as much variation as educators' beliefs on any pedagogical issue, our sites all have in common the fact that educational philosophies are important. Many of their programs, too, reflect the influence of recent professional trends, as certain design ideas become current in the networks of which local decisionmakers are a part.

Although Chapter 1 funds come from outside the district, other types of local resources and constraints can affect program designs. Space is

sometimes far from a trivial issue. The availability of qualified staff can also permit or preclude particular designs. Even local funds can sometimes be an issue, notably in the case of schoolwide projects. The competition for Chapter 1 resources among individuals and groups within the district poses an important set of political constraints on the program design process.

Finally, local experience with the implementation of a design can also affect its subsequent evolution. For example, the connections between Chapter 1 and the regular instructional program that teachers are expected to build at the school level may not materialize because of the well-known vagaries of implementation. In some cases, too, program managers make conscious efforts to learn about implementation experiences and to use what they learn in later program modifications.

Having discussed the influences on local program design that are not closely associated with the intergovernmental, categorical nature of Chapter 1, we now turn to those that are most directly associated with the Chapter 1 policy system--and hence are most susceptible to change through federal or state policy.

XVI INFLUENCES ASSOCIATED WITH CHAPTER 1 AS AN INTERGOVERNMENTAL CATEGORICAL PROGRAM

Because Chapter 1 is a categorical program funded from outside the district, it brings a special set of influences with it. Although the previous section demonstrates that these influences do not fully determine how local programs are designed, they do have effects. We discuss here the important sources of influence associated with Chapter 1 as an intergovernmental categorical program--its budget, its legal and regulatory structure, and oversight from the SEA.

As in the preceding section, we summarize the primary effects schematically (see Figure XVI-1), focusing on those derived from federal policy. The reader should understand, however, that none of the federal and state policy factors shown in the figure operate directly on program designs, but rather are one set of influences on the local decisionmaking process (shown in a dotted box in the figure). The previously discussed factors in the local setting are equally strong or stronger influences on this process and its outcomes. In the concluding section of this report, we will summarize how these two sets of factors act together to shape program design.

Budget Fluctuations

The size of the program budget obviously presents opportunities and constraints. We found that yearly changes in the local Chapter 1 allocation are especially important in stimulating changes in the program design. Districts commonly learn how next year's funding will differ from this year's at the time when they must prepare or update their applications to the SEA. This is also the time when they can recruit new staff for the next year or must issue layoff notices to current staff.

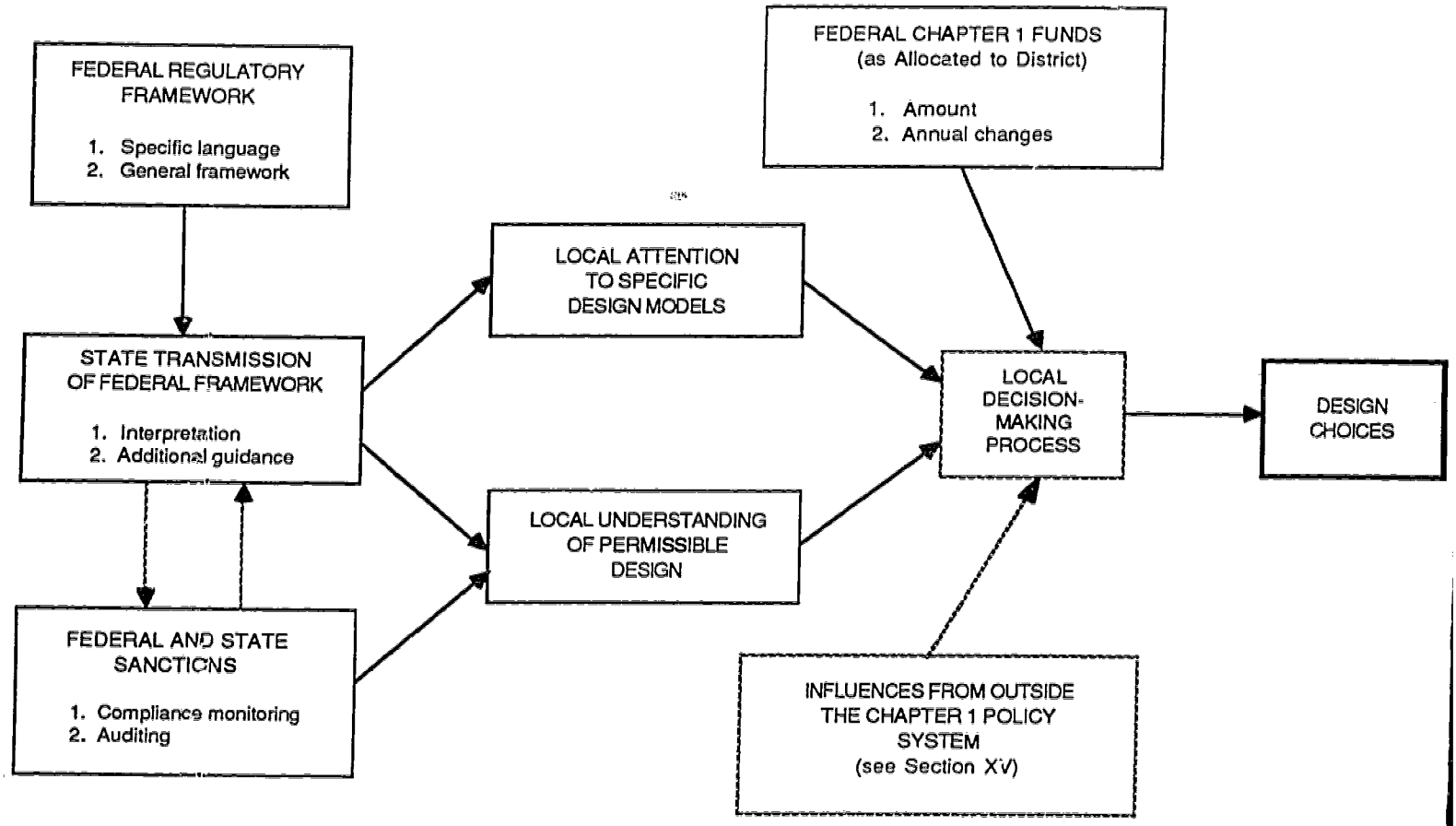

FIGURE XVI-1 INFLUENCES ON LOCAL PROGRAM DESIGN CHOICES FROM INSIDE THE INTERGOVERNMENTAL CHAPTER 1 POLICY SYSTEM

Because a district's annual Chapter 1 allocation depends on neither a local perception of educational need nor trends in the regular district budget, the program's budget fluctuations are experienced almost as random events. Primarily in the wake of the shift to 1980 Census data, we observed many instances of districts either taking advantage of a budget windfall or coping with the sudden effects of cuts. Program managers often have contingency plans for dealing with change in either direction in their allocation. At present, most of the ones we visited are aware of the provisions of the Gramm-Rudman-Hollings Act and are bracing for possible 4.3% cuts. However, where states are requiring districts to reduce their levels of carryover, some short-term spending increases can be expected as well.

We saw computer purchases, staffing changes, and expansions into new grades that appear to have been made possible by ample budgets. We also saw programs that had cut back their grade levels or staff or eliminated components (e.g., remedial math or health services) in response to funding cuts.

In addition to dealing with budget changes, local decisionmakers must work within spending limitations. They are not much different from their counterparts in the regular program in this regard, although the latter sometimes have more options for obtaining larger budgets. Because Chapter 1 funds are limited, we found that efficiency can be an important concern in design decisions. The use of aides, for example, was often explained by saying that their lower cost permits service to more students for the same price. Cost has also been an important issue in local thinking about how to serve nonpublic school students.

Federal Legal Requirements and Guidance

The federal legal framework influences local program design in several ways, even though the law is far less prescriptive about design than about other program features such as school and student targeting. In some cases, specific statutory language is an influence. More pervasively, the framework for compliance defined in the law and regulations has shaped local ideas about program design over the years. Although subsumed into a broader range

of considerations, the need to run a compliant program is never far from the mind of a Chapter 1 director.

We discuss here both the types of influence the requirements exert and the recent changes in requirements that have triggered local changes.

How Requirements Influence Programs

Through Specific Language--One place to begin a discussion of the influence of federal legal requirements is with the section of the law that deals most directly with program design and decisionmaking, Section 556(b), and its language about "size, scope, and quality." This federal statutory language is not specific about how size, scope, and quality are defined or how they are to be achieved--only that they must be sufficient to give the local program a reasonable chance of success. In our sample, we did not find examples of district decisions that hinged on particular interpretations of this legal phrase. A previous study (Knapp et al., 1983) indicated that local educators attach great importance to state requirements for maximum group sizes or caseloads. However, this study did not include any instances in which such requirements were said to be a factor in designing a program a particular way.

As one would expect, local decisionmakers did not indicate that they have been forced to pay attention to program quality because of the statutory requirement. Program quality is a matter of professional concern to them. Our evidence also suggests that they have no difficulty garnering local support for the aim of running high-quality programs, so the legal mandate for quality does not appear to strengthen their hand in local disagreements over design.

Specific language from some part of the federal law, regulations, or nonregulatory guidance can make a difference when district decisionmakers check out the legal requirements as one set of factors to consider in relation to a possible design option. The newer options provide the clearest examples of this in our study. When districts considered schoolwide

projects, they informed themselves about the requirements (and, in several cases, abandoned the idea forthwith). Consideration of replacement models has also been accompanied by a close reading of the guidelines and/or extensive consultation with the SEA about the rules for this model.

Through a More General Framework of Rules--Harder to document, but probably more important than any specific federal language, are the internal maps of legitimate Chapter 1 options that decisionmakers carry around in their heads. Under federal policy and its interpretation by the states, the interplay between compliance and pedagogical soundness (or other grounds for making design decisions) is inescapable and has been reinforced through years of compliance monitoring and auditing. We found that the fiscal and other requirements remain a constant presence in the design decisionmaking process, as important as educational considerations or other factors (such as the political need to fulfill the requests of powerful people). In a sense, the process of designing new programs is a search for designs that simultaneously meet compliance requirements and other goals of local importance. Although decisionmakers generally understand the acceptable range of practices, it is probably the case that local staff unnecessarily constrain their thinking about alternative designs out of concern about compliance, whether or not they consciously worry about compliance considerations.

The following Chapter 1 director's descriptions of his program suggest the way an orientation toward compliance interacts with pedagogical and other considerations:

> "In our grade 4-8 program, we're serving kids having difficulty in other areas such as science. This is incorporated into Chapter 1. We've got more of a supportive service here; we're not supplanting: a child can bring in science work if he wants help with it. ...
>
> In the high school, we had a math component. We got away with tutors for a while there...it was almost illegal. We had gotten an incentive grant from the state Chapter 1 office 4 or 5 years ago. We already had reading and language arts as one component in the high school, so we put math in grades 7-10 geared towards occupational students. We didn't cover math in grades 1-6, which seems to be a no-no. You're supposed to start concepts at the earliest grades, but we were allowed to serve the higher grades only. ...

> At all levels we use pullouts. The only time I ever thought of doing it differently, a high school Chapter 1 teacher said he wanted to work with the classroom teacher in the room.... As far as pullouts are concerned, I am always afraid of supplanting. I don't know how you can [take kids out of social studies] and not supplant. I know you can pull out of social studies, but I just don't like it. But at least with the pullout model I feel safe [when students are pulled out of study halls]...."

The quote indicates that this director always considers the legality of his design options at the same time that he develops the educational grounds for his decisions. The example also demonstrates several other features of the compliance story: the director is dependent on his state's interpretations of federal policy (which does not prohibit serving higher grades only, for example). Also, the concerns are most intense with regard to certain features of the program design, such as delivery models, that are most likely to pose a visible violation of the fiscal regulations.

It is reasonable to say, in general, that requirements like supplement-not-supplant have had a powerful effect in shaping local perceptions of what a Chapter 1 program design is supposed to be. In many districts, all Chapter 1 instruction must simply reinforce lessons that have been introduced in the regular program. Delivery models are chosen and fine-tuned with the goal of nonsupplanting in mind. In some districts we heard of a reluctance to offer Chapter 1 services in high schools because designing supplementary programs is more difficult at that level.

Also common is evidence of more general vigilance about compliance. An example is the assignment of one resource teacher to each building, in a program staffed primarily by paraprofessionals, partly in an effort to maintain a monitoring presence in the schools.

In drawing generalizations about the influence of compliance concerns, we must issue yet another caution about the sample of districts we visited. Because we sought out examples of change in particular program features, our sample contains a probable bias toward districts with more venturesome decisionmakers--the ones who actively search for alternatives and try to find ways to do new things. We encountered no local program leaders who are

paralyzed by worries about compliance, but we cannot say that a random sample of 20 districts would contain no such people. By the same token, the willingness we found to test the limits of compliance or to design programs first and ask questions about their conformance to requirements second may be rather unusual in the nationwide program. We simply cannot generalize from our sample.

Furthermore, in this study we asked questions about programs, not about what is done to maintain compliance. If our questions had had the latter focus, we might have obtained an entirely different picture of the considerations that go into design decisions. (It would have been a distorted picture that would not have served the overall purposes of this study, but on this particular question of compliance issues it would have given us some interesting clues.)

Changes in Requirements

We looked for instances in which a change in the language of the federal law, regulations, or nonregulatory guidance precipitated changes in local design. In general, there were few examples.

However, we noted that the idea of the replacement model (see Section VI) has caught on in a number of districts over the past few years, and its advent can reasonably be traced to the fact that the federal government has begun to mention its legality in program guidelines. For example, in a large urban site in which pullout programs had generated considerable dissatisfaction among staff, the director asked the evaluator to see whether a way could be found to get around the problem. The evaluator read the law and regulations and realized that a replacement model could be set up that would fulfill the technical requirements while allowing Chapter 1 teachers to meet with whole classes of Chapter 1 students. The solution was then checked with the state Chapter 1 personnel to make sure it would satisfy their reading of federal law. Once they said yes, the decision went forward and the change was made.

The Supreme Court's decision in Felton provides the clearest example of local changes precipitated by a change in the program's legal framework (see Section XI). Most of our districts had reached some sort of equilibrium in their services to local private school students; few decisionmakers, if any, were contemplating a change before Felton came along.

By contrast, the shift from Title I to Chapter 1 stimulated little change. The exception was in the formal efforts to involve parents as advisors in decisionmaking. Chapter 1 significantly changed the requirements for parent consultation by removing the specific mechanism of parent advisory councils and substituting a weaker rule that parents be consulted annually. As noted in Section IV, districts in our sample responded in one of two ways: either there was no change from previous practices or the program cut back on the intensity of its efforts to consult parents. A Chapter 1 director in a small rural site summarized the latter effect as follows:

> "We still run a parent advisory program. Now it's meeting once a year. Chapter 1 made no difference to the strength of the parent lobby here, but gave us permission to--well, to get lazy. We don't recruit parents as much as we should. Deemphasis on the national level filtered down to the state level and on to us."

The pattern of change implied by this quote was common among the sites we visited.

A change in the law that our findings suggest could eventually have a local effect is the reduction in the set-aside for state Chapter 1 administration. This is only a speculation at this point because we did not find evidence that the state presence has lessened as a factor in our districts' design decisions. However, as the next section discusses, we did find that the visits of state monitors could precipitate decisions and change. It is reasonable to think that if these visits become less frequent, the state influence will decrease over time--and, consequently, that compliance concerns might even diminish.

Finally, we found no evidence that any signals of increased federal flexibility inherent in Chapter 1 caused districts to make design decisions differently.

Communication with the SEA Chapter 1 Office

Both opportunities and constraints arise from the fact that the Chapter 1 program receives attention from SEAs. Although the local decision-makers we visited mentioned very few new educational ideas that the SEA staff had introduced to them, the SEA staff had reportedly suggested a number of options for compliant program designs that might not otherwise have occurred to the local staff. An example of an educational idea promoted by state staff is one SEA's advocacy of computers in Chapter 1. Ideas for compliant programs ranged from schoolwide projects, which one state in our sample has made a point of introducing to at least some districts, to ways of serving nonpublic school students in the wake of Felton.

We found a few instances of districts changing some feature of their program largely because the SEA raised concerns about compliance. An example is the following shift from in-class to pullout services based on SEA monitors' concerns about noncompliance:

- A large district changed its delivery model from in-class to pullout this year, largely because its SEA objected to the general aid violations that might take place in the classroom. The district initially started to move to an extensive system of documenting the aides' in-class activities, but then decided that a change in delivery models would be simpler. This change also fit with the district's desire to centralize the program by making aides responsible to Chapter 1 teachers rather than classroom teachers.

In a large district in another state, no major changes are directly attributable to state concerns about compliance, but the Chapter 1 director commented that the SEA's interpretations of the law discourage some of the design features he would like to introduce. He said, "The state precludes the local people from interpreting the law to local benefit--it is difficult to figure out how to serve real needs." He would like the program to use a greater variety of service delivery models, to use computers differently, and to have less paperwork.

On the other hand, some Chapter 1 directors profess unconcern about the state. This attitude is generally based on their lengthy experience and detailed familiarity with program requirements, which make them confident

about their ability to justify virtually any design they would want to implement. Other districts show confidence in their dealings with the SEA for political reasons. Some districts' size and consequent political strength make them a commanding presence in the state. Sometimes local educators have been astute in working with the SEA bureaucracy--in one district, a particular program component regularly draws questions from the SEA monitors, but because a high-ranking state official cited this component as exemplary a few years ago it has so far remained in place.

Summary

Our analysis shows that federal policy does affect program design in several ways.

One example is the effects of budget changes (or redistributions, such as the one that followed the shift to 1980 Census data). When they learn about next year's funding, districts commonly activate their contingency plans for either adding new program components, sometimes on an experimental basis, or dropping the components that decisionmakers consider most expendable.

We looked for different ways in which the federal legal framework affects program design. In a few cases, specific language in the law or guidelines provides a blueprint for program choices. The districts that have recently shifted to replacement models provide the best example of this adherence to specific federal guidance. More pervasively, Chapter 1 decisionmakers act on their understanding of which program designs comply with the whole framework of federal requirements, including targeting and nonsupplanting. Considerations of the legality of a design coexist in their minds with considerations of its educational soundness or its fit with other local imperatives. At this point in the program's history, thinking about compliance tends to pose no particular strain for the Chapter 1 decisionmakers we visited--but that does not mean that they do not think about it.

As the primary interpreter of the Chapter 1 fiscal and legal framework for districts, the SEA Chapter 1 office can be the filter for much of the influence of federal policy. Districts do, on occasion, alter their designs on the basis of state interpretations of, for example, supplement-not-supplant regulations. State Chapter 1 offices also encourage or discourage certain design options through further official guidance or direct communication with districts.

XVII CONCLUSIONS

Summing up, what have we learned about the reasons underlying local decisionmaking processes and design choices for Chapter 1? The major point is that the local processes and decisions seldom relate to federal policy in a linear way. We will summarize here the influences on program design that originate outside the intergovernmental policy system of Chapter 1 (and are primarily local in nature) as distinguished from those that result directly from federal or state actions within the program. We then analyze the key avenues for policy influence on program design. We conclude with a few comments about the program's responsiveness or resistance to change.

Influences from Outside the Policy Realm

We have examined the influences that shape the local decisionmaking process itself as well as those that determine the outcomes of the process--that is, the choice of program designs (including change in an existing design). The theme in our findings is the same in either case: the major determinants of both the process and its outcomes lie outside the federal or state policy realm.

Our data on decisionmaking processes indicate that either the district or school administrators, depending on the customary local patterns of authority, are the major decisionmakers; informal data and perceptions play at least as large a role as systematic data from needs assessments or evaluations; and consultation with parents or teachers is rarely an integral part of real decisions. The driving forces shaping program decisionmaking processes are the prevailing decisionmaking style of the district, the degree of autonomy granted schools, the degree of local preference for participatory or data-based decisionmaking, and the complexity of the program (see Section IV).

Our analyses indicate that the outcomes of the process are powerfully shaped by five sets of factors that are not driven primarily by federal or state compensatory education policies.

First, for any one district, a key determinant of this year's program design is last year's program design. Program managers generally make only one or two changes at a time. The reasons include the relative stability of the program's legal and budgetary framework (an indirect effect of federal policy) and the limited time and attention that decisionmakers can give to Chapter 1 matters.

Second, local beliefs about effective educational practice--as manifested in both the instructional approach and administrative considerations--are also important in shaping program designs. In particular, the Chapter 1 director (who has different titles in different districts) is a key interpreter of the evidence from inside and outside the district concerning what works. This is not to say that Chapter 1 programs are always evolving in the direction of greater effectiveness. Flawed evidence, wishful thinking, and professional fads may steer directors into poor choices. However, their convictions about what will work best for their students, their staff, and the regular program are important determinants of their design decisions.

Third, the local environment for educational improvement sets the stage for change in and around the Chapter 1 program. This environment derives from locally initiated efforts to improve the instructional program, as well as from local responses to state reform initiatives. Although often not aimed directly at the Chapter 1 program, these efforts can be the source of new design ideas and can have implications for Chapter 1 where it is designed to dovetail with the regular program.

Fourth, the availability of such diverse resources as space and skilled staff also presents constraints and opportunities for program design, as do the political relationships within the district as different individuals and groups compete for resources or influence.

Finally, experience in implementing a design change has an effect on later changes. The result may be divergence in implementation at the school level as teachers modify a central directive to fit their own ideas. Sometimes district staff deliberately introduce change on a pilot basis and use what they learn about the results to make further decisions.

We must note that, whereas it is explicit about certain procedures related to decisionmaking (e.g., needs assessment, evaluation), federal Chapter 1 policy is intentionally unspecific about the particulars of program design (with a few exceptions, as in the case of schoolwide projects). Thus, the fact that forces from outside the policy realm are most powerful in shaping program design should not be surprising and, in fact, is in accordance with federal intent.

It is also true that the nonpolicy factors we have identified can show the residue of federal influence in various ways. Local program tradition, after all, represents the cumulation of policy-influenced experiences in the program. Educational philosophies of Chapter 1 directors derive, in varying degrees, from their interactions with the program and its policy framework over a period of years. The availability of staff at the local level can be traced, in part, to categorical program funding that put certain individuals in particular positions within the district. Even the power relationships within the district can reflect the influence of federal policy: in one of our districts, admittedly an extreme case, the superintendent rose to his current position through the categorical program hierarchy; together with trusted lieutenants in the Chapter 1 program, he has significantly altered the curricular organization of the whole district. The kinds of federal influence on these instances are very indirect, but they cannot be ignored.

How Federal and State Policy Can Influence Decisionmaking and Design

Although they do not play the leading role in determining decisionmaking processes or the specific program design, federal (and state) policies do have effects, which our analyses reveal. We summarize these below in terms

of the requirements affecting decisionmaking, funding levels, the legal framework, and state reform initiatives.

Requirements for Decisionmaking Processes

The requirements for needs assessment, consultation, and evaluation are intended to structure a process that revolves around certain types of information and that includes attention to the views of parents and teachers. We found that the results of this policy are mixed. Although the requirements are not the primary determinants of the way the local decisionmaking process works, they have added elements that are important in many districts. These requirements (or their history) generally add to the types of information that are available for use in decisionmaking--i.e., survey results, parents' questions and comments, and test scores are at hand in case decisionmakers want to use them. We did find evidence that these types of information enter into design decisions.

Federal policy about needs assessments has put in place and maintained an enduring ritual in the decisionmaking process that can do more than satisfy a reporting requirement. At the least, the results of the process provide a way of justifying program designs to diverse audiences. But even more, the process has the potential to provide broad-based evidence of problems or needs that have not been as well addressed as they could be.

It is also easy to overlook a long-term effect of federal policy regarding parent involvement in the decisionmaking process. The requirements under Title I, and to a lesser extent Chapter 1, have reinforced local commitment to making Chapter 1 programs responsive to community needs in some way. Chapter 1 staff typically express a genuine desire to involve parents in the instructional program and many continue to try to do so, despite the many factors thought to militate against this goal (one-parent families, low educational levels among community members, fear of the school, lack of expertise in instruction or program management, etc.). In a few of the sites we visited, Chapter 1 staff did not try to maintain significant communication

with parents about the program, the needs it addresses, and its application to the parents' children. On the other hand, a comparable proportion of Chapter 1 administrators have made extensive efforts to maintain parent involvement. The results of these efforts are often frustrating, but district staff have often persisted in one way or another. Overall, however, the level of parent involvement in each district we visited was either similar to or less than what it was before Chapter 1 was implemented.

Funding Levels

Turning to the influences on program design that stem directly from federal or state actions in the Chapter 1 policy system, we begin with the major importance of changes in the local funding level. These changes are often understood in Washington as leading to increases or decreases in the overall number of students served. However, they also have other types of effects on program design. Budget increases can provide the slack resources for experimentation with computers or new forms of staffing. Budget cuts can trigger the selective elimination of program components such as grade levels or subject areas.

The Legal Framework

The federal framework of regulations and guidance occasionally dictates specific design decisions, as when district staff consult the guidelines to find out how to design replacement programs. A more important influence of the legal framework is that it establishes general boundaries around acceptable design decisions--one that may encourage caution in changing the existing program and that seems especially powerful where it concerns possible supplanting violations. Relatedly, specific suggestions or prohibitions from SEA staff are an influence on design decisions. These occasionally include suggestions about educationally effective designs but more often, in our sample, revolve around ways of designing compliant programs.

We would like to be able to draw conclusions about trends over time in concerns about compliance. In particular, has the increasing maturity of the program permitted local decisionmakers to reduce their level of anxiety about compliance and to consider a broader range of program options? Because our sample contains a few districts that were visited 4 years ago in one of two studies of federal categorical programs, we have a small amount of longitudinal data with which to address this question. The answer, although a tentative one, is that we do not find a noticeable lessening of compliance concerns. Directors who used to worry about potential violations in their program still do so. In most programs, decisions continue to rest on a wide variety of criteria, while the Chapter 1 director continually attends to ways of justifying local choices to state monitors.

The Supreme Court's ruling in Felton is a part of the legal framework worthy of separate examination because federally stimulated changes in Chapter 1--as well as changes in social welfare programs more generally--are often gradual and incremental. Yet states and districts responded to Felton almost immediately. It is instructive to review the characteristics of this particular federal directive that produced major change.

The driving force behind local response to the Felton decision appears to be the combination of the Supreme Court's ultimate legal authority, despite the lack of an immediate enforcement mechanism, and the fact that the Court's ruling did not severely penalize or disrupt the public school district's own services (other than the short-term administrative hassle of change). A different ruling, more akin to the desegregation actions of the past, might not have been complied with so readily. Other factors also contributed to district response, among them the lack of ambiguity in the ruling, the existence of viable alternative arrangements, and the strong desire in many districts to preserve cordial relations with the private schools.

Clearly, relative to the other aspects of program design we investigated in this research, the reactions to Felton stand alone. No other federal influence--including the passage of ECIA, federal signals, or budget changes--produced such sweeping and immediate changes. In terms of the

federal legal framework of the current Chapter 1 law, regulations, and guidance, the Supreme Court wields a power not found elsewhere.

State Reform Initiatives

Another set of major policy influences arises outside the Chapter 1 system in the reform initiatives of states (which have received federal encouragement). As important as the SEA Chapter 1 office is in defining the options for local programs, its influence is at least matched by that of other initiatives at the state level. Educational reform efforts advanced by the state legislature, governor's office, or chief state school officer may have indirect but significant effects on the design of local Chapter 1 services.

Our data contain a striking number of examples of the powerful effects of state testing initiatives. Whether the tests are required for high school graduation or for promotion at earlier grade levels, they affect local Chapter 1 programs in several ways. Several of our districts have shifted Chapter 1 services into the grade levels where the testing takes place. Program decisionmakers are also making sure that the Chapter 1 curriculum covers the skills required for the test. The specific effects, of course, vary from state to state; we visited one state in which local programs have begun to incorporate higher-order skills in response to state efforts to test these skills, and another state in which local programs stay away from such skills in part because of the state's emphasis on basic skills.

We found one instance in which a state's emphasis on reform at the school level affected the Chapter 1 program. After conducting a state-developed needs assessment and receiving technical assistance from the SEA, a district identified one school with severe problems and decided to put a Chapter 1 schoolwide project in that school.

New state requirements concerning staff quality or qualifications have not directly influenced the decisions we studied, but we found a few examples that illustrate how these could affect Chapter 1. Two states in our sample

require that all instruction be delivered by certificated personnel, thus precluding both instructional designs based on the use of aides and extensive parent involvement in classroom instruction. Districts that have difficulty recruiting qualified staff may find that such requirements exacerbate this problem.

Finally, when states offer supplemental funding for education programs, one result can be that there are more services available for the Chapter 1 population and more programs for Chapter 1 to be connected to.

Responsiveness or Resistance to Change

Because responsiveness or resistance to change is an important concern with categorical programs, especially those like Chapter 1 that have been around for a long time, we offer a few observations. Our sample was drawn so as to minimize the inclusion of programs that resist change across the board; therefore, the fact that we found many instances of change does not permit us to conclude that Chapter 1 programs typically welcome change. However, we learned a great deal about the patterns of stability or change and the factors that promote or inhibit alterations in design.

For one thing, it is clear at this stage of the program's maturation that sweeping changes in design or approach are unlikely to occur. Although we selected programs for the presence of change, we were struck by the cautious, often incremental nature of the change process. In one year, computers might be added to the middle school component or the staffing pattern altered at the elementary level to deemphasize aides in the classroom (without removing all of them from in-class settings); a similar change then might be effected in subsequent years at another grade level. Our analyses of the forces in the local settings, affected as they are by policy forces that set boundaries around the range of compliant designs, have dramatized why the scope of change is typically narrow.

We had a chance to observe the complex equilibrium associated with instructional design decisions. Even in small districts, multiple parties

must be reasonably satisfied with a decision for the program to work; in large districts, assembling a coalition behind a design feature can be a major challenge. A finding that can be generalized beyond our sample is that the equilibrium is more complex in categorical programs because another actor, the SEA Chapter 1 office, enters the picture, wielding the power to withhold funds or (more realistically) to make life unpleasant for local administrators until compliance is demonstrated. To the extent that SEA monitors prefer the status quo in a program, change will often be that much more difficult to bring about. We can also assert that, as managers of a categorical program, Chapter 1 decisionmakers often have more people to convince of a design change than their counterparts in the regular instructional program.

Local program directors also hold power based on their expert knowledge of program rules. In our sample, this often means that the director simply shapes the final details of a design change to achieve compliance. However, we can reasonably speculate that directors who dislike change may use the specter of noncompliance to block change or, conversely, may invoke the rules to justify a change that others are resisting.

More generally, our findings suggest several ways in which Chapter 1 program designs and decisionmaking processes respond to signals or stimuli that induce change. Some of these signals are local, such as the arrival of new administrators with different educational philosophies or a disappointing experience with the initial implementation of a design. Others are manipulable through federal policy. We have discussed in this section and the previous one the local changes traceable to budget changes, some statutory changes (although the shift from Title 1 to Chapter 1 did little to upset the stability of existing program designs), and the process requirements for decisionmaking. Finally, both SEA Chapter 1 offices and broader state policies--most strikingly in the area of testing and curriculum standardization--are potent sources of influence on program design.

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Appendix A

STUDY METHODS AND SAMPLES

In this appendix, we explain the study design and approach to sampling, describe the sample from which the data was collected, and provide an overview of the methods for gathering the data on which our findings are based.

Overview of Study Design and Approach to Sampling

To answer the study's research questions (see Section I), we gathered information from Chapter 1 programs in 20 local school districts located in 11 states, chosen to fit the requirements of a "multiple-site case study design" (Greene and David, 1984; Miles and Huberman, 1984). Our analytic approach was guided by a "bottom-up" perspective--that is, we started at the local level with the outcome of interest (program design features, design changes) and worked backwards to the various explanations for these outcomes. This approach to policy research examines the phenomenon of interest in schools or districts operating Chapter 1 programs and distinguishes differences attributable to federal and state policies from those attributable to other features of the local or state context. This approach to research had several implications for sampling.

First, the multiple case study design is intended to provide an understanding of local events and their explanations in ways that allow generalizations beyond the sample. The sample of districts was selected to ensure representation on a range of factors that were likely to explain differences in the design of Chapter 1 services (including change in these designs over the last 5 years) and to account for the nature of the decisionmaking process.

Second, all generalizations assert that some feature of a sample describes the features of a population from which the sample is drawn. The logic of generalizing from case studies is somewhat different from that underlying statistical inference, in which rules for developing and assessing inferences from sample to population--that is, estimates of incidence or prevalence--are precisely established in quantifiable terms. Generalizations based on multiple-site case study designs are aimed at a more elusive, qualitative goal more appropriate to the purposes of this study: in effect, we addressed the "population" of explanations for observed Chapter 1 program design features rather than the population of program designs in school districts nationwide. Although the sample did not represent all the ways that a given category of explanations manifests itself, the range of likely explanatory factors was represented.

Meeting Multiple Sampling Demands

Given the large number of possible designs and explanatory factors, we faced a tricky sampling problem. If in selecting districts we emphasized the kinds of factors (independent variables) that may affect design choices, we ran the risk of not getting sufficient variability on the district's Chapter 1 design features (the dependent variables, or outcomes of the local decisionmaking process), and vice versa. This was compounded by the large number of design features we wished to consider and the relatively limited number of sites that we could realistically visit and analyze in a multiple case study design.

We addressed the problem in two basic ways. First, both outcomes and explanatory factors were given equal weight in sampling. This approach was consistent with the goal of the sampling plan in a multiple case study design, which is to select a set of sites that vary on both the outcomes of interest (design features) and the most important explanatory factors (contextual factors, stimuli for change), and to do so in such a way that the explanatory factors vary as independently of one another as possible (see Greene and David, 1984). Second, by taking advantage of within-site variability, we were able to augment the number of analytic combinations

possible in a limited sample (Kennedy, 1979). A large district with many components in its Chapter 1 program, for example, could serve as both an example of a pullout math program and a site for study of the use of in-class aides in a reading program.

Facilitating Retrospective Research Through Sample Choices

It was also important that the choice of sites allow for the reconstruction of "decision histories." The difficulties of eliciting a reliable account of past events are well known. But our choice of sites mitigated this fact in two ways. First, by choosing sites in which key personnel involved in Chapter 1 decisionmaking were still available (although not necessarily in the same roles), we increased our chances of putting together a more complete verbal account of past events. Although the impact of staff turnover on program design decisions was of interest, we did not want staff turnover to be overrepresented in the sample.

Second, wherever possible, sites were selected that had been studied previously and for which pertinent case reports existed. In particular, we took advantage of detailed case reports on Title I program design and decisionmaking from eight sites visited in the 1981-82 school year (after the passage of ECIA but before its implementation) as part of SRI's Cumulative Effects Study and Advanced Technology's Study of Title I District Practices. Of the 40 sites included in those studies, eight met our sampling criteria and were included in our sample. This retrospective data allowed us to trace the course of events that took place. Although district staff had changed in several programs, we had vastly improved retrospective data to form a picture of the historical context for current Chapter 1 program designs and decisions.

Sample Selection

We selected districts for study and, within them, a sample of schools so that we could understand program design decisions at both the administrative

and service delivery levels. The district sample was actually the product of two related processes, one for choosing states and one for choosing districts. Both relied heavily on a "networking and nominating" procedure among knowledgeable individuals in prospective states, districts, national associations, research organizations, etc. Conversations with these individuals quickly yielded a list of approximately 75 candidate sites in 15 states. Phone calls to the Chapter 1 directors in these sites were made to develop complete sampling information and to assess willingness to participate in the study.

In a traditional two-stage sampling process, states are usually selected first on the basis of state-level criteria, followed by the identification of appropriate districts within these states on the basis of district selection criteria. The nature of this study required some modifications to this traditional process. Because there were a large number of sampling considerations (e.g., the presence of rare design configurations, the need for retrospective data), states and districts were identified more iteratively than is typically the case. For example, certain districts that were ideal candidates served to nominate states in the early stages of the networking process.

Criteria for Selecting States

Although the limited number of states included in a multiple case study design cannot represent every possible position on more than a few variables, the most important range of variation on a number of dimensions was represented in our sample. Four primary criteria were considered:

- State political culture. We sought contrast between states in which districts tend to be more and less autonomous, as indicated by the proportion of local budgeting that derives from the state.
- Nature of state Chapter 1 implementation. We chose states that varied on two key dimensions: (1) the state Chapter 1 office's orientation toward compliance vs. program improvement (following the distinction in Research and Evaluation Associates, 1986b); (2) state education agency directiveness or nondirectiveness.

- Type of state compensatory education programs (and other programs serving special-needs populations). We included states with many special-needs programs and some with few or none, thus representing the range of programs or mandates serving special-needs populations (including formula-based general allocation systems). We paid special attention to variation in the presence and nature of a state compensatory education program, including whether the program is administered jointly with Chapter 1 or separately.

- Presence of minimum competency testing initiatives. We included states that had either recent or longer-established competency testing programs, as well as those that did not.

The variation on primary sampling criteria is shown in Table A-1. In addition to satisfying the preceding criteria, we tried to ensure variation among states on the following secondary considerations:

- Region
- Fiscal decline
- Per-capita spending on education
- Population gain or loss
- Reform initiatives.

Criteria for Selecting Districts

Four primary criteria were used in choosing districts for the sample. The first two criteria, district size and the proportion of students below the poverty level, corresponded to stratifying variables used in developing samples for the OERI-sponsored district and school surveys. They are proxies for a cluster of variables that profoundly affect school district organization, the size and complexity of the Chapter 1 program, and the overall arrangement of instructional services.

- District enrollment size. We selected districts across the enrollment size continuum, although larger, particularly urban, districts (which account for a large proportion of the nation's Chapter 1 students) were the most heavily represented in the sample. We used three student enrollment cut points to ensure adequate spread on district size--25,000, 10,000, and 2,500.

Table A-1

VARIATION AMONG SAMPLE STATES ON PRIMARY SELECTION CRITERIA

State	Chapter 1/ State Comp. Education (SCE) Administration	State Minimum Competency or Basic Skills Testing	SEA/LEA Funding Domination	Directive/ Nondirective SEA Influence
West/Southwest				
Arizona	No SCE	Yes	Joint	Nondirective
California	Joint	Yes	State	Directive
Texas	Separate	Yes**	Joint	Directive
Southeast				
Florida	Separate	Yes	Joint	Directive
Georgia	Joint	Yes	Joint	Directive
Louisiana	Separate	Yes	State	Nondirective
Central				
Illinois	No SCE*	No	Joint	Nondirective
Kentucky	???**	Yes*	State	Nondirective
Michigan	Joint	Yes	Joint	Nondirective
East/Northeast				
Maryland	Joint	Yes	Joint	Nondirective
Massachusetts	No SCE	No	Joint	Directive

* State compensatory education program serves only Chicago.

**New 1985-86 school year.

- Student poverty level. Student poverty level is directly related to the number of Chapter 1 students in the district and the amount of Chapter 1 funds available for services to them. This criterion, split at the cut points used for the district survey sample--12% and 25%--ensured a spread on the proportion of Chapter 1 students at any site.

The next two sample characteristics ensured variation on the key outcomes of the study--the design features of district/school Chapter 1 programs and change (or lack of change) in these designs:

- Design of Chapter 1 services. We sought variation on the following Chapter 1 program design features.

  (a) Basic features of the Chapter 1 program's design
  - Grade-level focus (e.g., secondary level or not)
  - Delivery models (e.g., pullout, in-class)
  - Staffing (e.g., certificated teachers, aides, or a combination)

  (b) Options for curriculum, approach, and instructional support
  - Use of computers
  - An emphasis on higher-order skills
  - Parents in instructional support roles

  (c) Arrangements for special groups or situations
  - Arrangements for serving nonpublic school students
  - Schoolwide projects

  (d) Degree of connection between Chapter 1 and core instructional program

- Change in program design. The sample incorporated a range in the nature, number, and degree of changes made in Chapter 1 program design over the last 5 years. For example, most districts made recent changes in their private student participation component in light of recent Supreme Court decisions. Some districts had also made sweeping changes in the focus of their program, the manner with which services are delivered, etc., whereas other sites had not recently made major changes.

To the extent possible, we ensured variation among districts on the following secondary considerations as well:

- Change in Chapter 1 funding levels.
- Metropolitan status.
- Desegregation status.
- Size and heterogeneity of the special-needs populations.

- Number and type of other special-needs services.
- Locus of program control (at the district vs. the school level).
- Presence of nonpublic schools within the district.
- Presence of appropriate respondents.
- Availability of prior research reports describing Title I/Chapter 1 program design and decisionmaking.

Given the available resources, the nature of the questions to be addressed, and the study design parameters, a sample size of 20 sites seemed optimal. To allow for intrastate contrasts (a key analytic tool for sorting out state and district influences on program design), we selected two districts per state, with two exceptions. Two major cities were selected as sole sites within their respective states. This greatly facilitated the need to ensure that all of the rare, yet requisite design features at the local level (e.g., schoolwide projects) were present in the sample while maintaining a good balance of state characteristics. Such a strategy was defensible on the premise that major city districts often interact differently with the SEA than the typical district in a state--in fact, these districts often act somewhat independently of their state. The selection of a second smaller site in such instances would not necessarily have allowed for clear intrastate contrasts.

The characteristics of the district sample are summarized in Tables A-2 and A-3. (Table A-3 indicates site overlap with other OERI-sponsored studies and previous research.)

Table A-2

DEMOGRAPHIC VARIATION AMONG SAMPLE DISTRICTS

State: District	Approximate Student Enrollment* (in 1984-85)	Poverty Percentile (Orshansky)	Desegregation Status	Percentage Black	Percentage Hispanic
WEST/SOUTHWEST					
ARIZONA					
Site A	Very large	39%	Yes	5%	32%
Site B	Medium	15	No	4	35
CALIFORNIA					
Site A	Very large	31	Yes	12	32
Site B	Large	12	Yes	21	9
TEXAS					
Site A	Very large	33	Yes	6	59
SOUTHEAST					
FLORIDA					
Site A	Very large	17	Yes	19	4
Site B	Large	30	No	36	0
GEORGIA					
Site A	Very large	37	Yes	91	0
LOUISIANA					
Site A	Large	38	Yes	24	0
Site B	Very large	28	Yes	55	0

* Student enrollment categories: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Table A-2 (Concluded)

State; District	Approximate Student Enrollment* (in 1984-85)	Poverty Percentile (Orshansky)	Desegregation Status	Percentage Black	Percentage Hispanic
CENTRAL					
ILLINOIS					
Site A	Small	48	No	70	0
Site B	Large	39	Yes	42	0
KENTUCKY					
Site A	Very large	35	Yes	31	0
Site B	Medium	17	No	4	0
MICHIGAN					
Site A	Medium	37	Yes	21	4
Site B	Large	9	Yes	18	8
EAST/NORTHEAST					
MARYLAND					
Site A	Medium	31	No	0	0
Site B	Large	30	No	2	0
MASSACHUSETTS					
Site A	Small	9	No	6	5
Site B	Large	20	No	1	0

* Student enrollment categories: very large = 25,000 or more; large = 10,000 to 24,999; medium = 2,500 to 9,999; small = less than 2,500.

Table A-3

VARIATION AMONG SAMPLE DISTRICTS' SELECTION CRITERIA RELATED TO PROGRAM DESIGN

State; District	LEA/ School Control	Basic Design Features: Grades Served	Basic Design Features: Subjects Addressed	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides	Curriculum/Approach Options: Use of Computers	Curriculum/Approach Options: Focus on Higher-Order Skills	Curriculum/Approach Options: Parent Involvement in Instruction	Arrangements for Special Groups or Situations: Schoolwide Program	Arrangements for Special Groups or Situations: Services for Nonpublic School Students
WEST/SOUTHWEST										
ARIZONA										
Site A[1,5]	Mixed	Pre-K-8*	Reading/math Lang. arts*	In-class Pullout Excess cost Replacement*	Both	Yes	Yes*	Yes	No	Private school site and rectory*
Site B[1]	Mixed	K-8	Reading Lang. arts Science*	In-class Pullout	Both	Yes*	No	No	Yes*	Extended day*
CALIFORNIA										
Site A[1,2,4,5]	School	Pre-K-12	Reading/math Lang. arts	In-class* Pullout	Both	Yes	No	No	No	Suspended*
Site B[1]	LEA	K-8	Reading/math Lang. arts	In-class Pullout	Aides	Yes*	No	No	No	Van in purchased parking slot
TEXAS										
Site A[1,2,4,5,6]	LEA	Pre-K-6	Reading* Lang. arts	Pullout Excess cost*	Both	Yes	No	No	No	Remote computer*

1 - Site overlap with district survey sample (REA).
2 - Site overlap with telephone follow-up sample (REA).
3 - Site overlap with targeting sample (SRA).
4 - Site overlap with school survey sample (Westat).
5 - Site overlap with Cumulative Effects Study or Title I District Practices Study.
6 - Exemplary Projects (participation in ED recognition project).

* - Recent change in the last 5 years.

Table A-3 (Continued)

State; District	LEA/ School Control	Basic Design Features: Grades Served	Basic Design Features: Subjects Addressed	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides	Curriculum/Approach Options: Use of Computers	Curriculum/Approach Options: Focus on Higher-Order Skills	Curriculum/Approach Options: Parent Involvement in Instruction	Arrangements for Special Groups or Situations: Schoolwide Program	Arrangements for Special Groups or Situations: Services for Nonpublic School Students
HEAST										
IDA										
A[1,5]	Mixed	2-6*	Reading/math Lang. arts	In-class Pullout Replacement*	Both*	Yes*	No	No	No	Remote computer and vans*
B[1,3]	Mixed	K-5*	Reading/math*	In-class* Pullout	Teachers	Yes*	No	No	No*	1-year SEA dispensation in nonpublic schools
GIA										
A[1,2]	LEA	1-12*	Reading/math Lang. arts	In-class Limited and extended day Pullout Replacement	Both	Yes	No	No	No	Temporarily dropped
SIANA										
A[1]	Mixed	K-8	Reading/math	In-class Pullout Replacement	Aides*	Yes*	No	No	No	Busing*
B[1,2,4,5]	LEA	Pre-K-5*	Math Lang. arts	In-class Pullout* Extended day	Both	No	No	No	No	Temporarily dropped*

Site overlap with district survey sample (REA).
Site overlap with telephone follow-up sample (REA).
Site overlap with targeting sample (SRA).
Site overlap with school survey sample (Westat).
Site overlap with Cumulative Effects Study or Title I District Practices Study.
Exemplary Projects (participation in ED recognition project).

ecent change in the last 5 years.

Table A-3 (Continued)

State; District	LEA/ School Control	Basic Design Features: Grades Served	Basic Design Features: Subjects Addressed	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides	Curriculum/Approach Options: Use of Computers	Curriculum/Approach Options: Focus on Higher-Order Skills	Curriculum/Approach Options: Parent Involvement in Instruction	Arrangements for Special Groups or Situations: Schoolwide Program	Arrangements for Special Groups or Situations: Services for Nonpublic School Students
TRAL										
NOIS										
A	LEA	K-9*	Reading/math Lang. arts	In-class Replacement Summer school	Both	No	No	No	Functional equivalent	None*
B[1]	LEA	Pre-K, 1-8	Reading/math Lang. arts	Extended day Pullout	Both	Yes*	No	No	No	Public site*
UCKY										
A[1,6]	Mixed	1-12	Reading/math*	In-class Pullout	Both	Yes	Yes*	No	No	In nonpublic schools, by local restraining order*
B	LEA	1-9	Reading/math	Pullout Replacement	Both*	No	No	No	No	Van*
GAN										
A[1]	LEA	Pre-K-8*	Reading/math Lang. arts	In-class Pullout	Both	Yes*	Yes*	Yes	No	Remote computer*
B[1,5]	School	1-5	Reading*	In-class Pullout	Both	Yes	Yes*	No	No	Busing*

ite overlap with district survey sample (REA).
ite overlap with telephone follow-up sample (REA).
ite overlap with targeting sample (SRA).
ite overlap with school survey sample (Westat).
ite overlap with Cumulative Effects Study or Title I District Practices Study.
xemplary Projects (participation in ED recognition project).

ecent change in the last 5 years.

Table A-3 (Concluded)

State; District	LEA/ School Control	Basic Design Features: Grades Served	Basic Design Features: Subjects Addressed	Basic Design Features: Delivery Model	Basic Design Features: Teachers or Aides	Curriculum/Approach Options: Use of Computers	Curriculum/Approach Options: Focus on Higher-Order Skills	Curriculum/Approach Options: Parent Involvement in Instruction	Arrangements for Special Groups or Situations: Schoolwide Program	Arrangements for Special Groups or Situations: Services for Nonpublic School Students
EAST/NORTHEAST										
MARYLAND										
Site A[1,2]	LEA	1-5	Reading/math	In-class	Both	No	No	Yes	No	None
Site B[1,5]	School	Pre-K-5*	Reading/math	In-class Pullout	Both	No*	No	Yes	No	Temporarily dropped*
MASSACHUSETTS										
Site A[5]	LEA	K-10	Reading	Pullout	Teachers*	Yes*	No	No	No	Busing*
Site B[1]	School	Pre-K-9*	Reading/math	In-class Pullout	Both	Yes*	Yes*	Yes	No	Public site and extended day

- Site overlap with district survey sample (REA).
- Site overlap with telephone follow-up sample (REA).
- Site overlap with targeting sample (SRA).
- Site overlap with school survey sample (Westat).
- Site overlap with Cumulative Effects Study or Title I District Practices Study.
- Exemplary Projects (participation in ED recognition project).

- Recent change in the last 5 years.

Sampling Schools within Districts

Once the district sample was finalized and districts agreed to participate, we identified candidate public schools through telephone contacts with program staff in these districts. The following steps were involved:

(1) We described school selection criteria to the district contact person (typically the Chapter 1 coordinator or the director of state and federal programs).

(2) Suggestions were solicited from the contact person, making sure to ask for contrasting cases within each category (e.g., high-concentration schools that were considered effective and ineffective; schools using in-class services that did and did not change in the last 5 years).

(3) We then assembled a candidate list that was approximately twice the number needed for the sample.

(4) A tentative selection of schools was made, with attention to the overall distribution of school factors across the whole sample.

(5) We remained flexible to add or subtract schools on the sample list based on new information gained on-site.

The choice of schools was made to maximize variation on these four primary criteria:

- Concentration of eligible students. Because the proportion of a school's students eligible for Chapter 1 services was a key design consideration--leading, for example to complex coordinative arrangements in schools with high concentrations of eligible students and, in the extreme case, the possibility of schoolwide projects--we chose schools ranging from those with high concentrations to those with relatively few.

- Number of other special services within the school. Schools were chosen with a varying number and mix of special services.

- Design and types of Chapter 1 services. Schools were chosen that represented important design variations as determined by the district-level plan or by school-level choices (where these occurred).

- Change in program design. As at the district level, schools might or might not have changed the design of their Chapter 1 services in the last 5 years. We included instances of both, and included variation in degree of change.

Other considerations were also taken into account in the selection of schools:

- Effectiveness/ineffectiveness (in terms of academic performance)
- School enrollment size
- Availability of appropriate respondents.

The number of schools chosen in each district depended on the size of the district and the degree to which the schools varied on the factors discussed above. Table A-4 identifies the range in the number of schools visited by district student enrollment categories.

Table A-4

NUMBER OF SCHOOLS PER DISTRICT

Size of District	Number of Schools
Small (Enrollment < 2,500)	1-4
Medium (2,500-9,999)	2-7
Large (10,000 - 24,999)	3-6
Very large (Enrollment ≥ 25,000)	5-6

The degree of uniformity among schools within a given district altered the number of schools we visited. In districts that imposed tight control over schools and insisted on standardized designs, for example, it was not necessary to visit as many schools as in districts that permitted more school discretion. Regardless of the district characteristics, we were generally not able to visit enough schools to cover the full range of variation in each district. However, across the full sample of 81 schools, the full range of variation on Chapter 1 program design features was represented.

Overview of Data Collection Methods and Procedures

The study gathered information at the school and district levels from on-site interviews with Chapter 1 program staff, other special program staff (e.g., special education program coordinator, bilingual education program coordinator), line administrators (e.g., superintendent or assistant superintendent, director of curriculum), other relevant district staff (e.g., desegregation coordinator, math coordinator, reading coordinator, evaluator), principals, teachers, and aides (where these were part of the Chapter 1 program). Additionally, representatives from the community (e.g., the district PAC chair) and the school board were interviewed.

Our approach to data collection incorporated the following general features:

- Data collection was done by two-person teams--a "primary site visitor" (research staff from SRI and PSA) and a "research assistant" visited each of the 20 districts. Research assistants rotated, so that the two-person team for each site varied. Each site visitor visited two or three sites.

- The length of the site visit depended on the size of the district, ranging from 2 days in small sites to 5 days in very large sites. The average site visit lasted 4 days. On average, site visitors spent approximately 2 days interviewing district-level staff, 1.5 days interviewing school-level staff, and .5 day reviewing and collecting local documents.

- Site visits were conducted in two waves. The first 12 sites were visited during January and February 1986. After the first site visits were completed, site visitors participated in debriefing sessions that were designed to stimulate new hypotheses and guide later data collection. The remaining eight site visits were completed by the beginning of April.

Additional data sources complemented the direct data gathering and reduced the amount of information that needed to be collected from local respondents. These sources included:

- Background materials requested from state and district Chapter 1 coordinators.

- Information about sites in which SRI or study team members had previously conducted research such as case study reports and relevant documentation (e.g., Title I District Practices and Cumulative Effects study sites).

- Compilations of demographic characteristics from universe tapes (QED, NCES).
- Informational phone calls to sites for sampling purposes, which yielded a capsule description of current program designs and recent changes.

These data were used to develop a profile of each district (and school) in the sample and to characterize their Chapter 1 program with respect to instructional delivery, curricular organization and emphases, physical facilities and location, staffing, student participant profile, selection criteria, and so on. Site visitors carefully reviewed this information prior to their primary data collection visits as a way of becoming familiar with the salient features of their sites.

Information Collection Guides

Information collection guides used in data collection consisted of a list of topics to be covered by all site visitors at each district. The guides were unlike structured interviews because they outlined topics, not a set of questions, to be asked of the most appropriate persons in an LEA. Since the site visitors were familiar with the characteristics of each of their districts before data collection, they were easily able to determine the most appropriate persons to question on each topic.

The guides served the following two purposes: they structured actual data collection sufficiently to ensure comparability across cases (without losing the uniqueness of each case) and also ensured that all of the needed data were recorded.

The information collection guides used to obtain a detailed description of the district's 1985-86 Chapter 1 program included topics and subtopics regarding the current (and past) decisionmaking process to elicit the following:

- Key elements in the district's Chapter 1 decision process (e.g., cast of characters, timing, form).

- Levels at which different decisions are made (e.g., state, district, school).
- Dominant mode of decisionmaking in the district.
- Typical phases or stages in the decisionmaking process.

Information collection guides then included sections related to all aspects of the instructional program design (as described in report Sections V-XIV) and the associated changes.

Prompted by explanatory topics and probes in the information collection guides, staff interviews and document reviews were aimed at understanding how Chapter 1 program design choices were made, who was involved, and when and why decisions were made. Site visitors collected information with which to assess the influence of the following factors on program design and changes over time:

- Federal policy (e.g., Chapter 1 rules and regulations, funds, signals, sanctions).
- State contextual factors (e.g., priorities, reform initiatives, other special programs, fiscal programs, state political culture).
- State implementation of Chapter 1 (e.g., application policy and procedure, technical assistance approach, maintaining and auditing, evaluation).
- District decision process (e.g., players, focus, timing, form, information).
- District contextual factors (e.g., organization, demographic profile, student enrollment, fiscal condition, pedagogical preferences).
- School decision process (e.g., players, focus, timing, form, nformation).
- School contextual factors (e.g., instructional organization, leadership, student population).

Although the topical guides were semistructured, they contained probes designed to elicit concrete examples from respondents rather than general statements. We developed a set of topical guides, one for each district role group at the school or district level.

Selecting Respondents

Potential individual respondents were identified throughout the site selection process. Factors such as longevity on-site and familiarity with program specifics were considered heavily. In addition, we interviewed respondents who represented a range of contrasting role positions (vis-a-vis decisionmaking). Once a site was included in the final sample and the process of scheduling the visit began, we verified our interest in talking with individuals already identified and suggested the nature of additional contacts we would like to make. As schools were nominated for a visit, the list of individual contacts was expanded. Once on-site, we continued to look for additional individuals to add to the list and serve as sources of confirmation or contrast.

Tables A-5 and A-6 identify the typical district- and school-level respondents interviewed on-site.

Table A-5

AVERAGE NUMBER OF RESPONDENTS INTERVIEWED
AT THE DISTRICT LEVEL, BY DISTRICT (ENROLLMENT) SIZE

Respondent	Small (Under 2,500)	Medium (2,500-9,999)	Large (10,000-24,999)	Very Large (25,000+)
Superintendent	1	1	1	1
School board member	1	1	1	1
Chapter 1 advisory committee member	1	1	2	2
Present Chapter 1 director/staff	1	1	2	3
Former Chapter 1 director (if available)	1	1	1	1
Director of federal and state programs	1*	1*	1	1
Director of curriculum and instruction	1*	1*	2	2
Coordinator of other categorical programs (e.g., bilingual education, special education)	--	1*	2	3
Specialized administrative staff, if appropriate (e.g., budget director, legal staff, evaluators)	1	2	3	4
Total	8	10	15	18

* If separate individuals occupied these positions.

Table A-6

RESPONDENTS INTERVIEWED IN PUBLIC SCHOOLS

Respondent Role Groups	Average Number of Persons in Each Role Group Interviewed at Each School
Principal	1
Chapter 1 teacher	2
Chapter 1 aides and/or parent volunteers (if these exist)	2
Other resource/special program teachers	1
Regular classroom teachers	2
Total (per school)	8

Appendix B

TITLE I AND CHAPTER 1 PROVISIONS AND REGULATIONS RELATED TO PROGRAM DESIGN AND DECISIONMAKING

In this appendix, we describe the provisions in Title I and Chapter 1 law, regulations, and nonregulatory guidance that pertain to program design or to local decisionmaking, noting changes that occurred under the Education Consolidation and Improvement Act. We include the 1983 Technical Amendments in our discussion. Title I references are based on the 1978 amendments and the final regulations issued in 1981.

Requirements Related to Chapter 1 Decisionmaking Process

The principal influences on the process of decisionmaking derive from procedural requirements in Title I/Chapter 1 law, regulations, and nonregulatory guidance. We display the relevant requirements below, and note changes from Title I to Chapter 1:

Title I Requirements (As of 1978 Amendments)	Chapter 1 Requirements, Noting Change/Continuity
Needs assessment	
Must be done yearly, to:	
. Identify and select educationally deprived children who have greatest need.	Basically the same, following clarifications in Technical Amendments.
. Identify the general focus of instruction for the program.	
. Determine educational needs of participating children.	
	Nonregulatory guidance adds that educational needs of identified educationally deprived children in private schools must also be considered in determining the instructional services to be offered.

Title I Requirements (As of 1978 Amendments)	Chapter 1 Requirements, Noting Change/Continuity
Consultation	
(a) With teachers/school staff	
Teachers and school boards must be involved in planning, evaluation.	No mention of school boards. Teachers involved in the program must be consulted. Nonregulatory guidance suggests how teachers might be consulted (e.g., special meetings to discuss Chapter 1 program).
(b) With parents	
. Parents of children participating must be permitted to participate in planning. . LEA must establish district- and school-level elected advisory councils and involve them in planning, implementation, and evaluation processes.	Advisory councils no longer required. Projects must be designed and implemented "in consultation with" parents. Technical Amendments add that parents must be consulted at least annually. Final regulations further add that the discussions at such meeting(s) shall inform parents of rights of involvement, solicit parents' input, and provide them with opportunity for ongoing communication with district staff. Nonregulatory guidance suggests options for parent consultation (e.g., ongoing contact through a "parent coordinator," systematic dissemination of program application, documents to parents). Final regulations state that form of parent involvement is at LEA's discretion. Regulations add that parent involvement procedures must be documented. Suggestions for possible parent involvement activities are given.
(c) With private school teachers and parents	
No specific mention of involving private school teachers or parents.	Requirements specifically call for consultation with parents and teachers of participating private school children.

Title I Requirements (As of 1978 Amendments)	Chapter 1 Requirements, Noting Change/Continuity
Consultation	
Evaluation	
LEAs must evaluate program effectiveness using TIERS models. Evaluation must include objective measures of program effects on educational achievement over a 1-year period. LEAs must also evaluate the overall program and use results in planning.	LEAs no longer required to use TIERS evaluation models, but are required to use objective measures of educational achievement over a 1-year period. Pre- and post-tests are suggested in non-regulatory guidance as a way to meet requirement. Technical Amendments add that evaluation results must be used in program planning.

Other features of federal policy may influence the decisionmaking process as well. The parallel provisions (or lack of them) in other federal programs, for example, affect decisions made about students who may also participate in Chapter 1. The way state agencies monitor or audit local programs also determines how seriously districts take any of the above requirements.

Requirements Related to Program Design Choices

Few requirements in either Title I or Chapter 1 relate directly to program design choices, because these are largely left to local discretion. However, the interpretation of the following requirements may have contributed to particular choices among service design features:

Title I Requirements (As of 1978 Amendments)	Chapter 1 Requirements, Noting Change/Continuity
Program size, scope, and quality	
Projects must involve an expenditure of at least $2,500 (an SEA can reduce this minimum in some instances).	Minimum expenditure not specified. Projects must show promise to make substantial progress in meeting needs of children served.
Coordination with the regular instructional program	
Regulations state that program must be coordinated with the regular instructional program.	Clause deleted.
Participation of private school students	
LEAs must provide for participation of children enrolled in private schools residing in an LEA Title I project area.	Almost identical.
Schoolwide projects	
Any school serving an attendance area where at least 75% of the children are from low-income families may use funds to upgrade the entire educational program, upon SEA approval, provided extra state or local funds are allocated to the school.	No mention in Chapter 1 law. Technical Amendments added provisions for schoolwide projects with language almost identical to Title I.
Supplement-not-supplant	
Funds should be used to supplement the level of funds that, in the absence of these federal funds, would be made available for children participating in the program. Funds cannot be used to supplant regular funds from non-federal sources.	Almost identical, except law now specifically states that pullouts are not required to show compliance. Nonregulatory guidance provides examples of acceptable delivery models (e.g., in-class limited pullout) using Title I language (see below).
Final regulations (1981) added that pullout programs are not required to show compliance with this requirement.	

Title I Requirements (As of 1978 Amendments)	Chapter 1 Requirements, Noting Change/Continuity
Delivery models	
No specific delivery models are mentioned in law; final regulations (1981) list five acceptable models that meet excess-cost and supplement-not-supplant requirements.	No mention of delivery models in law or regulations; however, Title I language appears in ED's nonregulatory guidance.

Aspects of Local Program Design and Decisionmaking That These Requirements May Influence

Conceptually, these requirements pertain to particular aspects of the decisionmaking process (as discussed in Section II) and to certain kinds of program design features. We display the most obvious relationships below; other, more indirect connections between the requirements and the phenomena under study are possible (we have noted these in text where relevant).

What Federal Regulatory Framework May Influence	Sources of Regulatory Influence
Local decisionmaking process	
Participants	. Consultation requirements (parents, teachers, private school officials)
Form of decisionmaking	. Current requirements for annual parent meetings; past requirements for district and school advisory councils
	. Implied rational planning sequence that starts with needs assessment and ends with evaluation
Kinds of information considered	. Needs assessment and evaluation requirements; guidance (and technical assistance) regarding appropriate evaluation models

What Federal Regulatory Framework May Influence	Sources of Regulatory Influence
Program design features	
Grade-level focus	. School and student targeting requirements . Local interpretation of "greatest needs" provisions
Delivery model	. Local interpretation of supplement-not-supplant (or excess-cost) requirements . Explicit denial that formal pullouts are necessary . Provisions governing specific designs such as schoolwide projects . Guidance regarding acceptable excess-cost designs
Staffing (qualifications)	. Provisions governing teacher training . Past requirements specifying that aides come from disadvantaged community
Connection with other instructional programs	. Past requirements encouraging close relationship with regular instructional program

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