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ABSTRACT

This report presents the results of a two-year project to design, pretest, and revise the Statistical Survey of Elementary Schools, which is intended to provide information on federally funded elementary education programs operating in local public school systems. The report also documents the activities and decisions that brought about these results. (Author)

NCES 76-303

Statistical Survey of Elementary Schools: Development of a Large-Scale Survey 1972-74

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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NATIONAL CENTER FOR EDUCATION STATISTICS

"The purpose of the Center shall be to collect and disseminate statistics and other data related to education in the United States and in other nations. The Center shall . . . collect, collate, and, from time to time, report full and complete statistics on the conditions of education in the United States; conduct and publish reports on specialized analyses of the meaning and significance of such statistics; . . . and review and report on education activities in foreign countries."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

Prepared jointly by RMC Corporation and Intran Corporation of Minneapolis for the National Center for Education Statistics under Contract No. OEC-0-72-5224 with the U.S. Department of Health, Education, and Welfare, Office of Education. Contractors undertaking such projects are encouraged to express freely their professional judgment. This report, therefore, does not necessarily represent positions or policies of the Government, and no official endorsement should be inferred.

FOREWORD

This report presents the results of a 2-year project to design, pretest, and revise the Statistical Survey of Elementary Schools, which is intended to provide information on federally funded elementary education programs operating in local public school systems. The report also documents the activities and decisions which brought about these results.

This project was undertaken jointly by RMC Corporation and Intran Corporation of Minneapolis, under Office of Education Contract No. OEC-0-72-5224. Key National Center for Education Statistics (NCES) personnel responsible for the conduct of the study were John Sietsema, Lois Green, and Susan Hill.

Other DHEW staff providing guidance were Harold Nisselson (NCES), Nancy Bradley Royall (BESE), and Lois Elliott (BEH). Jimmie Fortune of Virginia Polytechnic Institute and David Berliner of Far West Regional Educational Laboratory acted as consultants.

Special thanks go to those in State and local education agencies whose cooperation was essential in carrying out the project. Of great assistance was the Committee on Evaluation and Information Systems of the Council of Chief State School Officers, and particularly Jerry Barton of Texas and Clyde Bezanson of Minnesota. Special mention is merited by the 594 respondents—teachers, principals, school district coordinators—who not only completed questionnaires but also contributed valuable and constructive comments.

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OVERVIEW

This report is the result of RMC Research Corporation's contract with the National Center for Education Statistics (NCES) to redesign the Elementary School Survey (ESS). The last ESS was conducted in the spring of 1971. During the course of this contract with NCES, the name of the survey was changed to the Statistical Survey of Elementary Schools (SSES) and it will be referred to in this manner throughout this report.

With the passage of the Elementary and Secondary Education Act of 1965 (ESEA), Congress initiated a series of legislative actions designed "to meet the special educational needs" of certain specific groups of children. Among those who have received the benefits of this legislation since that time are educationally deprived children from low-income families, children of migrant agricultural workers, neglected and delinquent children, children from homes where the primary or dominant language is not English, and handicapped children.

The ESS began in 1968 as a compensatory education survey and has grown in importance over the years. The new SSES is specifically designed to help program planners within the Bureau of School Systems and the Bureau of Education for the Handicapped (BEH) answer the basic question of how well the education community has complied with the intent of ESEA legislation in making various special programs available to the children for whom they were designed. However, the survey is not an evaluation as such but rather provides baseline descriptive data on programs provided by ESEA titles I, III, and VII, as well as programs for the handicapped. In addition information is obtained on several other areas, including pupil mobility, teacher characteristics as related to pupil performance, and educational broadcasting. The first two of these areas are new to this survey and appear at the request of the National Institute of Education (NIE). The last is of special importance to NCES.

The SSES was initially part of a larger data-collection system that evolved from an agreement between the U.S. Commissioner of Education and the Council of Chief State School Officers. As a result of this agreement, the SSES represents a major effort to consolidate the data requirements of all the bureaus and offices within the U.S. Office of Education (OE). With this in mind, an attempt was made early in the redesign stage to eliminate potential data overlaps between this survey and other data collection efforts.

As originally planned, the survey was designed to produce a set of data elements linked to policy questions that had been developed by the New England School Development Council (NESDEC). This linking process was to result in new questionnaires that would be pretested in 50 school districts drawn from a number of States that had volunteered to participate. At the beginning of the study, six major tasks were envisioned:

- Task 1: Policy Question Review
- Task 2: Instrumentation
- Task 3: Field Test
- Task 4: Analysis Plan
- Task 5: Logistics Plan
- Task 6: Reliability and Validity Study

The original contract for this study began in July 1972. Intran Corporation, working under subcontract to RMC, began work at the same time. The study was scheduled to end in June 1973, but NCES postponement of the spring 1973 pretest resulted in an extension of funding and time until September 30, 1974.

Work progressed under the organization of tasks described above through the early spring of 1973. Task 1 was completed and a report on this activity was submitted in November of 1972. Following the process of establishing data elements, six sets of questionnaires were developed from November through February of 1973. These consisted of the first draft questionnaires, followed by five complete revisions. Each set of questionnaires involved four instruments:

district, school, teacher, and pupil questionnaires. After what was thought to be the final revision, an OMB clearance package was submitted to OE in February of 1973 and plans were begun to pretest the survey in the spring.

However, because the questionnaire development and revision process had taken considerably longer than expected, insufficient time remained to prepare for a proper pretest. In addition, NCES had surfaced some questions concerning the intent of the technical supporting statement in the Office of Management and Budget (OMB) clearance package that, if left unanswered, would delay the clearance process. Consequently, NCES made the decision to postpone the pretest until at least the fall of 1973. The reasons for the postponement were generally as follows:

- prolonged instrumentation and revision of questionnaires,
- NCES questions concerning portions of the OMB submission,
- insufficient time to prepare a revised OMB package and receive OE and OMB clearance early enough to print and mail survey packets to SSES survey coordinators prior to April 6 (the last date schools could receive the questionnaires and still be expected to complete them before the end of the school year), and
- internal discussion within OE as to the relevancy of the SSES in light of uncertain program funding.

The contractor was notified of the postponement on March 23, 1973, and at the same time was asked to prepare a revised plan for pretesting the instruments and procedures in the fall of 1973.

The *Revised Plan for Redesign of the Elementary School Survey* was submitted to NCES on April 13, 1973. This plan actually encompassed suggestions for two basic approaches to the pretest. Plan I involved little more than carrying on with the strategy developed to date, revising some of the methods for testing alternatives in the field during the pretest, and establishing the fall of 1973 as the target date for pretest operations.

Plan II was much broader in scope. During the course of the contract, it had become apparent to all involved that the NESDEC policy questions used in the design of the questionnaires were outmoded. A more flexible approach to the policy question concept was needed—one that would meet current data needs and that would be easily adaptable in the future for changing legislation. This last point was particularly important in light of changes in ESEA legislation that were imminent at the time (i.e., the proposed Better Schools Act, Education Special Revenue Sharing). Plan II proposed to identify new policy issues and change the thrust of the data collection to a pupil target group orientation instead of the program-related emphasis that had been used until then.

During the ensuing months a totally new plan that combined plans I and II was developed. NCES felt this new plan was the one that would receive the most favorable acceptance from OMB. Concurrently, details of the technical approach for the development and analysis of the pretest were also being worked out with NCES. This development and evolution continued until August of 1973, during which time the contractor modified and updated questionnaires and prepared a general statement of contract plans for the coming year. Since considerable revision of the questionnaires was anticipated during the next few months, the pretest was once again postponed—this time until the spring of 1974.

An intensive review of the study and the revised questionnaires occurred during meetings held August 29 and 30, 1973, with the Subcommittee on School Surveys of the Committee on Evaluation and Information Systems (CEIS). Following the CEIS meetings, RMC began another round of questionnaire reviews and revisions that extended well into November of 1973. Numerous discussions and meetings took place with data users such as BESE, BEH, NIE, and NCES. At the same time, the comments and suggestions of the CEIS members were considered during the revision process. While the new questionnaires maintained the original program-related approach, new questions were developed that reflected current policy issues and user needs, as well as a greater emphasis on identifying and counting relevant pupil target groups. In addition, questionnaire, logistics, and sampling alternatives were being developed for the pretest. These alternatives are defined and analyzed in later chapters of this volume.

In October 1973, NCES and the contractor jointly agreed on a more precise definition of tasks and the direction the study would take. This was reflected in RMC's *Revised Technical Proposal* of October 5, 1973. In general, the tasks fell into three main categories with a grouping of subtasks for each. The major categories were: instrumentation, field test, and developing recommendations. Figure 1 shows the October 5, 1973, project schedule and outlines the subtasks.

When the contract was amended and the time extended to complete the new tasks, RMC outlined goals for the pretest, which were to:

(1) supply information on how well alternatives, instruments, and procedures worked when implemented; and
(2) make recommendations on how the instruments and procedures could be revised for the full-scale implementation.

Figure 1.–Proposed SSES project schedule
October 5, 1973[a]

Task	1973 S	O	N	D	1974 J	F	M	A	M	J	J	A
Task 1: Policy Question Review												
Task 2: Instrumentation												
Subtask 2.1: Revision of D, S, T, and P Questionnaires	2.1											
Subtask 2.1.1: OE Review and Signoff	2.1.1											
Subtask 2.2: Develop Field Test Plan	2.2											
Subtask 2.3: Develop R&V Instruments				2.3								
Subtask 2.4: Prepare OMB Package	2.4											
Subtask 2.4.1: OE Technical Review and OMB Clearance					2.4.1	OMB clearance						
Task 3: Field Test												
Subtask 3.1: Field Test Preparation					3.1							
Subtask 3.1.1: Data Collection from LEA's						3.1.1						
Subtask 3.2: Preliminary Analysis of Field Test						3.2						
Subtask 3.3: Conduct R&V Checks (Field Test Site Visits)							3.3					
Subtask 3.4: Analysis of Field Test											3.4	
Subtask 3.5: Revise Questionnaires											3.5	
Task 4: Recommendations for Developing Analysis Plan (for full-scale implementation)											4	
Task 5: Recommendations for Developing Logistics Plan (for full-scale implementation)											5	
Task 6: Recommendations for Developing R&V Plan and Instruments (for full-scale implementation)												Final Report

a. This schedule was revised and extended to September 1974 after the OMB clearance procedure delayed project activities.

To achieve these goals, six major objectives were established for the pretest. These objectives were to:

(1) collect information that would be used to refine the instruments and procedures so that they would be clear and unambiguous,
(2) develop and test alternatives for obtaining a random sample of pupils using procedures capable of being audited,
(3) develop auditable procedures for obtaining a stratified sample of schools and for oversampling pupils,
(4) develop alternatives for selecting the most suitable respondent for certain data requests,
(5) collect validity data on selected items, and
(6) refine the instruments and procedures so they would provide meaningful and interpretable data that would meet the needs of clients served by NCES.

These objectives are described in a document entitled *Plan for the Pretest of the SSES*, dated December 12, 1973.

The pretest plan outlined how the six objectives were to be accomplished and served as a guidebook for conducting the pretest. Tables were presented for each objective describing:

(A) the objective itself,
(B) the method to be used in achieving the objective,
(C) the analysis needed, and
(D) recommendations.

Through the use of a coding system, each table was linked to a technical appendix that gave full details for each of the four points above. The tables were designed to provide an overview of the pretest in a concise format and to serve as an index to a detailed technical discussion of each activity.

During the time that the pretest plan was being developed, questionnaire revisions were completed and included as part of an OMB package that was submitted to NCES on November 30, 1973. While awaiting clearance (which was received on March 20, 1974), further preparations were made to put the survey in the field. Mailout of survey materials took place on April 12, 1974. Validation and sample check site visits to 20 participating LEA's began in early May.

The remaining chapters in this volume detail the activities described in general here and present the major results of the pretest.

Chapter 2

QUESTIONNAIRE DESIGN

INTRODUCTION

Questionnaire development for the SSES can be looked at in two distinct stages. The first stage was basically a redesign of the 1971 ESS. Questionnaire design was structured around policy questions that were developed by NESDEC and approved by the U.S. Office of Education (OE). An attempt was also made at this point to minimize the replication of data elements requested on other surveys, such as the Consolidated Program Information Report (CPIR) and Elementary Secondary General Information Survey (ELSEGIS). In this way, it was hoped to reduce the response burden on LEA's participating in more than one Federal survey and thus encourage cooperation for the SSES. As a result of these efforts, early draft questionnaires revealed a strong link between data elements and the New England School Development Council (NESDEC) policy questions.

However, during the second stage of questionnaire development, a significant change in emphasis occurred. Just prior to the postponement of the pretest (from spring 1973 to spring 1974), the questionnaires had begun to show a definite user-need orientation with less emphasis on the NESDEC policy questions. Since the postponement allowed more time for questionnaire revision, it was decided to develop the user-need approach in more depth. Questions were also added or redesigned to obtain data on pupil target groups. This last shift came about as a result of then impending legislation: the proposed Better Schools Act, Education Special Revenue Sharing.

The following sections of this chapter describe the events leading up to the final pretest questionnaires that were implemented in April 1974.

QUESTIONNAIRE DEVELOPMENT PRIOR TO PRETEST POSTPONEMENT

Policy Question Review

At the onset of the study, the NESDEC policy questions were the central force behind the redesign of the SSES. As originally envisioned, the NESDEC policy questions were to reflect data requirements at all levels of decision-making on eight federally funded programs: ESEA titles I, II, III, VII, and VIII; NDEA III; VEA 68; and EHA, part B.

The NESDEC policy questions for each program were divided into four general areas:

A. To what extent are program funds appropriately targeted?
B. Are services addressed to the special education needs of participants?
C. What effects are associated with the program services?
D. Is there a need for change in the Federal and State conduct of the program?

Within each of these broad areas were several major policy questions. These, in turn, included linkage questions describing the data required to answer the major policy questions.

One of the first tasks in the study was to determine whether NESDEC's policy questions were applicable for an elementary school survey and whether they reflected the current information needs of the bureaus and programs that would use the data obtained from the survey. To accomplish this task, Mr. Absalom Simms and Dr. Charles Hammer of NCES/DIS arranged interviews for RMC with the following people:

- Miss Nancy Bradley, BESE
- Dr. Lois Elliott, BEH

- Dr. Milbrey Jones and Mrs. Gladys Pendergraph, OLLR
- Mr. Leroy Cornelson and Mrs. Theda Cotton, BATVE
- Dr. Hyram Smith and Dr. Jerry Reynolds, NCIES
- Mrs. Barbara Resse, NCES/DSIS

These interviews solicited comments on the NESDEC policy questions, the past value of the survey—its strengths and weaknesses, and additional data needs. The interviews also provided the first indication that some of the eight programs under consideration were not relevant for an elementary school population. It was also pointed out that several of NESDEC's policy questions could not be adequately answered as part of a mailout survey. In addition, some doubt was raised about the inclusion of ESEA title II (school library resources) and NDEA III (strengthening instruction in science, mathematics, and foreign languages) because funding for these programs in Fiscal Year 1974 was uncertain at that time.

Early in the study, NCES and the contractor (RMC) also established contact with the State education agencies and initiated State interaction on this survey that continued throughout the next two years. On August 7 and 8, 1972, RMC staff members attended the Joint Federal State Task Force on the ESS in Louisville, Kenutcky (at the request of NCES). This meeting provided the contractor with background information on the evolution of the survey and stimulated useful discussion about State priorities and data needs.

After meeting with the State representatives, the next step in questionnaire development was to eliminate those portions of the NESDEC policy questions that were not applicable to an elementary school population. When NESDEC had developed its compendium of policy questions, the orientation was toward a secondary school population. Therefore, certain programs and data elements were not appropriate for an elementary school survey. After reviewing the policy questions and further discussion with OE representatives, recommendations were made by the contractor to exclude the Dropout Prevention Program (ESEA title VIII) policy questions as well as those concerning the Vocational Education Amendments (VEA 68). Other data elements were also dropped from the remaining program policy questions because of their secondary school orientation.

Finally, several sections of the NESDEC policy questions—namely those dealing with the impact of Federal programs and program management—seemed beyond the scope of a mailout survey such as the SSES. To satisfactorily address these areas, a research design was needed for specific program impact measurements. This type of research is generally the thrust of special studies associated with the Office of Planning, Budgeting, and Evaluation (OPBE) of OE. Therefore, it was recommended that these areas be excluded from the SSES, and NCES concurred.

Once the new "streamlined" policy questions were agreed upon, the contractor began the job of linking the remaining policy questions to data elements and determining the analysis required to answer them. This effort was completed for ESEA title I, II, III, and VII; EHA, part B; and NDEA III. The contractor had previously recommended the elimination of ESEA II and NDEA III from the new SSES because there was considerable doubt about whether funding for these programs would continue. They were subsequently dropped.

When the linking task was finished, data elements were grouped by linkage questions and a second wave of interviews with BESE and BEH personnel was conducted. Since all of the data elements identified by the policy question review could not be included in the survey instruments, the bureau representatives were asked to identify those elements that had low priority or were not useful at all. In this way, the contractor was able to document the "keep" or "drop" status of every data element and thus completed the first step in preparing draft questionnaires for bureau and NCES review.

Questionnaire Development

In October of 1972, the contractor began developing items and drafting questionnaires. In keeping with the former Elementary School Surveys, the new questionnaires addressed four levels of response—district, school, teacher, and pupil—with separate instruments designed for each. (The pupil questionnaire, although requesting information about individual pupils, was to be completed by the teacher.) Within each questionnaire, the first section asked general questions about the district, school, teacher, or pupil and then moved on to separate sections regarding ESEA titles I, III, and VII. At this time, the last section on each instrument collected information on Education for the Handicapped, part B.

Earlier in the contract, the contractor had been informed that questions relating to educational technology, the environment, and educational manpower would be included as part of the survey. However, since these areas were outside of the policy question framework, there was some question at this time as to whether they would appear on the survey. Eventually, items were drafted for inclusion as the final sections on the questionnaires. But the future use of these questions was not clear until much later in the study.

By late December 1972, the third draft of the questionnaires was submitted to NCES. However, meetings were still being held with BESE and BEH representatives and revisions were still occurring.

The Shift from Policy Questions to User Need

The primary purpose of the instrumentation task was to produce questions that could be linked to the NESDEC policy questions through analysis. This was not always an easy task. Writing items for the type of data outlined in the policy questions was difficult because the intent of the linkage questions was sometimes vague. In addition, the NESDEC policy questions had been developed by means of formula questions applied to all programs. As a result, the policy questions were often repetitious across programs. To avoid making the questionnaires equally repetitious, data elements required by all of the programs were identified and placed into the general section of each questionnaire wherever possible. A good deal of time and attention was also given to devising routing questions so respondents would not have to work through items on Federal programs that did not apply to them. Other individual data elements were revised or collapsed into one question in a further attempt to reduce the repetition found in the policy questions. Finally, each revision of the instruments meant complicated changes to the documentation the contractor was preparing that showed how each questionnaire item related to a general area, policy question, linkage question, or client request.

In mid-January 1973, the contractor met with bureau representatives to discuss the latest draft of the questionnaires. As discussed above, considerable time had been spent in producing documents that distilled the essence of the NESDEC policy questions into data items for the four questionnnaires. An item-by-item review with the bureau representatives was planned. Some additions, revisions, and deletions were anticipated, but the contractor did not expect the thrust of the redesign approach to change. However, the outcome of this latest meeting was a fifth draft of the instruments that reflected a shift in the methodology for designing new SSES questionnaires.

During the January meetings, the bureau representatives indicated that they wanted an increased emphasis placed on data needs that were of current interest to them. These new needs were very different from those found in the NESDEC policy questions. This was clearly demonstrated by the dropping of questionnaire items that did not solicit the type of information currently wanted (even though they were major policy question links) and the addition of new items that reflected current data needs. What the bureau representatives seemed to be saying was that some of the policy questions were no longer relevant and that there were more pressing data needs that should be satisfied on a mailout survey to schools and school districts.

For example, BESE indicated that it would like some items that appeared on the earlier forms of the ESS (1970 and 1971) asked again to see how certain Federal programs had changed over time. Additionally, BESE was in the process of analyzing the 1970 ESS data and added questions to pursue more fully some of the early findings there. In some cases this meant simply using questions from the earlier ESS, but in others questions were totally rewritten with the intention of collecting comparable data. This approach to questionnaire design was quite different from the one the contractor had been using and resulted in extensive revision of all four questionnaires.

Toward the end of this instrumentation stage, BEH also shifted its frame of reference. Prior to this, the contractor had developed the sections of the questionnaires dealing with handicapped children from the viewpoint of collecting information on programs and services funded under part B of the Education for the Handicapped Act. But at this time, BEH indicated that what they really needed was more information about *any* programs and services for the handicapped. As a result, the instrumentation for these sections began to grow more general in nature, collecting data on State and local programs for the handicapped rather than limiting questions to services funded by EHA, part B. But in another sense, the handicapped sections of the questionnaires had become more specific. Where early drafts asked about handicapped children in general (as implied by the policy questions), BEH now requested that questions be answered by type of handicap wherever possible. For example, on such a general question as "How many handicapped pupils attend this school?", respondents were asked to indicate numbers of pupils in specified grades by 12 handicapping conditions. This created considerable revision of the questionnaires and added commensurately to the

time spent on instrument design. And finally, BEH requested the addition of questions concerning preschool programs and services for the handicapped. This was a high-priority area for BEH during the 1972-73 school year, but the policy questions had not included preschool services at all.

The contractor was still making major changes and addition(s) to the questionaires that reflected current data needs and changes in priorities as late as February 16, 1973. Deletions, revisions, and additions were made by bureau representatives without respect to analysis issues or the NESDEC policy questions. At this point, the contractor realized that he was attempting to accomplish two completely different goals. On the one hand, he was trying to be responsive to NCES by redesigning the survey within the conceptual framework of the NESDEC policy questions. On the other hand, BESE and BEH had some requests for data that were extremely important to them but that did not fit into the NESDEC policy question framework. Consequently, the contractor was placed in the position of developing questionnaires that no longer met the rigid outlines of the policy questions but instead reflected current Federal program issues.

Moreover, an additional but related problem was identified concerning the analysis plan for the survey. The contractor could develop an analysis plan for questionnaire items based on the NESDEC policy questions, but it would be difficult to develop one for the new items because the rationale for their inclusion was not always known—beyond the fact that they satisfied current data needs.

QUESTIONNAIRE DEVELOPMENT AFTER PRETEST POSTPONEMENT

By February 1973, four new draft questionnaires totaling 234 items had been developed. These questionnaires received the verbal approval of BESE and BEH representatives and an OMB package was prepared and submitted for NCES approval. However, for reasons discussed in chapter 1, the spring 1973 pretest was postponed and the contractor was asked to begin work on revised plans for conducting the study.

An early step in all of the proposed pretest plans was further revision and refinement of the questionnaires. In preparation for these revisions, the draft questionnaires were distributed within OE and to State representatives (including CEIS members) for review. In addition, the contractor was asked to attend a two-day meeting (in August 1973) of the Surveys Subcommittee of the Committee on Evaluation and Information Systems (CEIS) where all four questionnaires were reviewed with the committee members in great detail. CEIS contributed many helpful suggestions that were carefully considered in subsequent questionnaire workshops. During the CEIS meetings, the contractor was also introduced to the data requirements of the National Institute of Education (NIE). A representative from NIE discussed existing questionnaire items that would be of interest to NIE as well as the possible addition of other questions.

Since the postponement of the pretest allowed the time necessary for more adequate response to user needs as well as issues raised by pending legislation, plans were begun to conduct questionnaire workshops with NCES and bureau representatives. However, because of scheduling constraints, only BESE representatives and NCES technical staff members attended the first 3-day workshop in September 1973. Over the 3-day period, BESE set item priorities and provided an item-by-item justification for the inclusion of its questions in this survey. The BESE sections of all four questionnaires were analyzed with an eye to producing revisions that would satisfy the bureau's current data needs. Questions were also added or rewritten addressing legislative issues such as the Quie proposal and the proposed Better Schools Act. The comments resulting from the CEIS meetings and the earlier distribution of questionnaires to other State and OE representatives were also weighed as part of the discussion.

After the BESE questionnaire workshop, meetings were scheduled and held with NIE staff members. These resulted in the addition of several new questions on the teacher and pupil questionnaires. Item priorities and justification for their inclusion were obtained from NIE.

However, scheduling meetings with BEH proved to be difficult. The contractor's original contact there, Dr. Lois Elliott, had left the bureau and another BEH contact for the SSES had not yet been appointed. When a BEH representative was identified, meetings were planned to finalize the portions of the questionnaires dealing with programs for the handicapped. The initial meeting with BEH provided the basis for minor revisions but an item-by-item justification could not be obtained since the new representative was not familiear with the history and development of the BEH questions. Although considerable effort and time were expended by RMC staff members of the contractor to elicit additional BEH input to the questionnaires, attempts to schedule other meetings were unsuccessful. Subsequent contributions were made primarily thorugh telephone conversations (initiated by RMC) with BEH staff on specific

questions. As a result, important issues raised by RMC, CEIS, BESE, and other persons within NCES and the OE regarding the length and complexity of the handicapped sections were never completely resolved.

During the period, NCES also requested that certain other items appear on the revised questionnaires. These included questions that would collect supporting information for a previously conducted staffing survey of school personnel who provide instructional or related services to handicapped children. In addition, the debate about the questions dealing with educational technology and environment was raised again. RMC was opposed to the inclusion of these questions because they were inappropriate for a survey such as the SSES. Further, reasonable justification had never been established about the usefulness of the data that would be obtained from them. The discussions between RMC and NCES on this issue continued for several weeks, extending the questionnaire revision time. In the end, however, the environment items were dropped and only the educational technology (broadcasting) questions were included.

When it was planned, the final revision process for the questionnaires was to have been quite short. But as can be seen from the description above, in reality, it was a time-consuming procedure that resulted in virtually rewriting all four questionnaires. However, the basic program-related organization of the questionnaires remained the same as described earlier, with each instrument having a general section and separate sections for ESEA titles I, III, and VII; programs for the handicapped; and educational broadcasting. The exception to this was the pupil questionnaire where the final section collected information on pupil achievement test scores as requested by BESE, NIE, and NCES.

On October 19, 1973, annotated drafts pointing out data users and unresolved problem areas were given to NCES for final technical review and written sign-offs prior to OMB submission. However, comments and sign-offs from the reviewers were slow in coming. Consequently, RMC was still receiving questions and revisions on the questionnaires as late as November 23, 1973. While these last-minute changes were being made, RMC was also preparing an OMB clearance package. The final questionnaires were included in the OMB package and submitted to OE on November 30, 1973. The number of questionaire items in the four questionnaires had increased from 234 (the number on the last drafts prior to pretest postponement) to 309.

SUMMARY

In retrospect, now that this study is over, the task of designing questionnaires based on the NESDEC policy questions was not as useful as originally envisioned. Several factors contribute to this point of view:

(1) The NESDEC policy questions were developed with a secondary school population in mind. Even though some Federal programs serve all 12 grades (e.g., ESEA title I), the major thrust of the policy questions was toward the upper grades. As a result, it was difficult to relate some program areas to an elementary school population.

(2) The NESDEC policy questions followed a standard formula in their development that did not allow for the inclusion of current data needs. This also caused some data elements appropriate for one program to be included in other programs where they had a tenuous relationship at best.

(3) The NESDEC policy questions were finalized in the fall of 1971. When questionnaire development began in late 1972, some of the areas found in the policy questions had cahnged in importance because of shifts in Federal funding or the need for data. Additionally, current data needs became apparent as the study progressed that had not been evident when NESDEC completed its work.

These three factors go a long way toward explaining why only 31 percent of the items on the questionnaires pretested this spring had a link to the NESDEC policy questions.

It would appear that the particular policy question approach used in developing the SSES questionnaires was time-consuming and expensive given the benefits derived. But this is not to say that questionnaires can or should be developed without respect to key issues or major questions that need to be answered. Rather, a broad framework of policy questions should be developed that is flexible enough to accommodate a variety of Federal programs as well as the results of changing legislation and user needs.

Chapter 3

MAILOUT SURVEY

INTRODUCTION

After submitting the OMB clearance package to U.S. Office of Education (OE), the next major step in the pretest toward which RMC directed its efforts was the preparation for the mailout survey. RMC's *Plan for the Pretest of the SSES* was developed and submitted to NCES on December 12, 1973. This plan outlined the strategies that would be employed in developing and analyzing the alternatives to be tested in the field. During the next few months, the contractor prepared the survey support materials, selected the States and LEA's that would participate in the pretest, developed the alternatives that would be tested and analyzed (see chapter 5 and 6), determined the mailout survey logistics (described in chapter 4), and conducted the precanvass of participating districts.

SELECTION OF PARTICIPANTS

States

A total of nine States agreed to participate in the pretest that would take place in the spring of 1974. Two of these States had volunteered at the CEIS meeting the preceding August; others who had agreed to participate in the pretest planned for 1973 were asked to participate again. When these two procedures did not produce enough participants, NCES called other States to request their participation. The States that were asked were selected on the basis of previous cooperation with OE and characteristics such as urbanism, presence of significant numbers of certain minority populations, and expected presence of ESEA titles I (including Migrant), III, VII, or any programs for the handicapped.

Districts

When the States were contacted, each was asked to volunteer 5 to 10 LEA's for participation. Some States agreed to pretest the SSES in the schools in the participating districts (referred to as "full" participation); whereas other States agreed only to pretest the district questionnaire in the participating districts. This was done to supplement the total number of district questionnaires in the pretest (referred to as "district-only" participation). In addition, other States had a mixture of both types of districts. After a State agreed to participate, the State survey coordinator was given a list of LEA's that RMC had selected as preferred districts for the pretest. These lists were compiled by selecting from the 1972 CPIR sample (the only available source of program participation information) the districts in each State that included as many of the target programs as possible and represented variations in other district characteristics. The contractor conducted telephone interviews with the designated representative in each of the nine States. These calls were used to brief the States on the details of participation, to finalize the district sample in each State, and to determine whether each State would allow direct shipment of pretest materials to the LEA's. Florida was the only State that agreed to the latter procedure. The list of participating States and LEA's is shown in table 1.

Summary

	Number of LEA's	
	Full	District only
Arizona	4	--
Colorado	5	--
Florida	5	--
Kentucky	6	5
Michigan	5	--
Minnesota	--	11
New Jersey	5	--
Texas	5	5
Virginia	--	5
	35	26

Table 1.--Participating States and LEA's

State	LEA	Number of schools	Comments
Arizona	Mesa	3	
	Nogales	3	Supplementary sampling
	Somerton	1	Supplementary sampling
	Wilson 007	2	Supplementary sampling
Colorado	Adams County	3	
	Boulder Valley	3	Supplementary sampling
	Colorado Springs	3	Supplementary sampling
	Ft. Lupton	3	Supplementary sampling
	Greeley	3	
Florida	Brevard County	3	
	Broward County	3	
	Collier County	3	
	Dade County	3	Supplementary sampling
	St. Lucie County	3	Supplementary sampling
Kentucky	Campbell County	0	District only
	Carlisle County	0	District only
	Carroll County	0	District only
	Clay County	3	
	Fayette County	3	
	Fulton County	3	Supplementary sampling
	Hickman County	3	Supplementary sampling
	Paducah City	3	
	Paintsville City	0	District only
	Somerset County	3	
	Trimble County	0	District only
Michigan	Eaton Rapids	3	
	Grand Rapids	3	
	Holland City	3	
	Lansing	3	
	Pontiac	3	
Minnesota	Albert Lea	0	District only
	Bloomington	0	District only
	Blue Earth	0	District only
	Breckenridge	0	District only
	Crookston	0	District only
	Hopkins	0	District only
	Minneapolis Special	0	District only
	Moorhead	0	District only
	North St. Paul	0	District only
	Owatonna	0	District only
	Roseville	0	District only
New Jersey	Atlantic City	3	Supplementary sampling
	Downe Township	2	
	Paterson	3	
	Union City	3	
	Vineland City	3	
Texas	Alice	3	
	Austin	0	District only
	Brownsville	3	
	Dallas	0	District only
	Edgewood ISD	3	
	El Paso	3	
	Ft. Worth	0	District only
	McAllen	0	District only
	Pharr-San Juan-Alamo	0	District only
	San Antonio	3	
Virginia	Accomack County	0	District only
	Hampton City	0	District only
	Norfolk City	0	District only
	Roanoke County	0	District only
	Smyth County	0	District only

Schools

It was realized early in the study that the only means of preventing large gaps of data (as in preceding elementary school surveys) about certain small programs and isolated pupil subpopulations would be to develop the capability of stratifying the sample of schools. Accordingly, a precanvass procedure was developed and pretested. This procedure and the results of the precanvass are described in appendix A.

Once the precanvass was completed and the data obtained from it reduced, keypunched, and matched to the original school universe subfile, a sample of three elementary schools was selected for each full participation district. This sample of schools was chosen in the following manner:

(1) Certain schools that had high concentrations of target pupil subpopulations (migrant, bilingual, Indian, or handicapped) or programs funded by ESEA title I Migrant, ESEA title VII, or EHA, part B, were included "with certainty" to ensure a large enough subsample for pretesting the supplementary sampling procedures.
(2) The remaining elementary schools within each district were oversampled with probability proportional to size.
(3) Depending on how many schools had already been picked with certainty (in point 1 above), the additional number of schools needed in each district were drawn from those in point 2. Special attention was given to choosing schools that had pupil target groups and Federal programs of interest.

It was not possible to follow these procedures for one State because it completed the precanvass task too late. Generally the following considerations were taken into account while implementing these procedures:

1. Schools that had *only* prekindergarten or kindergarten grades were excluded.
2. Attempts were made to pick a sample of schools that was representative of the distribution of programs across schools within each State.
3. Wherever possible, attempts were made to pick schools of varying characteristics with respect to the composition and size of the school population.

By using these procedures, a sample of 101 schools was chosen in 35 districts.

PREPARATION FOR THE MAILOUT

While the selection of participating States and LEA's was taking place, RMC was also working on the definitions for the questionnaires and survey support materials. Manuals were developed for each level of participation (district, school, and teacher) as well as the forms necessary to carry out the procedures outlined in the manuals. The development of alternatives to be tested as part of the pretest resulted in two forms of the school manual and Pupil Code Sheet (PCS), in addition to alternate forms of each of the four questionnaires. A more detailed discussion of the survey support materials appears in the following chapter.

In the meantime, the clearance process with OMB was taking much longer than expected. The clearance package had been submitted by OE to OMB on January 11, 1974. Since it was realized that delays in the mailout could have very serious negative effects on the entire pretest effort, it was decided to begin the design and layout work on the questionnaires prior to the receipt of clearance. However, all other composition and preparation, as well as printing, was held until OMB clearance was received. RMC was notified of OMB clearance on March 20.

On April 12, 1974, survey materials were shipped to the SEA in eight States and directly to the five districts in Florida. Districts were asked to return materials within 2 weeks. However, most districts were unable to comply with this request. In many States, the materials had arrived during the spring break. In one case, the State survey coordinator was away and the materials remained in his office for a week. Several districts indicated that the CPIR and SSES arrived simultaneously and since they felt the CPIR had priority, completion of the SSES was postponed. Several States had early school closings and stated that forms would have to be completed after the schools had closed. It became clear very early that the delay in OMB clearance and the resulting late shipment of survey materials was going to have serious effects on the pretest.

The contractor established early contact with the LEA's that were selected for the validation study site visits and asked them to hold their survey materials until after the site visits in May. When survey response was still lagging

significantly in June, followup phone calls were made to the SEA's early in the month and directly to nonresponding LEA's in mid-June.

MAILOUT RESPONSE RATES

The following pages contain lists of when the returns for each district were received at Intran Corporation in Minneapolis. As mentioned above, the districts selected for the validity study held their pretest materials at the district office until the site visit work was completed. Consequently, they are shown on a separate list. Their response dates should be evaluated in terms of the site visit period rather than the mailout date since they were asked to mail their questionnaires after the field staff had left their LEA. (Two districts in Kentucky were not included in the validity study subsample list because their returns were received prior to the notification to hold. These were both district-only participants.)

In addition to the listing of districts by date of return, four figures are presented that show:

- Returns by Week—Validity Study Subsample
- Cumulative Percent Returns—Validity Study Subsample
- Returns by Week—All Other LEA's
- Cumulative Percent Returns—All Other LEA's

Figures 4 and 5 show two groups: the total of all districts not in the validity study subsample and a subset of that total showing the district-only group alone.

Figure 2.–Returns by week–validity study subsample–SSES pretest (spring 1974)

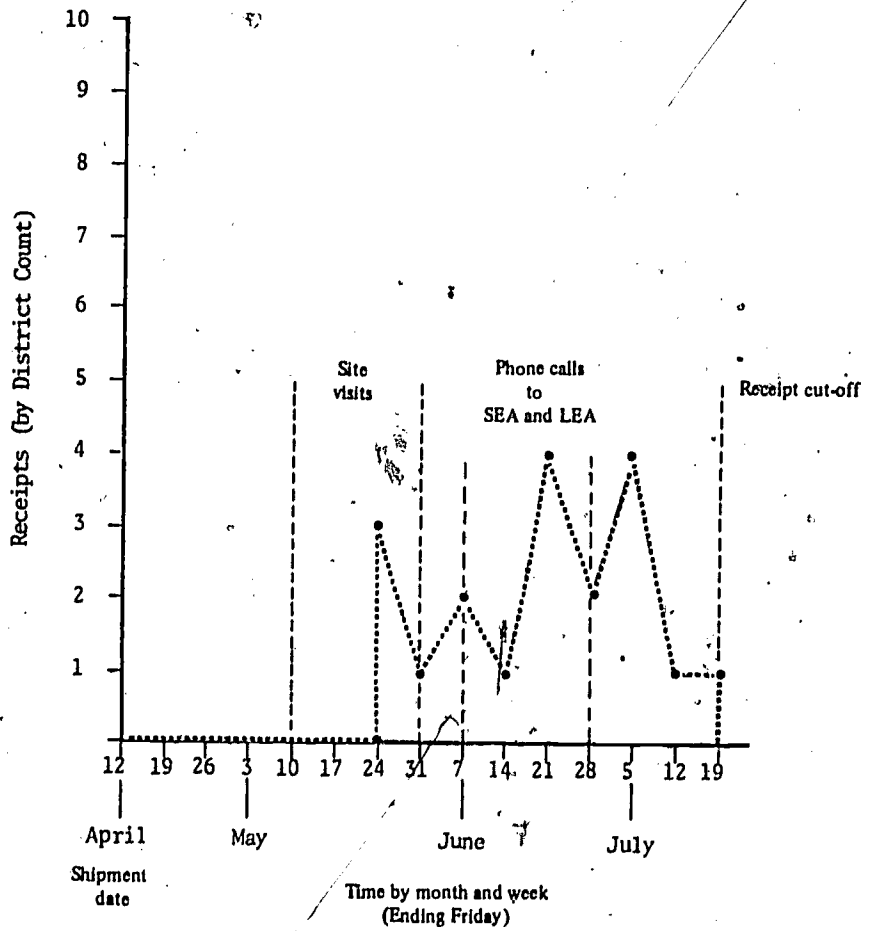


Figure 3.–Cumulative percent returns–validity study subsample–SSES pretest (spring 1974)

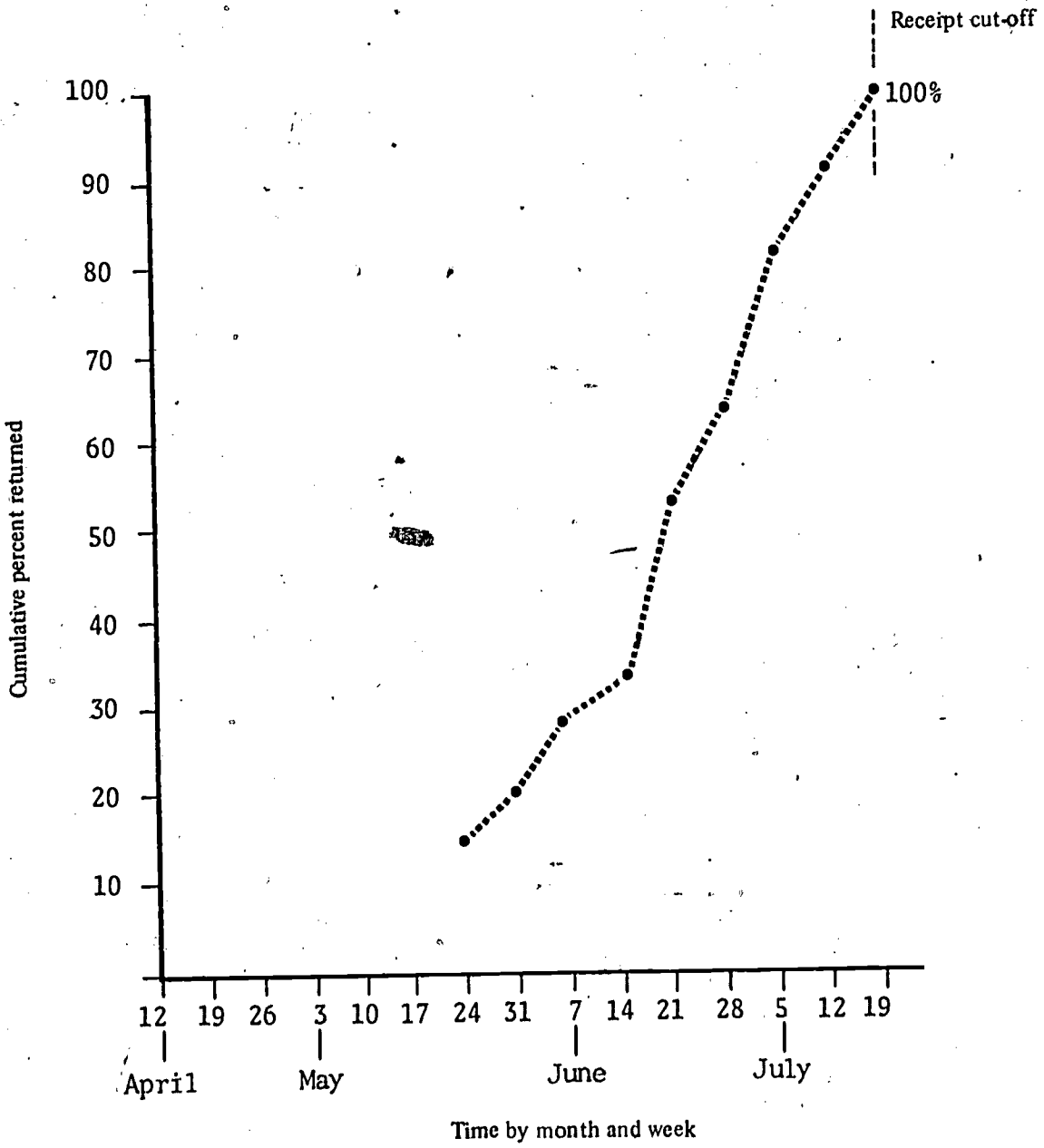


Figure 4.--Returns by week--all other LEA's--SSES pretest (spring 1974)

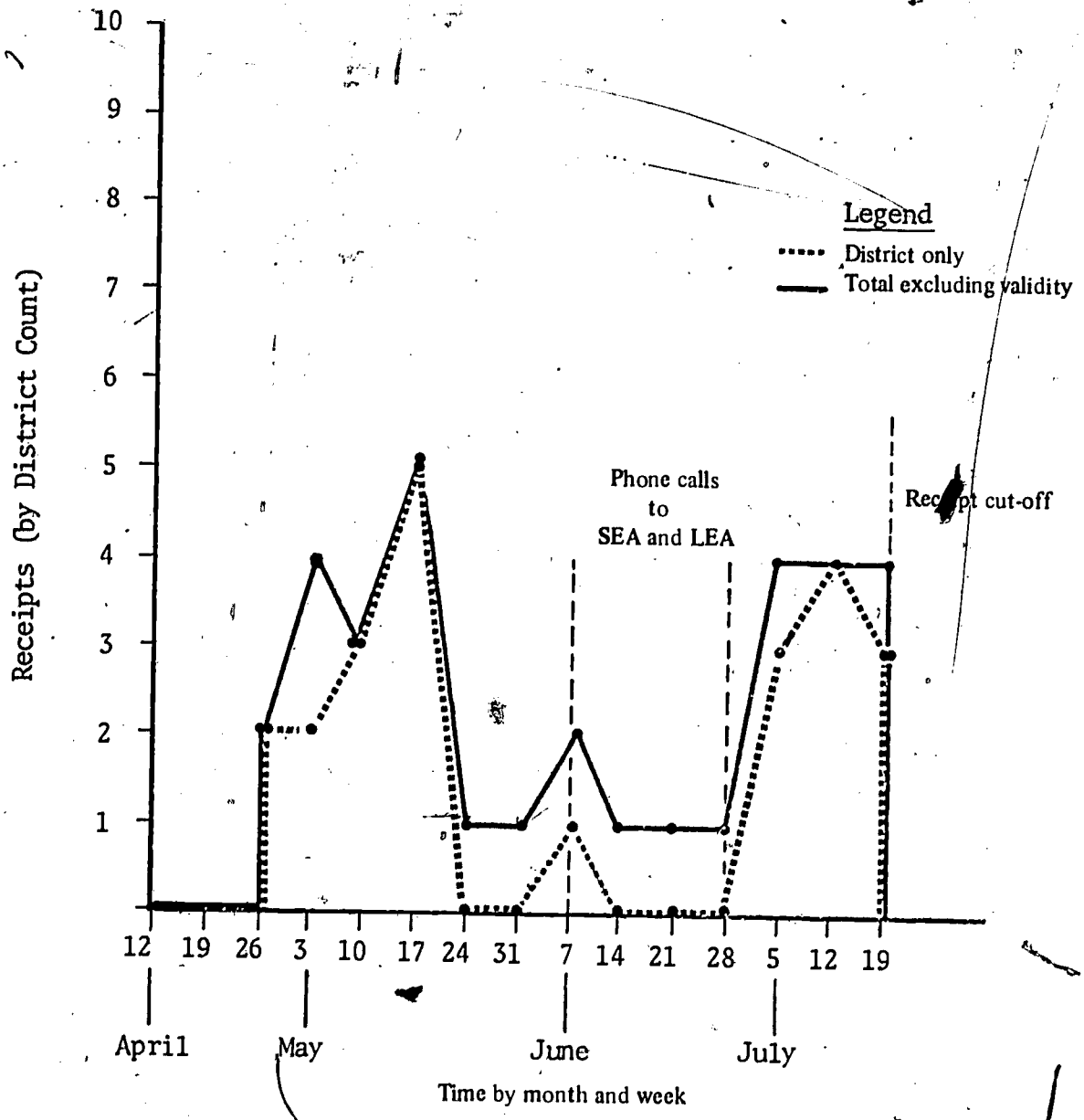
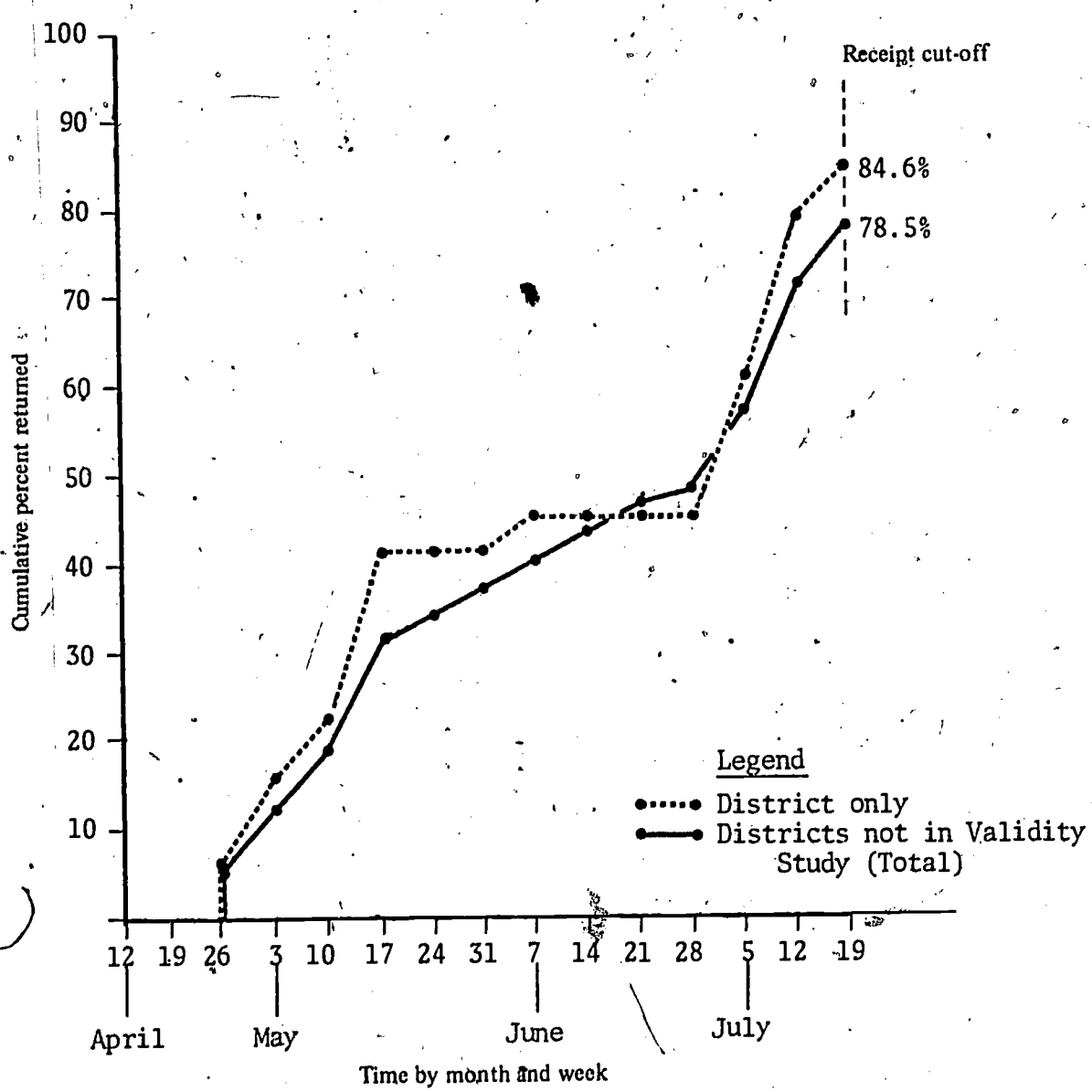


Figure 5.--Cumulative percent returns--all other LEA's--SSES pretest (spring 1974)



District Returns

Districts included in the Validity Study (with the exception of Trimble County, Kentucky, and Carroll County, Kentucky). The numbers below show school and teacher questionnaires returned as a fraction of questionnaires mailed out. All 19 districts here returned district questionnaires in 1974 on the dates shown.

District	State	Date return	School returns/ total schools	Teacher returns/ total teachers
Brevard Co.	Fla.	5/20	3/3	12/12
St. Lucie Co.	Fla.	5/21	3/3	60/72
Collier Co.	Fla.	5/22	3/3	12/12
El Paso	Tex.	5/28	3/3	8/12
Brownsville	Tex.	6/4	3/3	12/12
Grand Rapids	Mich.	6/6	3/3	9/12
Holland City	Mich.	6/10	3/3	10/12
Edgewood ISD	Tex.	6/17	3/3	11/12
Somerton	Ariz.	6/17	1/1	24/24
Eaton Rapids	Mich.	6/19	3/3	9/12
Paterson	N.J.	6/19	3/3	12/12
Boulder Valley	Colo.	6/24	3/3	17/52
Atlantic City	N.J.	6/25	3/3	17/52
Fayette Co.	Ky.	7/1	3/3	12/12
Adams Co.	Colo.	7/2	3/3	12/12
Wilson 007	Ariz.	7/3	1/2	0/48
Vineland	N.J.	7/5	3/3	7/12
Nogales	Ariz.	7/9	3/3	32/52
Colorado Spgs.	Colo.	7/19	3/3	12/72
Total			53/54	288/516

Districts not included in Validity Study. (Trimble County, Kentucky, and Carroll County, Kentucky, are included here.) The numbers below show school and teacher questionnaires returned as a fraction of questionnaires mailed out. All 33 districts here returned district questionnaires in 1974 on the dates shown.

District	State	Date return	School returns/ total schools	Teacher returns/ total teachers
*Trimble Co.	Ky.	4/23	--	--
*Carroll Co.	Ky.	4/25	--	--
San Antonio	Tex.	4/29	3/3	12/12
*Ft. Worth	Tex.	4/29	--	--
Broward Co.	Fla.	5/1	3/3	12/12
*Paintsville	Ky.	5/2	--	--
*McAllen	Tex.	5/6	--	--
*Carlisle	Ky.	5/8	--	--
Fulton Co.	Ky.	5/10	3/3	31/32
*Smyth Co.	Va.	5/15	--	--
*Roanoke Co.	Va.	5/15	--	--
*Norfolk City	Va.	5/15	--	--
*Hampton City	Va.	5/15	--	--
*Accomack Co.	Va.	5/15	--	--
Alice	Tex.	5/22	3/3	12/12

District	State	Date return	School returns/ total schools	Teacher returns/ total teachers
Clay Co.	Ky.	5/28	3/3	12/12
Lansing	Mich.	6/3	3/3	12/12
*Campbell Co.	Ky.	6/3	--	--
Somerset Co.	Ky.	6/10	3/3	12/12
Downe Twp.	N.J.	6/19	0/2	8/8
Ft. Lupton	Colo.	6/24	3/3	10/32
Dade Co.	Fla.	7/3	3/3	43/52
*Minn. Spec.	Minn.	7/3	--	--
*Blue Earth	Minn.	7/3	--	--
*Albert Lea	Minn.	7/3	--	--
*Roseville	Minn.	7/11	--	--
*Hopkins	Minn.	7/11	--	--
*Moorhead	Minn.	7/11	--	--
*Breckenridge	Minn.	7/11	--	--
*Owatonna	Minn.	7/19	--	--
*N. St. Paul	Minn.	7/19	--	--
*Austin	Tex.	7/19	--	--
Pointiac City	Mich.	7/19	2/3	8/12
Total			29/32	172/208

*District-only participants.

Summary: Pretest Return Statistics–Districts

	Mailed	Returned	Percent
Validity Study subsample	19	19	100
All others	42	33	79
(district-only subsample)	(26)	(22)	(85)
Total sample	61	52	85

Of the 52 responding districts, all 52 returned completed district questionnaires. A breakdown of returns for participating schools and teachers in those districts follows:

	Schools		Teachers	
	No.*	Percent	No.*	Percent
Validity study	53/54	98	288/516	56
All others	29/32	91	172/208	82
Total	82/86	95	460/724	63

*The numbers in this column show school and teacher questionnaires returned as a fraction of questionnaires mailed out.

GENERAL OBSERVATIONS

A brief glance at the statistics and graphs produced from the response to the pretest reveals the following points:

1. The response curve for the validity study subsample doesn't tell much of a story. It seems as though many would have taken much more time to return thier materials had it not been for the followup phone calls. It would also seem that the phone calls directly to the LEA's (the latter part of the followup period) had considerably more impact than the calls to the SEA's.
2. Returns for the validity study subsample accumulated to 100 percent. This was possibly caused by two happenings:

   - an additional commitment was made to the pretest upon agreeing to the site visit, and
   - a few districts were persuaded to participate in the pretest when requested to be included in the site visits.

The cumulative return line has a much sharper slope for the subsample.

3. The response curve for all other districts shows a very definite (and more normal) picture. There are two definite peaks: the first within the normally expected response time and the second showing the effects of the followup phone calls.
4. The district-only subsample shows a definitely improved initial response, but the curve also dips just as quickly and flattens out for just as long as the total group. The effect, then, of not having the schools involved was rather short lived. In addition, the overall response rate for the district-only LEA's was only the same as the total pretest sample.
5. It would seem, then, that the district survey coordinator is the key to a successful survey:

   - District-only returns were generally no better than all other groups.
   - The response picked up once the district was called, whereas the calls to the State appeared to have had little effect.
   - The return rate for the schools in the districts that made returns was excellent.

6. One final observation is warranted: the percent of returns for participating teachers was much lower in the validity study subsample because of the fact that all but two of the supplementary sampling schools were in the subsample. Teacher return rates in supplementary sampling schools were quite low as a group.

Chapter 4

LOGISTICS

INTRODUCTION

A major facet of the pretest of the SSES was the actual operation of the survey–often referred to as logistics. Logistics is a rather broad concept and covers many different operations of a survey that take place before, during, and after the survey. Since NCES requested that less emphasis be put on logistics than had been the initial intent, it was not possible to actually pretest all of the SSES operations. However, attempts were made to conduct as many aspects of the pretest as possible in much the same way a full-scale survey would have operated. This chapter addresses those aspects of pretest operations where adequate evidence exists for making observations.

This report on logistics is divided into two parts. The first part is a description of what was done and the results that were seen. The second part takes those results and relates them to recommendations for the full-scale survey. In both sections, the general areas to be covered include: survey support instrumentation, shipping and distribution methods, the survey management system, and the processing of survey returns.

PRETEST LOGISTICS RESULTS

Survey Support Instrumentation

Instrumentation.

A survey the size and scope of the SSES obviously could not be carried off with questionnaires alone. There had to be other materials to explain how to properly complete the survey and the questionnaires, to explain who should be respondents and how to select them, and to supply supplementary information needed to answer some parts of the questionnaires. The materials developed for the pretest to serve these purposes were:

- various letters to State representatives, district survey coordinators, school principals, and teachers;
- district, school, and teacher manuals;
- sample selection forms;
- the Record of Teacher Packet Distribution;
- the Pupil Code Sheet (PCS);
- a form for districts to use in the return of completed survey materials; and
- the district and school lists of special programs.

All of these materials were developed after the survey questionnaires were completed. Some of these materials could not be worked on until the design of the entire project was complete and until it was certain that there would be no further changes in the questionnaires or project design. This was particularly true of portions of the manuals and of the lists of special programs. Other forms, such as those developed to implement the alternative sampling procedures, were independent of the content of the questionnaires.

Because of the decreased emphasis on the logistical aspects of the survey (the feeling expressed by NCES being that the testing of the questionnaire and sampling alternatives deserved considerably more emphasis), materials were developed to serve a particular need, but no alternate forms or procedures were developed for testing. The alternate forms and procedures created for the two basic sampling plans were developed to test two separate sampling plans rather than to provide alternatives for logistics. Therefore, the results of the survey instrumentation will be rather simply stated.

Results.

In general, the survey participants apparently had little trouble with the pretest in terms of understanding what they had to do and how to do it. Rather, the basic problems expressed to the validators were the ability to provide the data required and the time required to complete the survey.

Survey Communications. All of the contractor and NCES contact prior to, and during, the survey was with the SEA representatives. Only one of the nine States indicated that they thought the presurvey communication was inadequate. However, of the 17 districts that responded to the question, 7 (over 40 percent) indicated that they would liked to have known more about the survey beforehand. Considering that some of the districts may have felt communications were adequate because they were also contacted by RMC prior to the survey about the site visits, there seems to be an indication here that the State coordinators do not pass enough information along to participating districts.

The letters for the district coordinator, the school principal, and the sampled teachers were included with the survey materials more as a courtesy than as a means of providing real communication. It would be possible, but not always practical, to send letters to participating districts and schools prior to the survey.

Manuals. The manuals were the core of the explanation of the survey intent and procedures. They provided general background information, administrative procedures, sample selection instructions, and general instructions for answering the questionnaires. Since little is known about any major survey administration problems, it is assumed that they generally served their purposes well. However, based on a review of the comments from some validators regarding problems with certain items and as a result of the item analysis, it is felt that certain items should be explained in more detail than would be practical to do on the questionnaires themselves.

Sampling Forms. The various sampling forms evolved from the development of the three basic sampling procedures within the schools. The results of using these forms can be stated only in terms of evaluating the sampling procedures themselves. Chapter 6 presents a report of these results.

Record of Teacher Packet Distribution. An initial look at the forms used in the pretest would lead one to think that this form was used for sample selection. It was common to both sampling alternatives and appeared as a place to record the results of the classroom sampling procedure.

Actually, the form also served other purposes. It was intended to remind the principal about the teacher survey packets and to provide a record of which teachers were selected, the date they received the survey materials, and the date each teacher returned the completed materials.

This form is not an integral part of the survey operations. For instance, the results of the classroom sampling could be recorded on another form. However, it is felt that any additional help that can be provided to the principals will in the long run help the overall survey efficiency. While the overall response of completed teacher questionnaires in the pretest was poor compared with the school and district questionnaires, this should not be interpreted to mean that additional controls are needed for the within-schools administration. The overwhelming majority of missing teacher questionnaire data was from schools selected to use the supplementary sampling procedures. It is recommended elsewhere in the report that the supplementary sampling procedures be dropped from further consideration.

Pupil Code Sheet (PCS). The PCS is designed to serve a number of purposes. It provides a place for the teacher to record the results of her pupil sample selecton, it serves as a place to record the pupil name for reference without placing the pupil name on the questionnaire, and it serves as a record for postsurvey validation. In addition, for the pretest only, the PCS indicated to the teacher the number of pupils she should sample from her class.

There are no indications to show that the PCS provided any problems, that it did not serve its purpose, and that it should not be used in its present form for the full-scale survey.

"Return of Materials" Form. After the district had gathered all the completed survey materials from the schools, it was faced with the problem of returning the materials to the contractor or to the SEA. To provide continuity in the survey operations and a means of diminishing and tracking nonresponses, the districts were provided with a form to record completion of survey operations and the shipment of completed materials. The form was sent to the SEA indicating the date of completion and shipment and whether the materials were shipped to the contractor or to the SEA.

No negative feedback was received on the use of this form.

District and School Lists of Special Programs. These lists of special programs were provided as a means of giving schools and teachers information necessary for providing some of the answers requested in the questionnaires.

The district list is designed for the LEA survey coordinator to indicate the description of the federally funded programs operating in the district. This description consists of the name of the program, the grades (prekindergarten through 6) that it serves, and the Federal funding source. The district was instructed to make copies of this form and to give one to the principal in each of the sampled schools.

Each principal would then use this information to complete the school list, including only those programs that operated in the school. Copies were then to be made and distributed to each sampled teacher.

Certain problems with the list were uncovered:

(1) It was often difficult to know how to define and name a program—whether to list the ESEA title I Migrant program, for instance, by all of the various areas it covered or to list it only once. The former procedure can be very time consuming in some cases, while the latter procedure is subject to the deficiency of not getting enough information to the people who need it.
(2) A similar problem arose where, say, "ESEA title I Migrant" was listed by the district office but the program was better known by another name in the schools, such as the "Migrant Food Project."
(3) It was often difficult for a principal to know for sure whether or not each program listed for the district operated in his school. In the same manner, it was very difficult for a teacher to know for sure if the programs listed for her school operated in her class or whether the sampled pupils were served by them.
(4) Funding sources for Federal programs were used that had little bearing on the survey as a whole. This served to confuse things somewhat for some respondents.
(5) Copies of the completed lists had to be made, which may have been an annoyance to some.

Shipping and Distribution Methods

Introduction.

Prior to setting up the survey operations for the pretest and while the States were being solicited for participation, each State was queried as to whether they would allow the survey materials to be shipped directly to the sampled districts or whether they wanted all of the materials to be distributed through the SEA office. All of the States except Florida indicated a preference for handling the distribution of survey materials to the districts themselves.

The advantage for the SEA's in allowing direct district shipment was two fold: they would not have to receive and then redistribute each box, and it would save them money since they would not have to pay postage or freight charges. The advantage to the survey operations was that considerable time would be saved in the distribution process. One potential disadvantage to the survey as a whole was that shipping costs would be higher following the direct district method.

The promise of not distributing materials to the districts until the State representative had seen information copies of all materials seemed to have little effect on their decisions.

Pretest Procedures.

The packaging procedures were set up for shipments to go directly to the LEA's in Florida and to the SEA in each of other States. All district materials for a given State were sent at the same time in one shipment. Each district represented one box and each box had two labels: one for the destination SEA and the other to identify for which district the enclosed materials were intended.

At the same time the shipments were made, each State was also sent a special delivery package containing information copies of all materials and a letter indicating the date of the shipment and the number of boxes in the shipment. Enclosed with the letter was a return postcard on which the State survey coordinator could record the date of shipment receipt and the number of boxes received. The State survey coordinators were instructed to mail the postcard as soon as the shipment was received. In addition, each district packet (in the top of the box) had a business

reply postcard attached on top. In the same manner, a postcard was supplied for each school packet. Instructions indicated that the postcards should be returned as soon as the respective shipments were received.

The procedures followed for Florida were similar, but varied somewhat because of the direct district shipments. The SEA was sent a package of informational materials and a letter indicating that shipments had been made to the selected districts. Each district received a letter under separate cover and the return postcard was included with this letter. Beyond this, the other procedures were identical. All shipments to the Florida districts were made on the same day as the other State shipments.

Return Postcards

States. Six of the eight States returned their postcards. Five of these States returned them when the shipment was received, whereas the sixth waited until the following week. As far as can be determined, there was no delay in the receipt of this shipment, so it is felt that the postcard was not mailed right away.

One way to make sure there would be no delay in notifying the addressee that the shipment has been received in the SEA building would be to provide for inside delivery to the addressee. However, it is unlikely that this would be desirable for the full-scale survey since most of the shipments to the SEA's will be very large.

Districts. Postcards were attached to district packets only for the full participation districts. This would mean, then, that they were sent to the 5 districts in Florida and to 30 districts in six other States. Figure 6 shows the cumulative percent return of these postcards over the weeks following the shipments. (Florida is graphed separately.)

Altogether, postcards were received from 4 of 5 districts in Florida and from 20 of the other 30 districts. In addition to the higher percentage of returns for Florida, it should be noted how much more efficiently the postcard system operated for Florida districts than in the districts of other States in terms of the time it took for the postcards to be returned. This is presumably due to two factors: (1) the districts received the shipments faster than those in other States, and (2) more attention was drawn to the postcard because it was enclosed in the letter.

Schools. Postcards were attached to the school packets for 101 schools. Of these, 15 schools were in Florida. Postcards were received from 14 of the 15 schools in Florida and from 46 of the 86 schools in the other States. Figure 7 shows the cumulative percent of returned postcards, with Florida shown separately. Once again, not only does Florida show a much higher rate of return than other States, but also the postcards were returned faster from Florida. Thus, the survey monitoring system seems to operate best with the direct district shipment procedure.

One point noticed in tallying the returns of the school cards was that the postcards from all three schools in a given district were almost always received during the same week. Any delays, then, were probably caused by the district officer rather than by the school principals.

Results of Interviews.

As part of the site visit procedures, interviews were conducted with each of the nine State representatives and with 17 district representatives in the 20 districts visited. Part of these interviews had to do with the logistics aspects of the survey. Responses to some of the key questions are as follows:

A. State Interview Responses

1. Do you prefer to have the SSES shipments come through your office?

   Yes = 6 No = 3

2. Did you open each box?

   Yes = 2 No = 5

   a. If YES: then, do you think it is necessary to label the boxes as to which district they are intended?

      Yes = 1 No = 1

Figure 6.--SSES pretest: Postcard receipts—districts

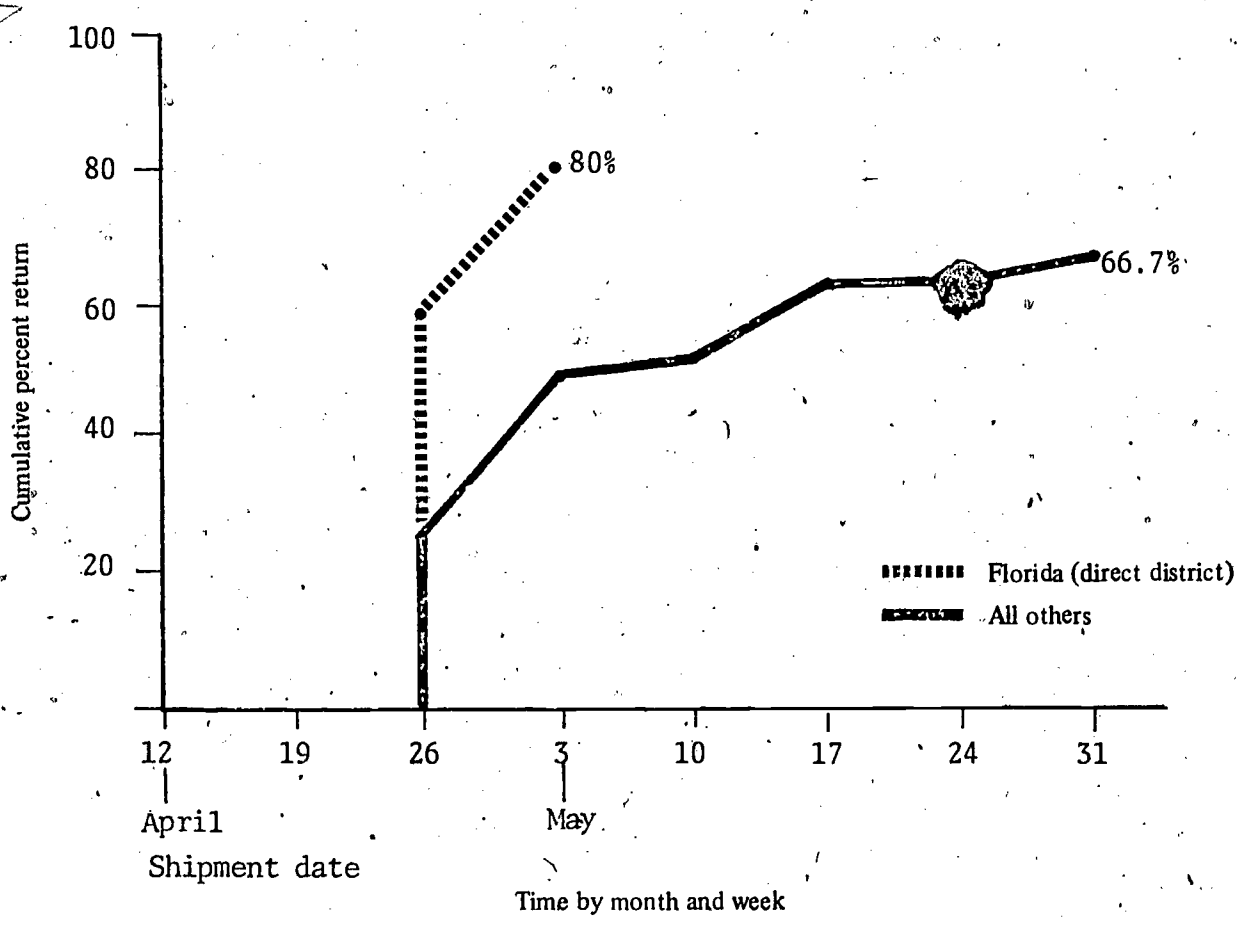
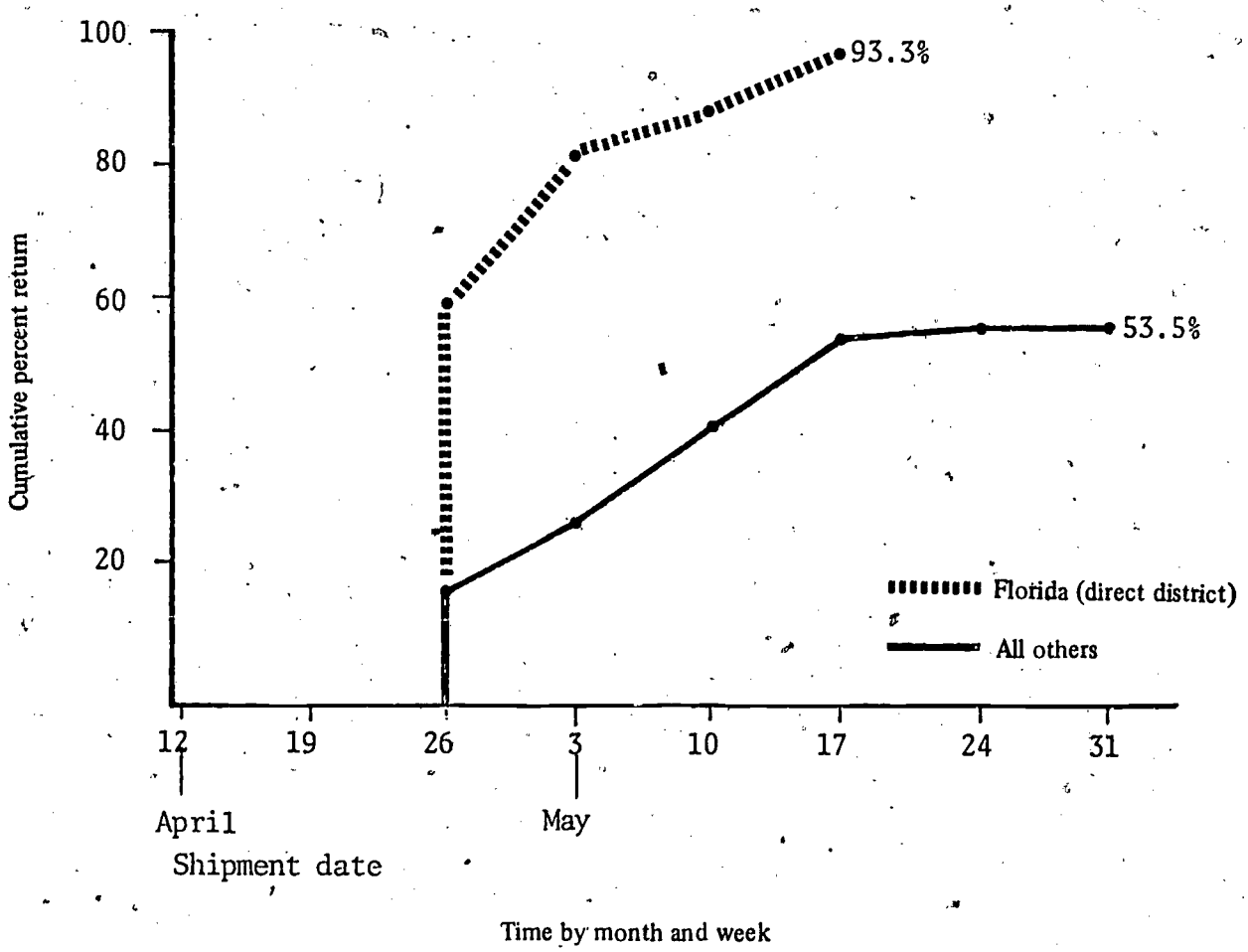


Figure 7.--SSES pretest: Postcard receipts--schools



b. If NO: do you, then, think it is necessary to ship all the materials first to your office?

Yes = 6 No = 2 (Total respondents should have been 5)

If YES (to b): would it possibly be satisfactory to ship them directly to the districts if you had first received your information copies along with a roster of participating districts and schools?

Yes = 2 No = 3

3. For the full-scale survey, would you possibly call a meeting of the survey coordinators of the participating districts (as some States do)?

Yes = 3 No = 6

4. (From the information provided by seven of the interviewees, an average of 2.5 days elapsed between receipt of materials and forwarding to the districts.) How did the materials get to the districts?

3: First class mail
2: Hand delivered by State personnel
2: Parcel post
1: Shipped by truck

5. Do you recall whether or not you returned the postcard as soon as you received the materials?

Yes = 4 No = 2

6. Do you prefer to write the letter to each participating district, or do you think it would suffice to have a general printed letter in the district packet?

6 = letter from State person
2 = general printed letter

(Florida was excluded from this question.)

If the *latter*, this would mean, then, that the district coordinator would call the contractor, rather than you, with any questions. Would this procedure be okay?

Yes = 3 No = 0

B. A Quick Look at the State Responses

1. The majority of the States prefer to have the shipments come through thier offices. However, three States indicated a preference for not doing so. Five of seven respondents indicated that they did not open the boxes. It is difficult to understand why six States prefer to have the materials come to their offices when four of them did not even open the boxes to inspect the contents.

Of the two States that opened the boxes, one felt that the boxes should be labeled with the district name. The only purpose for putting this label on the box was to eliminate the need for opening the box to find out for which district it was intended. The response to question 2b is generally consistent with question 1. Since too many answered this question, it is difficult to compare the responses to question 2b with question 2.

However, response to the next question shows that two additional States indicated they would consider direct district shipments under the conditions cited. (These are presumably not the same as the "NO" respondents to question 1, since we show five respondents total, following six "YES" respondents to 2b.)

2. One State evidently called a meeting of representatives from each participating district, while three indicated that they would probably do so for the full-scale survey.

3. It should be noted that the incident of use of First class mail is probably caused by sending small packages for the district-only participants. Since the volume of materials for the pretest is so much smaller than for the full-scale survey, it is unlikely that the responses here really indicate anything meaningful.

4. Two States indicated that they did not send the postcard right away. However, only one State postcard was received late. Presumably the two nonrespondents to this question are the same as the two who did not return the postcards at all. Evidently the State survey coordinators did not mind sending the letters to the districts. It is unfortunate that there was not a series of questions to the effect: Did you use the model letter provided? Do you endorse this concept, or prefer to compose your own? Did writing the letters hold up shipment to the districts? Did you send the letters at the same time as the materials?

   In addition to the two States that felt a general printed letter would suffice, one other State evidently preferred the idea of having the districts deal with the contractor for questions about the survey rather than dealing with the State survey coordinator.

C. District Interview Responses

1. Did you have any difficulty with the way materials were shipped?

   1 = Not clear for whome, or what, intended.
   2 = Method of shipment was not the best to get to me. What way would be better? None recommended. One noteworthy comment was that the notation on the box "Box 3 of 4" caused some confusion. For example, one LEA said that it "was waiting awhile for the other three boxes." (This notation was caused by the shipments to the SEA's. Standard shipping practice calls for labeling the four boxes in the shipment "1 of 4," "2 of 4," etc.) This problem would not occur if shipments were made directly to the districts.
   7 = Other (Specify):

   1 = received late (by mail)
   1 = no letter of transmittal inside
   1 = delivered by "grapevine" from SEA
   1 = well done
   1 = should box each school separately
   Other comments not pertinent

2. Did you find the communications adequate (prior to the receipt of survey materials)?

   Yes = 10 No = 7

3. Did you receive a letter from your State Survey Coordinator (excluding Florida)?

   Yes = 15 No = 2

   If YES:

   9 = prior to receipt of materials
   4 = with materials
   2 = after receipt of materials

   If NO: did you know who your State Survey Coordinator was?

   Yes = 13 No = 0

4a. Do you remember if you returned the postcard as soon as you received the survey materials?

11 = Yes, right away
2 = Yes, but delayed opening the box
4 = Did not return postcard

4b. Would you have opened the box and returned the postcard sooner if there had been a legend on the outside of the box that said: "Open Box No. 1 and return the enclosed postcard IMMEDIATELY upon receipt?"

Yes = 7 No = 8

5a. Did you send the materials to the principals of selected schools, or call them to a meeting:

5 = sent materials
12 = called meeting

5b. Would it be better to call such a meeting for the full-scale survey—particularly since there will probably be more than three schools sampled in your district?

Yes = 6 No = 3

6. (From the information provided by 14 of the respondents, an average of 2.5 days elapsed before giving or sending materials to the schools. Two other respondents indicated 28 and 30 days, respectively. Adding these two brings the average to 5.9 days.) How did you send the materials to the schools?

13 = hand delivered by school district staff
1 = via school district vehicle or truck
3 = picked up by principals

D. A Quick Look at District Responses

Some of the interesting things that can be learned from these responses are that:

(1) The districts often felt that they should have been told more prior to the receipt of survey materials—7 out of 17 thought that communications were inadequate. Only 15 received letter from the State coordinator and only 9 of these were received prior to the materials.
(2) Not many of the districts bothered to return the postcards; the majority admitted that calling their attention to the card by the legend on the box would not cause them to act any more quickly.
(3) The districts evidently find meetings preferable and it seems as though they are quite practical about the most efficient manner of distributing the materials.

Survey Management System

Initial Specifications.

A good part of what goes into the logistical aspects of a large survey such as the SSES is some very affirmative planning. Such planning—of the pieces involved in the survey, of the operations involved to make these pieces fit together properly, and of a schedule for these operations to happen on time and in the proper sequence—usually takes the form of a detailed set of operational specifications and schedules. Since the pretest was considerably smaller in volume than a full-scale survey would be, the procedures were a reduced version of what would be needed for the full scale implementation of the SSES.

In general, the first stage of specifications for the survey management system requires:

(1) A general overview to provide orientation for the reader.
(2) A list of all the materials that need to be produced or acquired—either as part of the survey package or as needed for packing and shipping operations.
(3) Specification of quantities: the quantity to be produced of each piece, the expected number that will actually be shipped, the number of different types of shipments, etc.
(4) Detailed specifications of how materials should be collated and assembled into sets, how sets should be packaged, and how to organize all of these materials for efficient operation.
(5) Specifications for the development of the computer system that will take the sampled districts and schools file and produce:

- labels for questionnaires, packets, and boxes—in the proper order and quantities for efficiency in the labeling and packaging operations;
- a roster of summary counts that provide an overview for labeling, packaging, and shipping operations;
- detailed rosters that will be used for recording the completion of various steps in the survey operations and allow for maintenance of up-to-date monitoring;
- detailed rosters that will allow for inclusion of a one-page summary for each district in the district shipment;
- punched-card tub files for use in keeping track of all returns and producing followup reports;
- followup reports to be sent to nonrespondents for various mail and telephone followups; and
- project monitoring status reports for various stages of operations.

Implementation for the Pretest.

Most of these procedures were followed for the pretest. The principal steps omitted were the use of tub files to monitor returns and the production of status reports. Because the survey volume for the pretest was relatively small, all returns were checked in by hand and status reports were produced on demand with little difficulty.

Responses on both the return postcards and the survey materials themselves were logged in daily and/or weekly, depending on the flow. These figures were used to produce the response tables in this report.

In general, little difficulty was experienced with survey management during the pretest. It is very difficult to properly report on how it all went or to evaluate the system since, on the whole, everything worked well and there were no alternatives to be compared. Another factor that makes it difficult to evaluate how well the survey management system worked during the pretest was that the analysis of alternatives concept introduced a great deal of variability into the materials production and assembly. Complications were introduced that will automatically be removed from the full-scale procedures. It is felt, however, that enough has been learned at various stages so that the procedures used for the pretest can be refined for the full-scale survey.

Processing of Survey Returns

Introduction.

This general category takes into account a number of operations:

(1) checking in postcard returns to monitor shipping and receipt activities,
(2) producing status reports to alert project management of potential problems on these distribution activities,
(3) checking in questionnaire returns,
(4) producing status reports on returns to monitor receipts and to signal necessity for followup rosters,
(5) capturing data (keypunching and scanning),
(6) two-stage editing and edit followups, and
(7) editing resolutions and producing a clean tape.

As indicated in the preceding section, not all of these pretest operations would allow direct reporting of results, evaluating results or alternatives, or comparing the results with what would probably occur on the full-scale survey.

As a result of the small survey volume, operations 1 through 4 (above) were performed manually. No tub files were

used for pulling receipts and updating the master file. Status reports were compiled whenever necessary without computer assistance. All followups were done by phone; consequently no computerized followup system was developed or used. Data capture was done entirely by keypunching will full key verification.

Frequency Distributions.

Since response to the mailout survey was significantly delayed, it was necessary to cut off inclusion of responses for processing the survey data. All responses received through July 19, 1974, were keypunched. The total number of questionnaires received by that time was:

- District questionnaire: 52
- School questionnaire: 81
- Teacher questionnaire: 447
- Pupil questionnaire: 1,104

Programing was completed at that time for running frequency distributions of the responses on these mailout survey questionnaires. These distributions (sometimes referred to as marginals or univariate statistics) included counts and percents for each category response for each variable. Where items were not categorical variables, that is, they were write-in items, reponse intervals were preset for each item (or item part) prior to the programing for the frequencies.

The frequency distributions played a strong role in the analysis of survey responses and in the evaluation of each pretested questionnaire item.

Edit Specifications.

Detailed edit specifications were developed to check the logical consistency and accuracy of data provided on the questionnaires. In general, the kinds of checks that were specified can be categorized as follows:

- Sum of parts; exceeds total provided in response to another question (base number)
- Response directly contradicts response provided elsewhere
  - directly conflicting data
  - did not follow skip patterns

RECOMMENDATIONS FOR FULL-SCALE SURVEY LOGISTICS

As stated previously, the logistical aspects of a nationwide survey are extremely important—especially for a survey of the size and scope that the full-scale SSES is likely to be. The outcome of the survey could suffer significantly without the implementation of a comprehensive and detailed system for the overall management of the survey. Without this system, the survey could result in incomplete or inaccurate data, delayed response to the survey, or overall poor response rates.

The recommendations that follow in this section are largely based on the results of the logistical aspects of the pretest that were reported earlier in this chapter. In some instances, the correspondence between results and recommendations will be quite obvious. In other cases, the recommendations will be based on sources such as the comments recorded at the time of interviews with State and district personnel during the pretest, on the observations of the RMC project staff who participated in the site visits, and on the writer's experiences with the 1969, 1970, and 1971 elementary school surveys.

The areas that will be covered are: survey communications, instrumentation, and the survey management system.

Survey Communications

Tried and proven survey methods have shown that the more communication that exists with survey participants before, during, and even after the survey, the more likelihood there will be of a successful data-collection effort.

Communication prior to the actual mailout or shipment of materials is particularly significant because it can have a pervading influence over the entire survey effort. Good channels of communication during the survey are important for solving logistical and substantive problems. Postsurvey communications (or feedback) show the effects of the earlier communication in establishing good relationships and creating an atmosphere that will encourage cooperation for subsequent data-collection efforts.

All three of these areas have direct application for the SSES. Because this survey depends on close working relationships and communication among various levels of respondents, it is important for presurvey communications to begin as early as possible. Since the SSES is a very detailed and complex survey effort, it is likely that questions will arise during the course of the data collection. Effective communication links will, in most cases, easily solve these problems and will potentially increase the response rate and reduce the amount of followup work. In most instances, future NCES data-collection efforts will be handled by the same SEA representative and, in many very important cases, by the same LEA representative. In any case, it is desirable to have communications that are as intensive and as complete as possible to enhance the understanding of the survey participants and to help eliminate any potential timing problems.

The following is an outline of procedures that are recommended for implementation in the full-scale survey to establish and maintain good relationships with the survey coordinators in the States and to guarantee the success of the SSES.

Presurvey.

(1) Send an informational letter to each State informing it of the current plans and intentions regarding the full-scale SSES. This should be done 6 to 8 months prior to the expected survey start date.
(2) Select a national LEA sample, excluding those States which absolutely refuse to participate.
(3) Five to six months prior to survey start date, send a letter to each State announcing the LEA precanvass effort and include a list of the sampled LEA's for each State. States should be requested at this time to notify each sampled LEA (preferably by letter) of the impending precanvass data request. If States are going to be given an option to have all survey materials shipped to them or to have them shipped directly to the districts, they should be given the opportunity at this time to make such a choice.
(4) When the precanvass materials are shipped to the SEA's, include a letter of explanation for each district. This letter should summarize the precanvass procedures, suggest distribution and followup procedures for the precanvass, and a second list of the sampled LEA's should be included. The precanvass should be done as early as possible during the school year—probably about 5 months prior to the survey. SEA's and LEA's should be given a number to call in Washington, D.C. (preferably toll free), to have questions answered and problems solved.
(5) Send a reminder letter to each State about 2 weeks later. The districts involved should probably be listed again for convenience.
(6) Approximately 1 month after the precanvass mailout, followup calls should be made to the States. Permission to send a reminder letter to the districts that have not completed the precanvass should also be obtained from the SEA at this time. (Some sort of personalized letter would be preferred and more effective.)
(7) Sometime after the precanvass has been completed, letters should be sent to the States giving them more detail about the survey effort—particularly an up-to-date schedule. The States should be made aware of NCES's intentions regarding survey procedures about 2 months prior to the survey start date.
(8) Approximately 2 weeks prior to mailout, a letter should be sent to each State. This letter will accompany a sample set of all survey materials as well as a relisting of the districts to be surveyed.

Communications During the Survey.

(1) Each State should receive a letter of transmittal at the time the shipment is made telling them the date of shipment and the number of boxes. If shipments are made directly to the LEA's for a given State, these letters would go to the LEA's. In this case, the State representative should receive a courtesy letter indicating that the shipments have been made to the district.
(2) Districts should receive a letter of explanation before they receive the survey materials. Most States prefer to

send such a letter themselves at the time they are distributing the materials to the districts, but a letter from NCES or the contractor would be more effective and timely. It is hoped that the States would have already communicated with the LEA's prior to the survey. However, it probably should be assumed that the LEA's will need some further briefing.

(3) States and districts (and preferably schools, too) should be provided with business reply return postcards to notify receipt of materials. This will assist the contractor in spotting shipment problems or distribution bottlenecks.

(4) A telephone number in Washington, D.C., should be provided for SEA's and LEA's to call if any problems or questions arise. This number should be toll free if at all possible. It has been shown in the past that such an arrangement has a significant effect on participant cooperation because they view "Washington" as trying to do as much as possible to make their job on the survey easier.

(5) About 1 month into the survey the SEA's should be asked to remind the participating districts of the survey completion date. At this time permission should be obtained to followup the delinquent districts directly—by either mail or phone.

(6) Periodic followups will have to be made to nonrespondent districts. The letters sent should be as personalized as possible and should provide information about what is being requested, including listing the materials that have not yet been returned.

Postsurvey.

(1) Letters should be sent to participating districts after their materials have been returned. These should also be as personalized as possible, should acknowledge receipt of survey materials, and should thank the district for their participation.

(2) States should also be sent thank-you letters after survey completion.

(3) Many States and districts have indicated that they would like to receive feedback on survey results. Plans should be made to provide for such feedback on whatever level seems most appropriate. This is particularly important for those skeptical States and districts that are reluctant to participate because they feel no good has ever come from previous surveys and view current efforts as a waste of their time. The feedback should be provided as soon as possible to show how effectively the survey can be run and to mentally prepare the respondents for future survey efforts.

General.

Results of other surveys have shown that using specialized mail services adds significantly to survey responses. While it is realized that the use of government franking privileges will realize a certain cost savings, nonetheless, it is recommended that stamped envelopes, special delivery, or certified mail be used when feasible. The use of these special services generally draws extra attention to the communication and results in a more effective survey.

Instrumentation

The concept of instrumentation, a vital aspect of a successful survey operation, involves not just the actual data-collection instruments (or questionnaires) but also the various pieces of survey support materials such as the manuals and forms used for recording completion of various survey operations. Careful consideration should be given to the conceptualization and design of each piece. The survey questionnaires could be perfect in every way and still be part of an unsuccessful data-collection effort without the proper support instrumentation. Recommendations for the approaches to be taken with survey instrumentation follow.

General.

(1) Setting type: It is recommended that an automated system such as a composer be used to prepare the copy for all instrumentation, as opposed to a standard typewriter. This is recommended because of the inherent advantages of the composer such as use of italics, different weight faces for highlighting, and different sizes of type of headings and titles.

(2) Use of color: It is recommended that all the instruments for each response level be printed on the same color stock and that the color for each level be different from that for the others. The use of bright colors helps respondents notice and recognize the survey materials, an advantage that was realized during the pretest. It is good to color key the instruments for a given level because the individual respondents can identify a particular color as something they should be concerned with. This also helps those processing the questionnaires to easily distinguish one questionnaire from another. Different colored inks should be considered on occasion where their use would serve a significant purpose.

(3) Instructions: The pretest further substantiated the need for complete, clear, and concise instructions. Because respondents tend to not read or follow them, instructions should be placed frequently throughout the instruments and always close to where they are needed. Where appropriate and economical, they should be set off in a different type face and sometimes printed in a different color of ink.

The Questionnaires.

The following points should be considered in approaching the layout of the questionnaires—the single-most important instruments in the survey:

(1) Questionnaires should be laid out in the manner that is most appropriate for the mode of data capture to be employed, including the provision of appropriate codes for data capture.

(2) Provision should be made for ease of clerical coding and pre-edits, if appropriate.

(3) The overwhelming consideration in design should be to lay out the questionnaires in a manner that will provide for the easiest and clearest response thus reducing the respondent burden.

(4) Provision should be made for a precoding system that will permanently identify the respondent through all stages of survey operations.

(5) Words that need defining should be clearly identified as such each time they are used. The definitions themselves should be part of the questionnaires as was done for the pretest. The theory is that the closer the definitions are to the need, the more likely it is that they'll be used.

(6) Certain important instructions should be repeated on the cover of the questionnaire so that they will be read, but their number should be reduced from that found on the covers for the pretest. There was evidence that some instructions were missed with some consistency. The fewer the instructions on the cover, the more attention will be given to those that remain. Certain instructions are so important and were missed so often in the pretest that they bear repeating on the top of each page of the questionnaire. Instructions printed inside the body of the questionnaires, particularly routing instructions (skip patterns), should be printed in red ink to avoid their being ignored as they often were during the pretest.

(7) Questionnaires should be set up for data capture in a way that will provide the most efficient and economical process. The type of data collected on the district and school questionnaires is such that they would be most adaptable to some form of key entry. The volume projected for each questionnaire on the full-scale survey is large enough that this route would be the most economical and is thus the recommended form of data capture.

However, with the volume projected for the teacher and pupil questionnaires (approximately 60,000 questionnaires between the two) if would be far more economical to use optical scanning (or optical mark reading) procedures for these questionnaires. In their current (pretested) form, these questionnaires are easily adaptable to an optical scanning format. The few questions that did not currently have categorical responses (i.e., closed end items) were put in the "open end" or "write-in numbers" form for the pretest solely to establish the proper ranges and intervals for closed end responses on the full-scale instruments. (It should be noted that precision of data is not lost by converting write-in numbers to categorical responses. Initial checks with data users determined that the data acquired by this means was more than precise enough for the analytical use to which it would be subjected.) Other items provide for a write-in response in the "other" category. These items also were set up in this fashion for the pretest only to establish whether or not the categories provided for response were adequate. The intent was to check the written-in responses for items that had a high incidence of "other" to see whether anything was written in often enough to warrant additional response categories.

The teacher and pupil questionnaires clearly collect the kind of data most suited to scanning. And, as mentioned

above, there will be a considerable number of these questionnaires to be processed. Both of these characteristics serve to make scanning the most economical mode of capturing the data. But there are other overwhelming reasons for recommending scanning as the most appropriate data capture technique for these questionnaires. From a logistical point of view, the greatest advantage is the speed with which the questionnaires can be scanned. Nearly as soon as the questionnaires come in they are ready for the machine: the ID number on the questionnaires can be used to update the master file with these returns and the data is quickly ready in a computer-processable form for computer edit checks. (This is of considerable advantage in the method of applying edit checks that is recommended further on in this chapter.) Another advantage from the operational point of view is that the scanner creates an easy-to-manage computer tape record that eliminates the error-prone and difficult-to-manage handling of large amounts of punched cards through various stages of processing.

However, more importantly, scanning provides significantly more accurate data than any key-entry process. Statistics have shown that scanners can be used to capture data through the optical mark reading process considerably more reliably than data can be captured through the keypunch/key-verify process (approximately 99.5 percent reliability versus approximately 97.5 percent reliability).

Manuals.

Manuals are a very necessary part of the SSES procedures. There is little question but that the administration of the survey is complicated enough that it certainly can do with no less in the way of instructions than has been the case in the pretest and previous ESS's. It is clear that the respondents need as much explanation of what they have to do as can be provided to them. There is too much that needs to be explained by way of background and rationale for the survey for it all to go into a letter. In addition, there are a number of details regarding survey administration that need to be explained somewhere: Two of these manuals contain sampling procedures. And, the item analysis of the response to several questions showed clearly that they needed more adequate explanation and examples. Such belongs only in the manuals and certainly not in the questionnaires themselves.

A suggested revision to procedures contained in the manuals would be to specify in the school manual that the principal should have a clerk in his office fill out the top portion of the PCS for each teacher packet. This form would then be used to ensure the correct distribution of the teacher packets by checking the PCS that the clerk would have clipped to the top of each packet. A further extension of this concept would be to have the clerk also copy the teacher code number onto each pupil questionnaire in the packet. This procedure was used by one school during the pretest and it provided a great deal of uniformity in the recording of this information.

We recommend not only that the manuals be retained but also that further advantage be taken of their existence.

Sampling Forms.

The sampling forms used by the school principals were part of the manuals, i.e., they were the back cover of each school manual. This procedure seemed to work all right in that no complaints were received.

It will be necessary to use some kind of form (or forms) in the classroom sampling procedure to provide a uniform method of recording procedural steps followed and results that can be audited in a postsurvey check. However, there is no strong reason to include them as a detachable part of the manual, as opposed to including a separate form in the survey package, except for the fact that the principal will know exactly where to find the form. There is a slight additional advantage in that following this procedure would mean one less piece of paper has to be kept track of in the package assembly process. A slight disadvantage, however, might be that the principal would neglect to detach the form from the manual and file it for future checks.

At the teacher level, the only form used for sampling pupils was the PCS on which the results were recorded. However, it is recommended in chapter 6 that a new form be created for the pupil sampling: a form on which the teacher would record the alphabetic roster of pupils. The same considerations about incorporating this form into the teacher manual would apply as above.

Pupil Code Sheet (PCS).

The PCS is a sampling form, but it also serves another purpose. To give as much consideration as possible to the

concept of confidentiality of data, the pupil name is not recorded onto the pupil questionnaire. And yet, it is necessary to know which pupil belongs to which pupil ID number at the time of the reliability and validity (R&V) study. The PCS meets this need.

The PCS also provides a place to record the names of the pupils sampled to be used for checking at the time of a postsurvey audit. Additionally, the teacher can use this form for referring to the name of the pupil for whom she is responding on a given pupil questionnaire. The PCS might also serve one additional purpose. If the pupil sampling were to be done by the principal's office for each sampled classroom, the PCS could be used for indicating what programs the pupils participate in.

For the pretest the PCS was a two-part "no-carbon-required" form. The reason for this was to help ensure that the PCS would be available at the time of site visits by having copies of it in two places—the school files and the district files. Since all the districts that were visited for the pretest were requested to keep all materials at the district office until the site visit, it is difficult to evaluate how well this procedure worked; i.e., whether or not copies resided in both the district and the school offices. Since the PCS is more important than just a place to record the sampling results (it is also needed for R&V of the pupil questionnaire), it may be worthwhile to continue the practice of using two-part paper in an attempt to ensure that a copy will be available somewhere. In any case, the instructions to hold the PCS and not return it to the contractor should be made as clear as possible.

Return of Materials Form.

There have in the past been problems with the return of the materials from the district. In addition, there have been problems with the State (as indicated when queried by the contractor on the followup) not knowing whether or not the materials for a given district had been returned. Finally, there have also been problems with lost shipments or wasted phone calls. The form that the districts used to notify the States that the materials had been shipped served two purposes: it alerted the State survey coordinator to the fact that shipment was on its way to the SEA offices, or it notified the State survey coordinator that the materials had been shipped to the contractor.

It is recommended that all return shipments be made from the districts directly to the contractor. There is little, if anything, to be gained from routing returns through the SEA since it most certainly adds to the total cost of return shipments, unduly delays return shipments to the contractor, causes the survey monitoring system to operate less efficiently, and results in needless followup on district return of materials that are sitting in the SEA offices. The States should be encouraged to allow the districts to return their materials directly to the contractor. And, in fact, perhaps they should not be given any choice.

The States do, however, have a right to want to monitor the returns from their own State. Consequently, we recommend that the districts be supplied with a postcard to notify the State coordinator that materials have been returned to the contractor. In addition, because shipments can be delayed and, at times, can get lost, it would be useful to supply districts with a business reply return postcard that they would mail to the contractor on the same day as the shipment is made. This card should contain places for the date materials are mailed, number of boxes, method of forwarding, and the name of the shipping agency or company.

Postcards would be the most efficient form of notification but only if they are actually used. Some thought should be given to devising a clever means of bringing the postcards to the immediate and obvious attention of the district person when the shipment is being made.

Lists of Special Programs.

The question of providing information to principals and teachers about the funding sources of programs operating in their schools and classrooms has always been a problem for this survey. The District and School Lists of Special Programs that were developed for the pretest represent a refinement of the forms used in the past. Respondents who were interviewed generally indicated little problem with the use of these forms. Yet the validation and item analysis procedures showed results for some items that indicate the information was still not transmitted properly. There is no question that it is necessary to make sure principals and teachers have some means of verifying the funding sources for the special programs in their schools and classes.

We would recommend the following further refinements to these procedures:

(1) Directions should be reviewed and fine-tuned in an attempt to clarify the situation for the small percentage that was confused.

(2) More specifically, directions should be explicit about how to name the program. Examples should be given in the district manual of how to indicate the name of each program that is the one most likely to be recognized—even to the extent of breaking down one program (such as ESEA title I Migrant) into the components by which people know it on a day-to-day basis.

(3) Time could be saved for the district survey coordinator by indicating that only programs operating in the sampled schools need to be listed.

(4) Confusion could be further eliminated by dropping the listing of all programs that are not the target programs for the SSES. (Recommendation was made elsewhere to similarly revise questions regarding Federal program participation in the district (pretest question 9) and school (pretest question 15) questionnaires. The concept of "non-Federal programs" should also be clarified by directions and examples.

(5) The district form procedures should be changed such that the district coordinator would:

- make the necessary number of copies of the completed list of programs,
- write in the name of each sampled school on the copies in the space provided, and
- check off (in the column provided) the programs that apply for each school.

Following these procedures would eliminate some of the confusion that arose concerning whether or not the programs were applicable to "all schools" or to "this school."

(6) The School List of Special Programs should be eliminated because there is evidence that teachers either did not use it or did not understand it. In addition, it represents too much of a problem in identifying which programs are applicable to a given classroom. The school manual should be appropriately revised as follows:

- A section should be added to clarify exactly how the principal should use the copy of the District List of Special Programs he received. (For the pretest, half of the principals interviewed found it necessary to contact the district coordinator regarding the list.)
- Instructions should be added asking the principal to specify the names and funding sources of the program which apply to each sampled classroom, the classroom teacher, and to any pupils in that classroom (where not appropriate for the class as a whole). A special place for the prinicpal to do this should appear on the front of the teacher questionnaire.

(7) While the District List of Special Programs should be color-coordinated with the other district materials, the shade of the color should be as light as possible to minimize any copying problems.

The Survey Management System

That the full-scale SSES is a large survey project that needs tight management control goes without saying. It is probably one of the largest nationwide survey efforts outside of the work that the Bureau of the Census is doing. Certainly there are other survey projects that gather data from a larger sample or from more respondents than the SSES, but there are few that

- gather data for four levels of response,
- depend on a three-stage distribution system, and
- need so many different survey support materials because of the complex nature of the survey materials and the data requested.

The ESS's in the past were notorious for their late shipments and lack of proper survey controls. Strong attempts were made for the 1971 ESS to significantly tighten up the survey control procedures. To the limits of our knowledge it appears that they worked, at least for the initial stages of the project. It is known at least that the 1971 survey was printed, assembled, and shipped in record time and that the ESS shipment date was met for the first time—despite the usual delays in OMB clearance.

The only way in which this was possible was by a tight survey management system. Quite often it is assumed that the use of the word "system" automatically implies computer system. Well, that is at least partially true for the type of system necessary for a large and complex survey effort such as the SSES. To successfully control and monitor such a survey, a system is needed that interrelates a computer system and a detailed set of procedures for production personnel to follow during the course of the project effort. This system must cover all aspects of the project from the design and implementation of the survey materials and their printing, assembly, and shipment, to the check-in of receipts, followups, and processing of survey responses.

Survey Preparation.

One thing that was clear in preparing for the 1971 ESS remains clear for the SSES: the size and scope of the survey is entirely too large to keep track of it all without the assistance of the computer. But the computer and the system it runs can only be as good as the original specifications that are laid out and the information that is fed into it during the course of the survey. The amount of interaction necessary, during every stage of the survey, between the survey operations (the system of procedures for production personnel) and the computer system is quite high. Careful planning—prior to any implementation—of every stage is extremely important to optimize the computer system. It should be thought out and developed by the same person or team that is designing the survey operations.

Every step should be preplanned. This holds true for the design of every piece of survey materials—from the very important questionnaires to the smallest but integral survey support form. It can be quite amazing how much effect the content of one form has on another. The production of materials should be coordinated in such a way that

- the finalization of survey materials should occur within the same week;
- each piece should be available for proofreading as soon as the composition, layout, and key-lining are completed for each;
- the same person (or team) who is familiar with *every* aspect of the survey's complexities should review and proof each survey piece;
- it is important that last-minute changes and refinements be made by one person in a coordinating position who has intimate knowledge of all aspects of the project and is in constant touch with each aspect—either the contractor's project director or NCES's project technical monitor;
- as the pieces are reviewed and proofed, their interrelationship becomes clearer; vital changes in content are often introduced to survey support instruments at this time; this process should take place on a flow basis;
- the sign-off on each should be accomplished as much as possible in the order in which it is produced—a *complete* piece at a time—so that it can move onto production (printing and binding) in such a way that the production workload can be evenly distributed over time to eliminate last-minute jam-ups.

The timeliness of these steps is extremely important. It is essential that PERT (Program Evaluation and Review Technique) procedures be utilized in establishing the schedule and monitoring progress. The computer comes into play through PERTing of all important steps. Unless sufficient time is set aside to do this work in an efficient manner on a schedule spread over time, preparation and production of the large volume of materials necessary for the SSES cannot be done on time without the use of a PERT system. The only compromise to adequate scheduling or using PERT is a budget large enough to consume all the ineconomies generated by doing too much in too little time in too unorganized a fashion.

The assembly of materials is the next major step: The assembly will be very complex and every step must be thought through and preplanned. Careful thought must be given to the order in which the materials should be inserted in the packets. With the large numbers of materials involved in the SSES, the logistics of pre-assembly must be carefully planned so that once assembly is begun it will flow smoothly through every step. Only an organization with experience in handling many different pieces of materials (up to 20 for the SSES) in large volumes should attempt these operations. Every step of the assembly process should be closely observed and monitored by someone with intimate knowledge and understanding of the survey's inner workings. Only in this manner can time-consuming errors be avoided and potential problems foreseen. The SSES materials production, assembly, and shipping will fully occupy large printing and mailing facilities for a number of weeks and an operation of this complexity must be closely observed and monitored by key project personnel.

The computer system comes back into play with the labeling and packaging steps. Computer listing should be produced that will provide an overview of each segment of these steps. The numbers of materials and packets for each level should be summarized for each higher level so that checks can be made at key steps. Detailed procedures will direct assembly and shipping personnel on correct interpretation and use of these listings, how to make checks and correct errors, and the manner to be used in recording successful completion of key steps. The computer system will also produce labels to be applied to each packet (actually to each questionnaire). It is extremely important that these labels are produced in an order that allows the most recently labeled product to be placed on top of the one preceding. In that way, the materials can be processed through the next step in the same order and the order of the materials never has to be inverted. The end result of this procedure is that all materials are in the proper sequence for boxing and shipping. Labels should also be interspersed in the proper quantity at the appropriate places in the label sequence.

This assembly and shipping process will take about a week. It should be closely monitored at each step. Part of this monitoring process is the information that is supplied each day on the shipments that day, the number of boxes in each, and the carrier name and waybill number. This information is recorded on a shipment master roster and is vital for the shipment notification letters that are mailed each night during the course of the shipping process. This is the first step in the very necessary survey monitoring system and is vital to the tight control that must be kept on a survey of this magnitude and complexity.

Management During the Survey Process.

Monitoring Distribution. The interaction of detailed personnel procedures and the computer system continue during the course of the survey. As postcards are received from the States and districts that have received their shipments, an up-to-date picture of the status of the distribution process can be provided. The computer system will have produced punched-card tub files that will be used to monitor receipts. As soon as a shipment receipt is acknowledged, a notation and date is made on the master roster for each State and direct district shipment. A punched card is pulled for each of these in addition to all other districts and schools. This method allows for immediate production of a status report by running all the pulled cards against the master computer file to update the status of each. Periodic checks of these status reports will alert the project staff to snags in the distribution process so that corrective action can be taken before significant delays are realized.

Shipping and packaging methodlogy will play a significant part in the responsiveness of the monitoring system at this stage of the survey. Given the results of the pretest and comments during the site visit interviews, the following are recommended:

(1) Packaging: Each school should be a self-contained package inside a box of multiple schools for a district. Each district should have its own box(es) that should be labeled as to the intended district when shipments are made through the States. The top piece inside the first box for each district should be a summary sheet that will provide an overview of the contents. It should also attempt to diminish the impact of the large amount of materials by noting the small numbers of questionnaires that are required for completion at each level. A roster of the sampled schools in each district should be included in each district shipment to provide the district coordinator with a further overview and a tool for his own survey monitoring.

(2) States should be encouraged to allow district shipments. The pretest results in Florida gave testimony to the efficiency of this procedure. States may not realize what a tremendous volume of materials they would be committing themselves to distribute and how much delay State distribution adds to the survey process. Several LEA's (outside of Florida) expressed preference for direct shipment. The addresses of the LEA's should be checked for accuracy and completeness in whichever States agree to direct shipments. In the past the addresses on the Public School Universe File were often inadequate.

(3) The postcard system should be employed to allow for the close monitoring of the distribution process that is necessary. Direct communication with the districts prior to receipt of survey materials will help in the process. As in the past, letters should be sent to the districts. Since States are not likely to get letters to the districts before the districts receive the survey materials from the States, it would be preferable to have the contractor mail letters directly to all districts regardless of the distribution method used.

(4) Provision should be made for efficient return of survey materials from the districts. Packaging and shipping procedures should provide for use of double boxes with the inside printed box pre-addressed to the

contractor. This will ease the job for the districts but still leaves the problem of payment for the shipment—a problem that has come up often in the past. It is unlikely that the use of government franked envelopes would work. The first problem is that materials would have to be mailed back directly to the government. The second problem is that, at even the school level, there are too many materials for one envelope. Each school will probably be returning 21 questionnaires. Use of multiple envelopes for each school would significantly add to the contractor's problems in controlling and monitoring survey responses. Perhaps districts could be directed to use Federal funds, such as ESEA title I funds, to pay for shipments. There have been indications of heavy (but unauthorized) incidence of this procedure in the past. In any case, we recommend that materials should not be returned through the SEA's because of the added delays and costs.

Monitoring Survey Returns. As survey returns are received from the districts, receipt should be logged on the master roster. As the contents of each package are checked in, the use of another more detailed punched-card tub file will come into play to permanently record each receipt. A card should be pulled for each district, school, and teacher questionnaire received. If it is desirable to monitor the number of pupil questionnaires, procedures can be implemented for overpunching the card for each teacher questionnaire.

Using this procedure will allow for production of weekly computer status reports of receipts. Close monitoring of these reports will enable the project monitor and project director to decide the best timing for followups to nonrespondents. Followups should take the form of listing, by district, the number of materials, by school, that have been returned as of a certain date as well as the number of materials that are outstanding. These followups can be personalized by use of computer produced letters for each district. To be done most efficiently, the letters should be mailed directly to the delinquent districts. A summary for each State can be given to the State survey coordinator since providing followup listings (by school and district) for the entire State proved to be highly ineffective in the past. Reports summarizing the entire followup activity could be automatically produced for project monitoring.

Certainly one and perhaps two or more followups will be necessary. They should be performed in a timely fashion that will be efficient and effective in keeping the overall survey response period down to the bare minimum. At some point toward the end of the response period, it will be necessary to telephone hard-core nonrespondents.

Processing Survey Returns. As returns are checked in as described above, they should be placed in the order they are received: district questionnaires, school questionnaires for the first school, teacher questionnaires for the first teacher followed by her pupil questionnaires. Questionnaires should then be checked in sequence to make sure that each is properly identified. This will be particularly necessary for the pupil questionnaires if the procedure is followed that calls for the teacher (or schol office) to transfer the teacher code number onto each pupil questionnaire for a given teacher.

Questionnaires will then be ready for the next process, which for the district and school questionnaires will most probably be a manual (visual) edit check of certain key items on each questionnaire. Certain items may be predetermined as being absolutely necessary for analysis. Should this be the case, it will be desirable to acquire any missing information prior to further processing. In many situations, it will be preferable and easier to followup on such missing information imediately. Standard forms should be developed for mailing requests for missing data. Clerks should make sure each of these letters receives an identification number prior to mailing. It would be preferable to follow such a mail procedure prior to introducing any necessity for expensive telephone followups.

Questionnaires should be subject to data capture processing as soon as possible and on a flow basis to avoid any log-jams later on. Once data has been put on tape (through reliable, proven, and error-free techniques) they will be ready for computerized edit checks. Previous history of the ESS points out the desirability and necessity of applying edits as soon as retruns are received so that quick-resolution followup can be made. Use of optical scanning on the large volumes of teacher and pupil questionnaires will make this possible and feasible. The first groups of questionnaires should be run through the already-prepared edit routines to make sure they are providing the desired results. Any changes and refinements should be made prior to running checks on large numbers of questionnaires. For those edit checks that require respondent followup for resolution, procedures should be implemented for the periodic production of edit checks, followup outputs, and mailings. This whole process can be automated. The mailings should be sent directly to the districts. Telephone calls may possibly be necessary at the very end to meet project deadlines.

Close following of these procedures should result in high response rates on the SSES and the prompt production of clean, edited tapes that can be used to provide univariate statistics prior to weighting and nonresponse adjustments.

Chapter 5

ANALYSIS OF QUESTIONNAIRE ALTERNATIVES

INTRODUCTION

During the design of the SSES, many questions arose as to the optimal method or approach to employ. When it was found that some of these could not be resolved *a priori,* it was decided that they would have to be evaluated in the field. As a result, one goal of the pretest was to design and evaluate various survey alternatives. The alternatives fell into two major areas: sampling and questionnaire variations. This chapter will review only those alternatives that fall into the questionnaire design area. Chapter 6 will present an analysis of sampling alternatives in full detail.

There were four major questionnaire alternatives tested:

(1) response alternatives of yes/no versus mark all that apply,
(2) response alternatives of numbers versus percent,
(3) selection of optimal respondent, and
(4) collection of welfare versus low-income data.

Two forms of each questionnaire were developed to address these alternatives. To eliminate confusion between the two forms, each district received the same form of questionnaire for each response level: district, school, teacher, and pupil. So, in other words, half of the districts were mailed one form of the questionnaires and half the other.

The approach initially intended for the analysis of survey alternatives is discussed in detail in a separate report to NCES. However, constraints placed on the field test by the delay in OMB clearance resulted in the revision of that approach as shown in table 2. Table 2 presents a summary of the questionnaire alternatives tested, reviewing for each one the reason the alternative was inserted into the pretest, indicating the analysis approach to evaluating which of the alternatives should be adopted in the full-scale study, and briefly describing recommendations made by the RMC staff. The approach taken in this chapter will be to discuss each of the alternatives in turn and to provide some background information regarding the basis for the recommendations made by the RMC staff. It should be noted that the recommendations presented here are a summary of the recommendations for the individual questionnaire items. Specific information on each item is contained on the item analysis sheets on file at NCES.

ALTERNATIVE 1: YES/NO VERSUS MARK-ALL-THAT-APPLY

During the early design stages of the SSES pretest, two questions were raised that led to the insertion of both yes/no and mark-all-that-apply response alternatives for a series of items. The first question arose because the RMC staff was uncertan as to which of the two approaches would yield the most accurate data. One of the main concerns of the staff was that the use of the mark-all-that-apply format allowed no internal edit check on the data provided by respondents. However, it was felt that the yes/no format would permit the analyst to review each of the questions and to determine whether the respondent did not provide the data requested. The mark-all-that-apply format on the other hand provided no way for checking this since the respondents need only mark those that were specifically applicable. The second question leading to the insertion of this alternative dealt with the issue of respondent burden. It was felt at the outset that requesting the respondent to check either yes or no for each of the possible choices would add considerably to the response burden. Since both of these questions operated in different directions—one in favor of the yes/no responses and the other favoring the mark-all-that-apply response approach—it was decided to insert a series of questionnaire items in both formats: half of the questionnaires to be mailed would request one form, the other half would request the

Table 2.–Summary of questionnaire alternatives tested

Alternatives tested	Question addressed	Analysis approach	Recommendations
Response alternatives of yes/no versus mark-all-that-apply	Question existed as to which approach yielded the more accurate data	Analysis of frequency distribution of survey responses	Use mark-all-that-apply approach
Response alternatives of numbers versus percents	Question arose as to whether respondents could provide numerical responses or whether it was only possible to estimate the values requested and provide percents	Analysis of frequency distribution of survey responses	Impossible to generalize–must judge on individual basis, but general tendency toward numerical responses
Selection of optimal respondent	Question arose about which respondent could more easily provide the most accurate data to specific questions	Review of frequency distribution and validation study outputs	See item analysis sheets (on file at NCES) for each item
Collection of welfare versus low-income data	It was unknown at the outset as to whether respondents would be better able to provide information on welfare or low-income families	Discussions with respondents during validation study	Request low-income data

other. Table 3 indicates the questions that were treated in this manner. All 40 questions were entered in both the yes/no and mark-all-that-apply response formats–but on separate forms of the questionnaires. An example using question 15 of the pretest district questionnaire is shown below:

EXAMPLES OF THE YES/NO VERSUS MARK-ALL-THAT-APPLY ALTERNATIVES FOR THE SAME QUESTION

Yes/No Alternative

15. Were any of the following methods or standards used as part of the last needs assessment conducted by this LEA? (Mark "Yes" or "No" for each).

	Yes	No
a. Conference with parents	☐	☐
b. Conference with pupils	☐	☐
c. Staff or teacher conference	☐	☐
d. Survey of parents	☐	☐
e. Survey of pupils	☐	☐
f. Survey of staff or teachers	☐	☐
g. Pupil achievement scores	☐	☐
h. Pupil grades	☐	☐
i. Pupil IQ scores	☐	☐
j. Other (Specify): _____	☐	☐

Mark-All-That-Apply Alternatives

15. Which of the following methods or standards were used as part of the last needs assessment conducted by this LES? (Mark all that apply)

☐ Conference with parents
☐ Conference with pupils
☐ Staff or teacher conference
☐ Survey of parents
☐ Survey of pupils
☐ Survey of staff or teachers
☐ Pupil achievement scores
☐ Pupil grades
☐ Pupil IQ scores
☐ Other (Specify): _____

Table 3.--Questions tested for yes/no versus mark-all-that-apply responses
(Question numbers refer to the pretest instruments)

Question number	Subject of Question
	District Questionnaire
14	Programs involved in needs assessment
15	Methods used in needs assessment
16	Major needs identified in needs assessment
30	Major functions of title I parent advisory council
50	Target groups for title III project
53	Direct recipients of title III services
56	Members of title III advisory council
57	Major functions of title III advisory council
72	Title VII services provided
76	Major emphases of training for title VII staff
78	Major functions of title VII parent advisory council
102	Services for handicapped pupils
	School questionnaire
1	Grade levels in school
15	Federal projects in school
16	Target groups receiving federally funded services
18	Grade levels served by title I
21	Services provided by title I
24	Grade levels served by title I migrant
27	Services provided by title I migrant
32	Grade levels served by title III
35	Target groups receiving title III services
36	Services provided by title III
41	Grades served by title VII
44	Title VII language of instruction
56	Orthopedic barriers in school
	Teacher questionnaire
12	Primary focus of preservice training
15	Primary focus of inservice training
16	Target group focus of inservice training
17	Federal programs in which teacher participates
46	Type of special training to teach handicapped pupils
	Pupil questionnaire
9	Areas of instruction
10	Classification of pupil
27	Problem subject areas
29	Persistent problems requiring assistance
33	Services received through title I
36	Services received through title III
39	Basis of selection for title VII
41	Pupil's handicapping condition(s)
48	Services for handicapped pupil
49	Equipment or materials for handicapped pupil

The approach taken to evaluate which of the response formats would be better for inclusion in the full-scale SSES was basically an analysis of the frequency distributions and accuracy of survey responses. These frequency distributions almost invariably yielded fewer responses for the mark-all-that-apply format. Because of the type of validation instruments developed, it was impossible to directly use validation data as part of the analysis of this alternative.

As mentioned before, the yes/no approach was included to provide an internal edit check. Respondents, however, only checked "yes" responses and did not check "no" responses, treating the questions much the same as mark-all-that-apply questions. Again using district question 15 as an example, the responses received as a result of the pretest are as follows:

Response indicated	Mark-all-that-apply format		Yes/No format		
	Number of responses	Percent of responses	Number of "Yes" responses	Percent of "Yes" responses	Cases where "Yes" responses exceed mark-all-that-apply
Omits	3	12	Average: 6 1/3	23	x
a. Conference with parents	10	40	13	48	x
b. Conference with pupils	5	20	10	37	x
c. Staff or teacher conference	11	44	19	70	x
d. Survey of parents	9	36	14	52	x
e. Survey of pupils	8	32	12	44	x
f. Survey of staff or teachers	20	80	19	70	x
g. Pupil achievement scores	17	68	22	81	x
h. Pupil grades	7	28	12	44	x
i. Pupil IQ scores	3	12	7	26	x
j. Other (specify):	2	8	3	11	x

While it is impossible to make statements about the validity of any given item, the fact that, in 9 out of 10 cases, there were more "yes" responses than mark-all-that-apply indicated a trend on the part of respondents to over-report "yes" responses, a trend substantiated by validators' comments. In addition, averaging across all respondents to each type of response format, only 12 percent omitted responding to the question on the mark-all-that-apply format, while an average of 6-1/3 respondents did not respond to the question on the yes/no format. When individuals did respond, they entered an average of 4.18 and 6.34 responses for the mark-all-that-apply and yes/no formats, respectively.

Reviewing these facts, and combining them with the knowledge of school systems obtained through validation study site visits, analysts determined that the mark-all-that-apply responses were more accurate since respondents were over-reporting on the yes/no format. Hence, it is recommended that those questions pretested in this manner should be inserted in the full-scale study in the mark-all-that-apply format. The revised questionnaires reflect this recommendation.

ALTERNATIVE 2: NUMBERS VERSUS PERCENT

The SSES is a very different type of survey from that usually conducted by NCES. Many of the data items included on this survey are subjective in nature and request data concerning personal estimates of individuals involved. This being the case, the question arose as to whether the respondents could reasonably be expected to provide numerical responses for certain data items, or whether it was only possible for them to estimate the values requested and to provide percentage answers. Analytically, it was preferred that respondents provide numerical answers, since base data would then be available for a number of analysis procedures. On the other hand, it was felt that

requesting numerical answers indicated a level of precision in the data that was not necessary for the analysis to be performed and posed an unnecessarily high level of burden on the respondent. Therefore, as table 4 indicates, 12 questions were designated to appear in both formats so the question could be resolved. An example of each alternative is shown below using question 4 on the pretest district questionnaire:

EXAMPLES OF THE NUMBERS VERSUS PERCENT ALTERNATIVES FOR THE SAME QUESTION

Number alternative

4. Approximate how many elementary pupils in this LEA are from families whose primary supporter receives *welfare?* (If none, write "0")

_____ Pupils

Percent alternative

4. Approximately what percent of the elementary pupils in this LEA are from families whose primary supporter receives *welfare?* (If none, write "0")

_____ Percent of pupils

Table 4.--Questions tested for number versus percent responses
(Question numbers refer to the pretest instruments)

Question number	Subject of question
	District questionnaire
4	Pupils from families on welfare
6	Pupils from non-English-speaking homes
8	Educationally deprived pupils
	School questionnaire
7	Pupils from low-income families
9	Pupils from families on welfare
10	Pupils from non-English-speaking homes
11	Pupils from non-English-speaking families earning $3,000 or less
14	Educationally deprived pupils
46	Lanugages spoken by title VII participants
	Teacher questionnaire
24	Pupils from nón-English-speaking homes
27	Pupils with general ability to work at grade level
28	Pupils who will be prepared to work at grade level next year

This question was analyzed through an evaluation of the frequency distributions of the survey responses. These frequency distributions yielded very similar data for each of the items regardless of the format (numbers or percents) used. As may be seen in the table below, however, the omit rate for numerical responses is consistently lower than for percentage responses, indicating that respondents had fewer problems in answering numerical questions.

Question	Omit rate (percent)	
	Percentage responses	Numerical responses
District 4	16	0
District 6	12	4
District 8	16	0
School 7	2	0
School 9	6	3
School 10	7	3
School 11	5	0
School 14	9	3
School 16	74	77
Teacher 24	2	2
Teacher 27	2	3
Teacher 28	1	2

The accuracy and validity of the percents versus numbers varied by each specific item tested. In addition, difficulty was expressed in the field validation of some items. However, it was determined that respondents were better able to provide numerical answers for most of the data items in question. As to the recommendation for this alternative, it is impossible to generalize. Each question or item must be evaluated on an individual basis as shown in the item analysis, but there is a general preference among RMC analysts for numerical responses to facilitate analysis in terms of the aggregation of data, the development of averages, and in weighting individual responses.

ALTERNATIVE 3: SELECTION OF OPTIMAL RESPONDENT

The SSES is a large-scale effort that, in the full-scale implementation, will survey approximately 800 school districts, 3,000 schools, 12,000 teachers, and 48,000 pupils. This being the case, it is possible to aggregate many data items to national totals and hence averages. Since the data can be aggregated from any level, many of the questions (such as enrollment, program participation, and expenditures) could be asked at whatever level was most appropriate from the viewpoint of both respondent burden and data accuracy. The pretest, therefore, was designed to determine which respondent or questionnaire was the best location for a number of data elements. In addition to the respondent burden and data accuracy considerations, some items needed to be entered on more than one questionnaire to permit certain types of analyses. Questions asked of multiple respondents for whatever reason occurred 43 times as shown on table 5. Shown below are examples of similar questions asked at different levels of response:

EXAMPLES OF MULTIPLE RESPONDENT QUESTIONS
(Question numbers refer to the pretest instruments)

School questionnaire

47. What are the major criteria used in the selection of elementary pupils for participation in the ESEA title VII project in this school? (Mark all that apply in each vertical column)

	Pupils whose primary or dominant language is English	Pupils whose primary or dominant language is other than English
a. Basis of selection is unknown	☐	☐
b. No special criteria employed	☐	☐
c. Pupil's English-speaking ability	☐	☐
d. Scores from standardized achievement test written in English	☐	☐
e. Scores from standardized achievement test written in the primary or dominant language of the pupil	☐	☐
f. Pupil grades	☐	☐
g. Teacher recommendations	☐	☐
h. Economic need of family	☐	☐
i. Other (Specify): _____	☐	☐

Pupil questionnaire

39. On what basis was this pupil selected to participate in the ESEA title VII project? (Mark all that apply)
- O Basis of selection is unknown
- O No special criteria employed
- O Pupil's English-speaking ability
- O Scores from standardized achievement test written in English
- O Scores from standardized achievement test in the primary or dominant language of the pupil
- O Pupil grades
- O Teacher recommendations
- O Economic need of family
- O Other (Specify): _____

Table 5.–Questions asked of multiple respondents
(Question numbers refer to the pretest instruments)

Duplicated items				Subject area
District	School	Teacher	Pupil	
2 (line a)	2 (line b)		—	Membership in grades prekindergarten-6
2 (line c)	2 (line a)	21	—	Total membership in LEA/school/class
3	6	—	—	Population size of area LEA/School located in
4	9, 11[a]	—	23	Welfare–percent of pupils from families on
5	4 (col. b)	23	12	Race of pupils–number of each
6	10, 11[a]	24	17	Primary or dominant language other than English–percent of pupils
7	13	—	—	Sixth graders reading below grade level–percent
8	14[d]	—	30	Educationally deprived–percent of pupils
9	15	17	—	Federal programs in LEA/school/taught by teacher
—	4 (col. a)	4	—	Race of teachers
—	1	20	1	Grade levels in school/grade level teacher is reporting for/grade level of pupil
—	7, 8, 11[a]	—	21, 22	Low-income families–percent of pupils; definition of low income
—	12	—	19	English-speaking ability of pupils
—	16	—	10[b]	Target groups
—	—	27	6 (col. a)	General academic ability when pupils entered class.
—	—	28	6 (col. c)	General academic ability of pupils next year/at end of year
—	—	29	8	Likelihood of completing elementary school, high school, some college
24	20	32	—	Number of pupils in title I in LEA/school/class
—	21	—	33	Subject or activity area of title I services
34 (if totaled)	26	—	—	Number of pupils in title I Migrant in LEA/school
—	27	—	33[c]	Subject or activity area of title I Migrant services
—	22,28(Migrant)	31	—	Selection and mode of title I participation
40	30	—	—	Number of title III projects in LEA/school
48	34	35	—	Number of pupils in title III in LEA/school/class
50	35	—	10[b]	Target groups of title III project
51	39	—	37	Selection criterion of pupils for title III
54	37	—	—	Major emphasis of title III in LEA/school
—	36	—	36	Subject or activity area of title III services
71	43	37	—	Number of pupils in title VII in LEA/school/class
—	44	22[e]	—	Language of title VII project in school/class
—	45	—	19[f]	English-speaking ability of title VII pupils
—	47	—	39	Selection criteria of pupils for title VII
76	—	12,15[g]	—	Major emphasis of preservice or inservice
88, 89	48, 49	—	—	This is actually a skip, but it also tells why handicapped pupils aren't getting services
90	51	—	48	Services provided to or needed by handicapped pupils–these three questions are very similar but also very different. District Q.90 deals with availability of services but the last column (not available to pupils with need) is probably the same as school Q.51. Pupil Q.48 is probably the same as the first column (available to every pupil with need) of district Q.90.
94	50	—	41	Number of handicapped pupils by handicap–district Q.94 and school Q.50 are probably the same unless a pupil could be in a school and not receiving services from any funding source
94 (if totaled)	50 (if totaled)	40	—	Total number of handicapped pupils in LEA/school/class
97, 99 (line b)	52[h]	41	—	Number of teachers in LEA/school teaching handicapped pupils
97	54 (line a)	—	—	Number of teachers of handicapped in regular classrooms
98	—	43	—	Number of teachers fully certified to teach handicapped pupils
99 (line b)	54 (total of lines b & c)	—	—	Number of special teachers of handicapped
103	—	45[i]	—	Number of teachers receiving inservice for handicapped during this school year

a. Asks for primary or dominant language not English plus earning $3,000 or less per year–could be arrived at through analysis of entries at all respondent levels on these lines.
b. While not specifically asked for here, during analysis, this probably will be linked into Federal program participation of pupil.
c. Includes title I Migrant unless only operates in the summer.
d. Misnumbered in the current school questionnaires as a second question 13.
e. Even though in the general section, the answer here would be the language of the title VII project.
f. Although in the general section and already linked to school question 12, it will probably also be used in conjunction with school question 45 during analysis.
g. The "bilingual/bicultural" choice on teacher questions 12 and 15 links into district question 76.
h. It appears that school question 52 would be the same as the total of district questions 97 and 99 (line b).
i. If a positive response here, then had inservice for the handicapped during this school year.

The evaluation of this alternative was more time consuming than for any other of the alternatives tested. It involved an intensive review of the frequency distributions as well as an indepth evaluation of the validity study outputs. The primary concern of analysts in this evaluation process was to obtain the most accurate data possible with the secondary consideration being that overall respondent burden should not be increased.

Using the question concerning the number of pupils from homes where the primary or dominant language is other than English as an example, it is possible to determine how the contractor arrived at its recommendations.

It was the contractor's recommendation that this question be deleted from the district and school questionnaires and retained on the teacher and pupil questionnaires. This was based on a review of the data contained in the table below, as well as on validator comments and suggestions. The question numbers shown in the table refer to the pretest instruments.

Questionnaire number	Error rate	Response burden	Level of precision
District 6 . . .	24%	Hard	Estimate
School 10 . . .	35%	Easy	Estimate
Teacher 24 . . .	32%	Easy	Estimate
Pupil 17 . . .	11%	Hard	Estimate

In most cases, RMC analysts were able to make recommendations as to the suggested location for each of the data elements.

ALTERNATIVE 4: WELFARE VERSUS LOW-INCOME DATA

The SSES has been designed to collect information on school systems in general and Federal program participation in particular. These Federal programs are designed to reach pupils with special needs.

One target group with special needs is generally felt to be children who have been determined to be educationally deprived and who live in low-income areas. Hence, it is a concern of this survey to collect accurate, valid information on the extent of low-income pupils within school districts. During the survey design stages, it was unknown whether the respondents could better provide information on the number of pupils who come from families currently receiving welfare, or whether data were more readily available on the existence of low-income families within the district. Given this, it was decided to pretest questions on this topic during the spring of 1974. Table 6 indicates the seven questions relating to this alternative, while examples from the pretest school questionnaire are also shown.

EXAMPLES OF LOW-INCOME VERSUS WELFARE QUESTION ALTERNATIVES

Low-income alternative

7. Approximately how many of the pupils in this school are from low-income families? (If none, write "0")

_____ Pupils

8. What is your definition of low-income?

_____

Welfare alternative

9. Approximately how many of the pupils in this school are from families whose primary supporter receives *welfare?* (If none, write "0")

_____ Pupils

Table 6.--Questions regarding low-income or welfare status
(Question numbers refer to the pretest instruments)

District questionnaire
4 -- pupils from families receiving welfare
School questionnaire
7 -- pupils from low-income families
8 -- definition of low-income
9 -- pupils from families receiving welfare
Pupil questionnaire
21 -- pupils from low-income families
22 -- definition of low-income
23 -- pupils from families receiving welfare

The approach that the contractor's staff members took in the evaluation of this question was to conduct discussions with respondents during the validation study site visits. It was learned through these discussions that, while respondents have difficulty providing information on either topic, they have an even greater amount of difficulty providing information on welfare. Whereas some school districts had conducted an ESEA title I survey in the past year requesting information on the existence of low-income families within the district, in almost no case did the school district officials have information concerning the welfare status of pupils' families.

The difficulties encountered by respondents in providing welfare data can be seen in the omit rate, shown below, which is double that of the equivalent low-income question.

	Omit rate			
	Low-income question		Welfare question	
	Number	Percent	Number	Percent
School questionnaire	1	1	3	2
Pupil questionnaire	15	1	27	2

In addition, the error rate for the welfare questions was high relative to that for the low-income questions as may be seen in the table below. Question numbers there refer to the pretest instruments.

Questionnaire number	Error rate	
	Low-income	Welfare
District 4	Not asked	57%
School 7/9	30%	58%
Pupil 21/23.	0%	0%

Where requested, welfare information was either estimated or respondents were forced to contact either welfare or social service agencies within the school district area. It is for these reasons that the contractor recommends that the questions concerning this issue request information on low-income families receiving welfare.

Chapter 6

ANALYSIS OF SAMPLING ALTERNATIVES

INTRODUCTION

One of the most significant sets of alternatives to be pretested during the mailout survey were the alternatives developed for sampling procedures. Each of the Elementary School Surveys (ESS) in the past had followed identical procedures for the sampling of classrooms and of pupils but these were not always successful. As a result, a good deal of attention was given to developing procedures that would solve some of the problems of the past.

The procedures used from the original Survey of Compensatory Education in 1968 to the 1971 ESS for sampling grades and classrooms had been to take every homeroom class for grades 2, 4, and 6 in every school in the sample. One problem this procedure offered was the difficulty in obtaining accurate counts of class sections for each school prior to the survey. In addition, this procedure did not provide any means of estimating between-grades variance. The procedure for sampling pupils traditionally used in the ESS was to have the teachers of the selected classrooms pick a random sample of four pupils in each class. The teacher manual provided instructions and a random number table for use in the selection of the pupil sample.

Given this background, RMC and NCES set out to develop alternative procedures for sampling classrooms and pupils that would be tested during the SSES pretest. A considerable number of alternatives were considered during a series of meetings throughout the summer of 1973. Among the alternative procedures initially under consideration, but eventually ruled out, were:

- sampling by birth date across the elementary grade population of each school,
- sampling by alpha segments within sampled classrooms,
- sampling alternate sets of grades in alternate schools,
- randomly sampling pupils from every grade in each school, and
- sampling pupils from homerooms sampled with probability proportional to size across the school population.

A basic sampling issue at one point in the discussion was whether a one-stage or two-stage sampling design was appropriate. In general, the parameters followed in designing and choosing sampling alternatives were:

- The sampling procedure must provide a means of measuring the variance between grades. From past surveys, the variances between schools, between classes within grade, and within classes were known, but it would be desirable to continue measuring these variances.
- The total sample size should be large enough for measuring the components of sampling error, but not so large that the sampling error is much smaller than it needs be. NCES indicated that the size of the 1971 ESS sample was adequate to provide these measures.
- Procedures to oversample (where necessary) pupils in target pupil subpopulations and pupils in small Federal programs should be developed. Certain programs and pupil groups in the past were inadequately represented for the purpose of drawing national estimates.
- Each alternative procedure developed must be auditable in postsurvey checks.
- Each alternative must be designed to provide the necessary components of variance that would allow for testing each alternative.

The product of all this was the development of two alternatives each for classroom and pupil sampling procedures.

The first classroom sampling procedure would select four homerooms at random across all homerooms for the elementary grades in each school. The second proeedure would select two grades at random in each school. In the pretest, only two homerooms in each selected grade were to be chosen. This was done to cut down on the pretest burden. NCES indicated that, should this procedure work, all homerooms in the two grades selected for each school would be surveyed as part of the full-scale design.

The alternative developed for pupil sampling was to vary the number of pupils selected in each sampled classroom. The alternative procedures were simple enough: In roughly half the schools, the teachers would be instructed to select four pupils. In the others, teachers would select two. If the selection of four pupils worked as well as selecting two, the general opinion was that within-class sampling would continue to select four pupils from each class to ensure adequate numbers for measuring within-class variance.

RESULTS OF SAMPLE CHECKS AND RECOMMENDATIONS

There were three types of sampling procedures being tested during the field effort conducted this spring. They were (1) sampling of classrooms that was conducted by the principal, (2) sampling of pupils that was conducted by teachers, and (3) supplementary sampling of pupils in special target populations in some schools. These special target populations were migrants, bilinguals, Indians, and handicapped—and this sampling was done by the school principal. For the sampling of classrooms, two alternative procedures were being pretested. Sampling Type 1 (referred to as the HLF type, because it used the Homeroom List Form) sampled four homerooms from a list of all the homerooms in a school. Sampling Type 2 (referred to as the GLF type, because it used the Grade List Form) first sampled two grades, and then two homerooms within each of these grades. The pupil sampling procedure involved two alternatives, also. The first alternative asked the teacher to sample four pupils from her homeroom; in the second she sampled only two. There was also a supplementary sampling procedure being pretested that involved sampling an additional number of students in schools that had high concentrations of these special target groups. This supplementary sample included up to a maximum of 20 additional pupils.

In the following discussion of the results of the pretested sampling procedures the phrases "correct sample," "incorrect sample," and "procedural error" will be used quite frequently. It is important for the reader to know the exact meaning of these phrases. The research design to check the selected sample directed the field staff to replicate the sample selection procedure that the respondents had been asked to complete. This replication was independent of the respondent's to ensure that the sample checker would not be biased by the respondent's errors. After the sample checker completed his sample selection, he compared it with the respondent's sample. If the samples were identical, the respondent drew a *correct sample*. If they were different, the respondent drew an *incorrect sample*. If the same was incorrect, it was due to a *procedural error*, or a mistake in following the sampling instructions precisely. It was also possible that the respondent drew a correct sample, yet made procedural errors. Some mistakes made in following the instructions would not necessarily affect the sample selected. An example of this would be the incorrect completion of the worksheets or the omission of information requested on these sheets, neither of which led to an incorrect sample. Although the primary consideration in the sample checks was that the correct sample was selected, the secondary consideration was whether or not the respondents were able to follow the instructions.

The RMC Research Corporation and OE field staff conducting the SSES sample checks visited the schools in May shortly after the respondents completed the pretest. Prior to beginning the field work, a three-day training session was conducted at RMC. In each school, the sample checker independently completed the same sample selection that was asked of the respondent, using the appropriate rosters and source documents in each school. He then compared his results with those of the respondent, indicated whether an incorrect sample was selected, and, if so, the types of procedural errors made. Also, for each district the sample checkers completed a site visit report that summarized their experiences, including problems incurred and recommendations. The field staff provided many comments and recommendations for redesign of the sampling procedure for the full-scale survey in addition to their sample verification tasks. The sample checkers spent approximately 2 days in each district and verified the sample selection procedure of three schools in the district.

The package used by sample checkers in the field included the necessary materials to complete the independent

sample selection, materials to report correct or incorrect sampling, procedural errors, and problems found, as well as a site visit report outline. Also included was a list of procedural error codes and an explanation of each. These errors included those of omission, arithmetic, transcription, misunderstanding of instructions, misuse of random number tables, creating lists, definitions, and other. Table 7 is a summary of the errors reported by the sample checkers and the frequency of occurrence of errors by sampling type. The procedural error types listed above are those the sample checkers used in the field and those reported in table 7.

Table 7.--Reported procedural errors

Sampling type	Procedural errors by site		Procedural errors												
									Definitional			Teacher packet of distribution record			
	One or more	None	Errors of omission	Arithmetic errors	Transcription errors	Misunderstood instructions	Misuse of random number tables	Errors in creating lists	Inconsistencies	Inadequacy	Not used	Misuse	Nonuse	Other known	Other unknown
Classroom															
Type 1 (HLF)	21	4	0	0	2	13	1	9	0	5	0	0	1	1[a]	0
Type 2 (GLF)	10	10	0	2	0	6	3	0	0	0	0	0	2	1[b]	0
Pupil															
Type 2 (2 pupils)	29	37	0	0	2	0	0	6	0	0	0	0	0	16	1
Type 4 (4 pupils)	44	52	1	1	0	13	8	17	0	0	0	0	0	17	0
Supplementary	11	4	0	0	0	4	0	1	0	0	0	0	0	6	0

a. Sampling forms were mailed to the district offices and had not arrived yet.
b. Minor procedural error--lack of thoroughness.

After reviewing results of the sampling procedure, however, it was possible to define a list of procedural error types made in following the HLF and GLF sampling procedures that was more concise than the list used by the sample checkers. These error types are the following:

(1) Errors in creating the list

a. Ordering within grades
b. Placement of AM and PM kindergarten classes
c. Placement of multigraded or multiaged (ungraded) classes
d. Other (such as using the enrollment from a date other than January 31, 1974)

(2) Transcription Errors (such as those made from transcribing enrollment figures from source documents to sampling worksheets)

(3) Definitional errors

a. Definitional inadequacy
b. Definition not used
c. Definitional inconsistency

(4) Lack of thoroughness

(5) Instructional errors

a. Instructional inadequacy
b. Misunderstood instructions

(6) Misuse of random number tables

(7) Arithmetic errors

(8) Did not follow instructions at all

(9) Other (such as not completing the sampling procedures at all)

The following paragraphs address each of the three major sampling types independently and discuss the results from the pretest, including the types of procedural errors that occurred and the solutions that may remedy them. In the sampling procedures the major questions that were addressed were: "Was the sampling done correctly?", "Were respondents able to follow directions?", "Was the procedure auditable?", and "Which method of sampling worked better?".

Sampling Classrooms

As can be seen in table 7, there were significant numbers of procedural errors and incorrect samples for both classroom sampling types. Some of these mistakes (in following the procedures) did not affect the sample drawn. However, the number of incorrect samples was still greater than 10 percent for *both* the HLF and GLF sampling procedures (see table 8).

As a general consensus, the sample checkers seemed to prefer the conceptual framework of the HLF, although admittedly on the whole the HLF was not nearly as effective as the GLF. In the 20 schools that used the GLF sampling procedure, 13 (or 65 percent) drew correct samples. In the 25 schools that used the HLF type sampling, only four (or 16 percent) drew correct samples. In tables 9 and 10, all the schools that were involved in the SSES pretest site visits and that conducted the sampling procedures are listed. Designations indicate whether errors were made in completing the sampling procedure and, if so, what the errors involved.

Type 1–Homeroom List Form (HLF).

The HLF procedure involved two basic steps: the first was creating the sample universe list of homerooms, and the second was selecting the homerooms from this list by use of random number tables. Most of the errors made in using the HLF sampling procedures occurred in creating the list. As can be seen in table 9, only two principals made errors in the second step. Four principals did not follow the instructions at all and picked "representative" samples based on their own judgment. This error type is therefore not attributed to either of the steps in the sampling procedure.

Of the 21 schools that picked incorrect samples using the HLF procedures; 8 of them were caused solely by the fact that they did not order homerooms within grade correctly or place AM and PM kindergarten classes correctly when creating the list. No other procedural errors were made. Most respondents read the first paragraph in step 1.1 whose key

Table 8.--Classroom sampling results

Sampling type	Correct sample	Incorrect sample	Procedural errors													
			Creating list				Transcription errors	Definitional			Lack of thoroughness	Instructional		Misuse of random number tables	Arithmetic errors	Other
			Ordering within grades	Placement of kindergarten classes	Placement of multi-graded classes	Other		Inadequacy	Not used	Inconsistency		Inadequacy	Misunderstood			
HLF Type 1	4	21	11	5	6	3	2	2	0	0	4	3	5	1	0	4	1
GLF Type 2	13	7	0	0	0	1	0	0	0	0	4	0	3	1	2	1	1

sentence was: "On the HLF prepare a list of all homerooms in your school in ascending order of grade level, from *prekindergarten through grade 6 only.*" They did not read further to the instruction stating that homerooms within a grade level should be ordered by size. These also included people who did not place AM and PM kindergarten classes correctly on the list. Some principals combined AM and PM classes and regarded them as one class. The procedure of combining the AM and PM classes is not technically correct, although the instructions were never explicit about this point. Other common errors included not using rosters from January 31, 1974, but from later dates, usually in April and May. This error was caused by the delayed timing of the pretest. Except for the four principals who did not follow procedures at all but picked a sample that they felt would be "representative," the procedural errors were minor ones that could be reduced by making the instructions clearer and easier to follow.

The HLF type sampling procedure was capable of being audited. All steps in the procedure were defined. The respondent was not given any choices where he could manipulate the sample and still follow the stated procedures. However, since the membership roster date that the principals were asked to use was 3 months before they received the materials, there were some problems in obtaining the correct roster needed to "audit" the sampling procedure.

Type 2--Grade List Form (GLF).

There were three basic steps in completing the GLF sampling procedure. The first was to establish the enrollment of each grade level in the school. The second was to determine which grades were to be sampled. The third was to determine which classes within these grades were to be sampled.

Thirteen principals selected correct samples, although some of them made procedural errors that did not affect the sample. Seven principals selected incorrect samples. In the first step of the GLF procedure, of the four principals that made procedural errors, two were arithmetic and two were caused by lack of thoroughness. The two that were due to lack of thoroughness did not affect the sample drawn. In the second step, two of the three procedural errors resulted from misinterpreting the phrase "equal to or less than." In the third step, one of the three procedural errors was caused by an error in creating the list of homerooms within the grade sampled: The respondent did not order homerooms with equal enrollment alphabetically by the last name of the teacher. Another procedural error resulted from the incorrect

Table 9.--Detailed description of HLF-type sampling procedure errors

School Number	No errors	HLF-type sampling				Other
		Step No. 1		Step No. 2		
		Creating the list		Selecting the homerooms		
		Sub-step No.	Procedural error	Sub-step No.	Procedural error	
1		.1	Ordered within grade incorrectly			
2						Picked his own sample
3		.1	Ordered within grade incorrectly			
4		.1	Misunderstood definition of multi-grade classes			
5		.1	Used wrong membership roster date			
		.2	Transcription error			
6		.1	Ordered within grade incorrectly			
		.1	Misunderstood definition of multi-grade classes			
		.1	Transcription error			
7		.1	Placed K classes incorrectly	.0	Instructional inadequacy	Picked his own sample
8		.1	Lack of thoroughness (omission).			
		.1	Placed K classes incorrectly			
		.1	Ordered within grade incorrectly			
		.1	Instructional inadequacy			
9		.1	Placed K classes incorrectly			
		.1	Ordered within grade incorrectly			
10		.1	Ordered within grade incorrectly			
11						Picked his own sample
12						Picked his own sample
13	x					
14	x					
15	x					
16		.1	Ordered within grade incorrectly			
17		.1	Ordered within grade incorrectly			
18						Sampling procedures not completed
19		.1	Placed K classes incorrectly			
20		.1	Ordered within grade incorrectly			
21	x					
22		.3	Lack of thoroughness	.0	Misused random number tables	
23		.1	Ordered within grade incorrectly			Confused about regular vs supplementary sampling procedures
		.1	Misunderstood definition of multi-graded classes			
		.1	Used wrong membership roster date			
		.1	Misunderstood definition of multi-graded classes			
24		.1	Placed K classes incorrectly			
		.1	Used wrong membership roster date			
		.1	Misunderstood definition of multi-graded classes			
25		.1	Ordered within grade incorrectly			
		.1	Misunderstood definition of multi-graded classes			
		.2	Lack of thoroughness			
		.3	Lack of thoroughness			

Table 10.--Detailed description of GLF-sampling procedure errors

School Number	No errors	GLF-type sampling						Other
		Step No. 1		Step No. 2		Step No. 3		
		Establishing enrollment by grades		Determining grades to be sampled		Determining classes to be sampled		
		Sub-step No.	Procedural error	Sub-step No.	Procedural error	Sub-step No.	Procedural error	
1		.5	Arithmetic	.2	Lack of thoroughness	.2	Creating list	
2	x							
3	x							
4								Completely multigraded/ team teaching (NA)
5	x							
6	x							
7	x							Record of TP distribution not completed
8		.4	Arithmetic			.5	Misunderstood instructions	
9	x							School has only one grade level/instructions failed
10								Picked own sample
11	x							
12	x							
13	x							
14						.5	Misused random number tables	
15	x							
16	x							
17								Sampling procedures not completed
18	x	.3	Lack of thoroughness					
19	x	.3	Lack of thoroughness	.2	Misunderstood instructions			
20				.2	Misunderstood instructions			

use of the random number tables. Other miscellaneous errors included a school that was set up on a multigraded team-teaching approach for which the instructions were not easily applicable. Only one principal who was assigned a GLF sampling procedure neglected the instructions altogether and picked his own "representative" sample. The fact that procedural errors made in the beginning of the process did not necessarily affect the sample drawn gave the GLF sampling procedure an advantage over the HLF sampling procedure. Small errors made in determining the enrollments of the grades normally did not affect the sample drawn.

The GLF sampling procedure had more steps and was somewhat more cumbersome in the sense that the respondent had to pick two grades based on the enrollments in them. Then, for each grade, a list of homerooms had to be created. And finally, using a random selection process, two homerooms had to be picked from each grade. Nonetheless, the GLF

sampling procedure seemed to produce better results than the HLF in terms of correct samples. This was due to the fact that errors made in the earlier steps of the procedure did not necessarily affect the sample drawn.

The GLF-sampling procedure was capable of being audited except for one minor point. There was no date specified for the student membership figures used to construct the cumulative grade totals. The addition of this date to the instructions would make the procedure completely auditable.

Recommendations.

From the results and experiences gained during the pretest of these two sampling procedures, certain things become apparent. First, it is imperative that the sampling instructions be made as simple as possible. Only if they are simple is the respondent likely to follow the procedure in a "rigorous" manner. However, it is difficult to produce both an auditable and simple sampling procedure. Also, it is clear that most of the incorrect samples were caused by procedural errors in creating the list from which the homerooms were to be selected. The respondents did not have significant trouble in using random number tables or following the selection instructions. Most errors occurred in the areas of producing lists as of the given date (January 31, 1974), understanding how to apply the instructions to different organizational structures, using the definitions, and following the instructions. For instance, most principals did not consider their special education classes as ungraded or multiaged classes, even though these classes were not designated as a particular grade. Thus, in some cases, the principal omitted the special education classrooms entirely from the sample universe list. The instructions also did not adequately address the team-teaching concept or the AM and PM kindergarten class case.

Neither the HLF nor the GLF-sampling procedure can be recommended in its present form. Generally, this recommendation is based on the fact that both are overly complex. There are too many places in the instructions where the principal can make errors. The procedure for sampling classrooms to be used during the full-scale survey must be simpler, easier to follow, and involve fewer definitions than the HLF and GLF-pretest procedures. In particular, the procedure for constructing the sample universe list of classrooms must involve fewer decisions of the type as where to place a particular homeroom on the list or to which homeroom or grade to assign a student. It was in these areas that the HLF and GLF-sampling procedures presented the most difficulty.

Two improved sampling procedures are suggested: (1) Sampling two grades from each school (not dependent on enrollment in the grades) and then using all homerooms within these two grades as the sample homerooms. This will be referred to as "grade level" sampling. (2) Having the principal list all the homerooms (alphabetically by the last name of the teacher) and selecting the required number of homerooms from that list (similar to the pupil sampling procedure). This will be referred to as the "alphabetical list" sampling procedure. Each of these sampling procedures has the advantage that it is much simpler than the ones pretested. Additionally, the problems in creating the list of classrooms to be sampled would be essentially eliminated. However, each still has its weaknesses. The entire concept of sampling homerooms for the SSES arose when it was felt that using grades 2, 4, and 6 (as in the past) did not provide enough information to measure variability between grades. Thus, the concept of sampling grades within a school and having teachers within those grades complete the SSES instruments addresses the issue directly. But the disadvantage is that all students in that school must be assigned to a particular grade level (i.e., to a homeroom at a particular grade level) before the sampling procedure can be completed. This presents problems in the cases of team-teaching, multigraded, ungraded, special education, and open-classroom situations, where it is difficult to assign each child to a particular grade level.

The alphabetical list sampling procedure—although the simplest, most logical way from the point of view of principals—does not stratify the sample by grade level. However, when a random sample is selected from this alphabetical list, the grade levels chosen will also be randomly selected. It gives less control over grade distribution of the sample. For example, it would be possible, although highly unlikely, that all homerooms selected in a certain school would be from the same grade level. It is also possible that each homeroom selected in a sample school would be from different grade levels. Sampling from the alphabetical list of homeroom teachers avoids the problem of assigning a grade level to the homerooms. However, the problem of assigning each pupil to a unique homeroom still exists. Some schools do not use a homeroom structure. In these cases, the first class period on Monday morning or some other point in time would have to be used to define the homerooms. The alphabetical list procedure also has the advantage that the number

of children in a homeroom does not vary much across LEA's. When combined with the fact that a fixed number of homerooms would be selected from each school, this means that the number of pupils in the sample is more effectively controlled. Another consideration is the logistical problem of conducting the survey. If one samples all homerooms within the grade levels selected, the number of instruments required cannot be determined in advance. Thus, an oversupply of instruments would have to be sent to ensure that a particular school had enough. This is a significant disadvantage. The alphabetical list sampling procedure does not have this problem since a constant number of homerooms would be sampled from each school.

Considering all the strengths and weaknesses of the alternatives, RMC feels the alphabetical list sampling procedure is definitely the best one. The instructions would be a two-step procedure. The first would be to create an alphabetical list of homeroom teachers. In this process, all students in the school must be assigned to a unique homeroom with a unique teacher. For the majority of schools, this process would be very simple since all students are normally assigned to a unique homeroom and a unique homeroom teacher. For schools that use an open-classroom or team-teaching approach to instruction, special instructions will be needed. In the second step, a random sample of homerooms would be selected from this list. Random number tables would be constructed for each number from one to the maximum number of homerooms existing in a school. A school would use the table appropriate for the total number of homerooms in the school for prekindergarten to grade 6. This sampling procedure is auditable since it will specify exactly all the steps the principal must complete to select the sample. There will be only one correct sample that can be chosen. And it can be verified to estimate how frequently incorrect samples occur. The procedure is statistically sound. It will provide a random sample of pupils from all grade levels very nearly equal to the proportion of children in each grade. This will make it possible to make estimates for each grade level, to calculate the variability within grades and between grades, and, most importantly, the procedure will be simple. It does not involve creating special lists that depend on elaborate definitions of which children can be placed where. All of these attributes combine to give a very strong sampling procedure.

Pupil Sampling

For each homeroom selected to be included in the SSES pretest sample, the teacher was asked to follow procedure to select either two or four pupils. The purpose of the pretest was to determine whether selection of two or four pupils by the teachers would have any effect on the randomness of the sample or the probability of the teacher following the sampling instructions precisely. The sampling procedure for teachers to select two pupils will be referred to as pupil sampling Type 2 and the other as pupil sampling Type 4.

Generally, it was found that problems resulting from the pupil sampling procedures were minor for both alternatives. First, the creation of the list from which the teacher would select the sample of pupils was straightforward (alphabetized). The likelihood that a teacher would already have a list of this type was very high. In some cases, teachers had an alphabetical listing of their children but was separated by boys and girls. This did introduce an error to the sample chosen in some cases. Second, the use of the random number tables was quite easy for the pupil sampling procedures since the teacher needed only to know the total number of pupils in her classroom. That number referred her to the table having the correct sequential numbers of the students to be included in the random sample. In table 7, it can be seen that the majority of teachers did not choose correct samples. However, the procedural errors made did not introduce serious errors in the sample picked since they did not affect the randomness of the sample. For example, errors in alphabetizing the list of students did not systematically include or exclude certain types of students. The important point in the pupil sampling procedure is that all students must be given an equal chance of being included in the sample. Thus, as long as the pupils were placed on the list and the teacher used the random number table, the sample selected was random.

Seldom did teachers pick their own "representative" sample of students. Before the SSES pretest was conducted, it was felt that sampling of only two pupils in a classroom might introduce problems of this type: Teachers might be more tempted to select pupils that they felt were representative if such a small number of pupils were to be sampled. However, during the pretest, teachers commented to sample checkers that they knew the sampling was supposed to be a random process. Even when they questioned the appropriateness of the pupils they had selected randomly, they did not let this sway them from attempting to follow the correct procedures. Still, the problem with minor errors such as

misalphabetizing is that the procedure cannot be audited unless there is strict adherence to the instructions. One cannot determine whether the sample was purposely manipulated or whether a true random sample was selected unless all steps in the procedure are determined and followed exactly.

Table 7 (shown previously) is a display of the results as reported by the field staff for the sample checks. It can be seen from this table that most procedural errors fell under the category of "other errors" with a known cause. Examples of the errors that teachers made during the selection of the pupil sample are: (1) not alphabetizing the list of pupils correctly (usually using separate alphabetical lists of boys and girls, (2) using the student enrollment roster for the wrong date, (3) errors caused by lack of thoroughness (such as miscounting), and (4) misusing the random number tables.

Recommendations.

The pupil sampling procedure used a straightforward, alphabetical list of the pupils and, depending on the total number of children in the class, the teacher was directed to a specific random number table. The random number table contained sequential numbers for the students on the alphabetical list to be included in the sample. The sampling procedure was very sensitive to the number of students in the class because, for each number of total students in the class, there was a different set of random numbers. The procedure could be audited. However, it is recommended that a sheet for the actual alphabetical list of students in the class be included as one of the survey forms. These forms should then be maintained in the school's survey files since they would provide a means of checking the teacher's sampling procedure. It is important that the sampling procedures be implemented correctly if a nationally representative sample is to be obtained. Thus, the sampling procedure must be auditable so it can be determined whether it was correctly implemented.

The conclusions that can be drawn from the pretest of the pupil sampling procedures are that both pupil sampling Type 2 and pupil sampling Type 4 were successful in selecting a random sample. The procedural errors that occurred were the type of errors that would always occur regardless of the quality of the instructions or the procedure used. As long as the procedure must be auditable, it will retain a certain degree of complexity that will invite errors. It should be pointed out that even though the procedural errors uncovered often affected the sample selected, they did not affect the randomness of the sample in most cases. Instructions should be slightly redesigned and refined to emphasize the importance of the teacher following the procedures precisely.

Supplementary Sampling

The supplementary sampling procedure pretested was designed to ensure that a sufficient number of students in various special target groups would be obtained. This was done so sufficient data could be collected to provide statistically valid results. The four target groups were: migrants, bilinguals, handicapped, and Indian children. Not all schools were asked to complete supplementary sampling procedures. Only those schools that had significant percentages of these target populations were asked to participate. Of the 20 schools that participated in the supplementary sampling procedure, 15 were examined during the sample checks. Only four of these schools completed the procedures without error. Table 11 indicates the schools that picked correct supplementary samples and for those schools that did not, an explanation of the problem or procedural error that caused the incorrect supplementary sample is given.

The supplementary sampling procedure was an involved process composed of four steps:

(1) compiling the list of the target population,
(2) selecting a sampling plan,
(3) selecting the sample, and
(4) completing the supplementary sampling form.

The actual sampling procedure instructions did not cause the majority of the problems. Rather, 4 of 15 schools did not conduct the supplementary sampling procedures at all, feeling that the regular sampling procedures superseded

Table 11.--Supplementary sampling results

School number	Target population type*	No errors	Explanation of errors or problems
1	I		Sampling procedures not completed--respondent uncooperative
2	I		Sampling procedures not completed--no list of Indians exists in school
3	B	x	
4	B		Indadequate instructions
5	B		Sampling procedures not completed--logistics problem
6	M	x	
7	M	x	
8	M	x	
9	H		Substituted regular pupil sampling in handicapped classrooms--misunderstood instructions
10	H		Substituted regular pupil sampling in handicapped classrooms--misunderstood instructions
11	H		Target group changed from Indians to handicapped because of small number of Indians (4) in school--principal not notified
12	H		Error in creating list--left one student off list
13	H		Did not complete supplementary sampling procedures--respondents thought regular sampling superseded supplementary
14	H		Did not complete supplementary sampling procedures--respondents thought regular sampling superseded supplementary
15	H		Did not complete supplementary sampling procedures--respondents thought regular sampling superseded supplementary

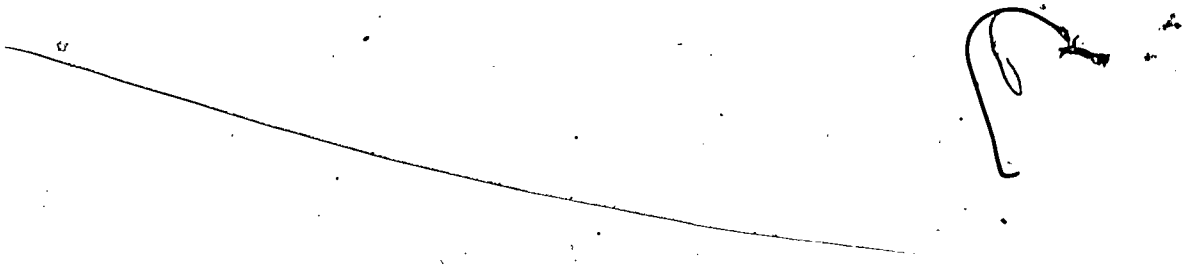
*I - Indians, B - bilingual, M - migrant, H - handicapped

them. There were also several schools that did the opposite: they completed the supplementary sampling procedures but did not complete the regular sampling procedures, feeling they were superseded by the supplementary sampling procedures. Another two schools knew that they were supposed to conduct a supplementary sampling procedure, but they merely used the regular sampling procedure in classrooms that had the target population students of interest. These cases occurred with handicapped pupils. Other procedural errors that occurred were caused by problems in finding the data sources to compile the list of supplementary sample pupils. For instance, many principals did not know the criteria or the information concerning whether or not a child should be considered an Indian. Also, Federal definitions of who should be considered a migrant pupil are often different from those used by local school authorities. Handicapped pupils may be considered handicapped in a certain school district but not by State or Federal definitions. It was frequently difficult to determine whether a child should be considered as bilingual or coming from a home where the primary language is other than English. In short, the supplementary sampling procedure had many definitional inadequacies.

Recommendations.

This procedure would be significantly improved if the instructions were refined. However, there are still many deficiencies in the basic framework of the supplementary sampling procedure. It tends to place an undue burden on the principals and on a few teachers. For example, a teacher of the educationally handicapped or a teacher of bilingual children might be asked to complete questionnaires for all the supplementary pupils chosen. It also tends to be highly confusing because two sampling procedures are conducted in a school instead of just one. Thus, although the supplementary sampling procedure could be improved to the point where it would be somewhat successful, alternatives to the present procedure should be considered.

A very desirable alternative would be to sample schools with increased probability if there were a concentration of these special target groups in them. For instance, schools with a large Indian population would be selected with certainty in the SSES sample. This probability of selection compensates for the small number of these children in the public school system at large. However, the major difficulty with this concept is obtaining the necessary data about concentrations of these target pupils in all schools or school districts. The approach, therefore, is to heavily oversample those schools in which there are high concentrations of the special target group pupils to obviate the need for oversampling pupils within a school.



Chapter 7

VALIDATION STUDY

INTRODUCTION

The original goal for the pretest of the SSES was to prepare a reliability and validity study that would evaluate the ability of the instruments to collect accurate data. In a decision jointly arrived at by RMC and NCES, the reliability study was deleted and all available resources were channeled into the validity study. The reasons for this decision were as follows:

(1) The funds available for the reliability and validity study were limited and it was felt they should be spent in acquiring only the information most useful for the revision of the instruments.

(2) The data requested in the instruments were of the type for which analysts expected little response variation over time, but there were doubts as to whether respondents had accurate information to report.

(3) The sample included in the pretest was sufficiently large to reduce errors in measurement (a reliability question) but could not be expected to reduce systematic errors (a validity question).

The basis for the decision, in a technical sense, was that for any characteristic of interest concerning a respondent, there is considered to be some "true" value (u_i). When a questionnaire is used to determine the value for a respondent, an answer (x_i) is obtained that is not necessarily equal to the true value but rather is a random variable that has an average value a_i and a standard deviation σ_i. The difference between a_i and u_i is called the bias of the measuring instrument. Checking the *validity* of the measurement may be thought of as estimating the bias $b_i = a_i - u_i$. Note that in this formulation of the response error model, the bias reflects the effects of systematic errors, and cannot be reduced by making repeated measurements on a respondent with the same instrument.

On the other hand, the difference $x_i - a_i$, the random part of the response error, averages out to zero over repeated independent trials. The quantity σ_i is a measure of the variation of a respondent's answer in repeated trials. If σ_i is large, we say that the measurement is unreliable.

Now suppose we attempt to estimate the average value of u_i in the population by drawing a random sample of n respondents. Normally we would use

$$\bar{x} = \frac{1}{n} \sum_{1}^{n} x_i$$

as the sample estimate—the average of the responses for the n respondents in our sample. In this case, the estimate $\bar{x}$ will have a bias equal to the average value of the bias b_i over all the N elements of the population. It will also be subject to random variation from two sources. One source is the population variability σ_p between the values a_i in the population, and the other is the variability σ_r between (independent) repeated responses from the same respondent.

The total variability of $\bar{x}$ will be proportional to $\sqrt{p^2 + \sigma_r^2}$. Thus if the variability σ_r between responses from the same respondent is not more than say one-third as large as the variability between the average values a_i for different respondents, the response variability component will increase the sampling variability by only about 5 percent, since

$$\sqrt{\sigma_p^2 + \left(\frac{\sigma_p}{3}\right)^2} = \sigma_p \frac{10}{9} = 1.05\,\sigma_p,$$

provided, of course, that the sample is a relatively small fraction of the total population. If σ_r were half as great as σ_p, the increase would be only about 10 percent.

RMC, therefore, concluded that because resources for checking were limited, as was the case in the SSES field test, we should concentrate on measuring the bias (i.e., the validity) of the answers rather than devoting resources to replicating the process to get a measure of the response variability (reliability).

Once the decision was made to focus on validity issues, three overall objectives were stated for the study:

(1) to produce quantitative measures of the type of nonsampling errors,

(2) to determine the sources from which data were drawn in responding to the survey, and

(3) to elicit comments and suggestions for the full-scale implementation of the survey.

ASSUMPTIONS AND PREMISES

The basic premise for this validity study was that much of the data could be validated in the traditional sense; i.e., the data were contained in records at some place in the school district system and could be located as part of a field work effort. This assumption was based on RMC's previous work with other validation studies in similar areas. The SSES instruments were reviewed to see if this assumption would hold true in this case. From this, it was determined that, while there were a number of questions for which the approach would not work, for many others it would. And as a result, it was felt that validation would be a fruitful method to follow.

With the basic assumption given, the first major step in the development of the validity study was to prepare a plan for using the information that would be collected. This plan also served to determine the instruments and forms to be developed and the precise approach that would be taken. The basic method RMC decided to use in this validation study was to search for:

- the distribution of errors by questionnaire data element, and
- the distribution of errors by type of error.

Therefore, it was decided to concentrate the validation analysis on those errors occurring with a high frequency. In the first case, RMC would review the data elements in which errors were made most frequently, regardless of the cause or type of error. From this review, RMC would be able to determine which data element, item, or section contained the greatest error on the SSES instruments and thus deserved the most careful review. A review of the frequency of each type of error (arithmetic, transcription, etc.) would allow RMC to determine whether the need existed for special instructions or revisions. Whenever there were differences between the actual data as determined by RMC and the data reported by the school district, a thorough review could then be held to determine where the instrument or instruction should be revised so that the data reported would be valid. It was realized that with the small sample of school districts visited, results of statistical analyses might not necessarily be conclusive. However, it was decided that this approach could provide information concerning the analysis of the SSES data and would assist in providing directions for the full-scale implementation of the survey. One of the major efforts would be the evaluation of comments made both by the respondents to the survey and on-site interviewers. It was believed that the evaluation of these comments could significantly improve the full-scale implementation of the survey and that they would prove most useful for questionnaire revisions.

Because of the limited time and funds available for the validation study, it was felt that it would be impossible to validate every questionnaire item at all of the sites visited. Therefore, it was necessary to select a subset of items to be validated from over 300 items on the four questionnaires. The staff of RMC, Intran, and a consultant (Mrs. Nancy Bradley Royall) rated each data item on the questionnaires against four basic criteria. The criteria that were used in the selection were:

(1) *Importance in Analysis*
0–not used in analysis
1–used in analysis of some data
2–used for analysis of large sections of data

(2) *Confidence in Accuracy of Data*
- 0—few doubts about the accuracy of data
- 1—some doubts about data accuracy
- 2—strong doubts
- 3—grave doubts

(3) *Effort Required for Validation*
- 0—easily validated
- 1—possible to validate
- 2—considerable effort required for validation
- 3—unreasonable effort required for validation

(4) *Existence of Prior Validation Studies*
- 0—item valid
- 1—similar item found valid
- 2—item not validated on previous studies
- 3—item validated on previous study with poor results

The scores given to the questionnaire items by these evaluators were summed. Then candidates for validation were selected by paying the greatest amount of attention to the importance each item would play in the analysis of the SSES data. The result of this effort was the determination of a subset of data items to be validated at all sites, another subset would be validated at approximately half the sites, and the remaining data elements would be validated at only two sites.

The frequency with which items were validated in the sites visited may be seen in table 12 below. This table also indicates an estimate of the amount of time thought to be required for the validation effort. This time estimate was found to be quite accurate during the site visits.

Table 12.--Frequency of item validation and estimated time required

Questionnaire	Frequency of item validation			Estimated time required
	All sites	Half	Two	
District	43	32	55	2 days
School	30	13	18	4 hours
Teacher	11	12	38	2 hours
Pupil	5	21	34	1 hour

The basic approach taken in the validation of the SSES documents was a series of site visits to a sample of the school districts that completed the instruments in the spring of 1974. Since the site visits were to be made so late in the school year, the cooperation of participants was extremely important to the study. This being the case, the sites visited were selected on the basis of providing a broad range of school district characteristics and were composed of those who agreed to participate in the validation study. The result of this is that the data that came out of this study may or may not be statistically significant, but they do provide broad indications of the direction and magnitude of the problems of the survey.

The field work effort was composed of two major parts: First, validators spoke with the individual who completed the SSES documents in the school districts to orient themselves to the methodology used by the district in completing the forms. Through this discussion, validators learned things such as the degree of automation in the school district recordkeeping system, the utility of State or Federal handbooks in responding to the questionnaires, and any significant problems encountered with the survey. The second part of the approach was an attempt to complete the SSES documents from the basic data sources available at the school district. This allowed the

validators to compare the data they developed with that entered previously by the school district respondents. So that this procedure could take place while the validators were still in the field, the LEA's participating in the validation study had been asked to hold their completed questionnaires until after the site visits were finished.

In performing this study, RMC developed a comprehensive package of data-collection instruments. The rationale for this was twofold. First, to ensure the collection of accurate data across school districts and, second, to ensure consistency among the field staff that would be used in the data-collection effort. The materials developed consisted of:

(1) *Interview Guidelines.* The interview guidelines were developed to be used at the State, district, school, and teacher levels. These guidelines were designed to collect information on logistics, the precanvass survey, background information on the school system, and problems encountered in completing the SSES instruments.

(2) *Questionnaire Critique Sheets.* The questionnaire critique sheets were developed to be used individually for the district, school, teacher, and pupil questionnaires, and were designed to collect information on the clarity and wording of both the questions and the definitions used.

(3) *Validation Workbooks.* The validation workbooks were developed individually for the district, school, teacher, and pupil questionnaires. They were designed to collect information on the original source from which the respondent collected the SSES data, the problems encountered, the recommendations made by the RMC staff member for corrections, the value of the validated data elements, and the cause or source of error if the element was in error.

(4) *Special Programs Form.* Special programs forms were developed for the district and school levels to determine how well the district and school personnel were using the District and School Lists of Special Programs.

Because of the time constraints imposed on the project by the delayed OMB clearance, a short period of time was available in which to do the work. Consequently, a large staff was required for the validation study. Included among the staff were individuals who either were not familiar with the SSES goals and objectives or who had never participated in a validation study. Therefore, a 3-day training session was conducted by the contractor.

As a result of the approach taken, a number of outputs were expected from individual validators including:

(1) A completed workbook for each of the questionnaires validated in the field.
(2) A critique sheet for each questionnaire validated in the field.
(3) One special programs validation sheet for each district and each school visited in the field.
(4) Interview guidelines for each of the major persons interviewed.
(5) A complete site visit report, documenting the persons interviewed and the outputs of the study. The site visit report was to consist of a description of the school system, a description of the method by which the school district completed the SSES instruments, a description of the validation of the SSES instruments, an enumeration of the problems discovered, as well as the recommendations for their correction, and an indication of the necessity, if any, for developing State-specific instructions for the SSES instruments.

A separate report to NCES presents a summary of the validation site visit reports as well as the site visit reports themselves. Listed as part of the summary are the sites that were visited and the major persons contacted there. It gives a concise overview of the procedures conducted by the validators and perhaps, more importantly, those used by the LEA's as they completed the survey. Significant problems encountered by the validators and respondents alike are also discussed. These, in combination with the recommendations suggested by the field staff and school district personnel, provide valuable insights that should go a long way toward improving not only the SSES but also other Federal data-collection efforts.

EVALUATION OF ERRORS

Where validators found discrepancies between the data they produced themselves and that previously entered on the questionnaires, an interview was held with the original respondent to determine the reason for the differences. If the differences could not be resolved at that time, the errors were recorded in the validation workbooks.

Considerable thought was given to the distinction between a discrepancy and an error. A discrepancy was defined as a difference between the data estimate initially determined by the independent validator and that originally submitted by the respondent. If, during the resolution interview, it was determined that the respondents' data were truly in error, the discrepancy was then called an error. If, however, it was determined that the respondent was correct and the validator was incorrect, the existence of a discrepancy was noted by the validator to provide an estimate of the difficulty involved in obtaining accurate data for a given questionnaire item.

In an effort to standardize the analysis and reporting of the SSES validation study data, a series of error codes were developed. While the categories of errors were not mutually exclusive, it was useful to categorize them for analytical purposes into the following types:

(1) Arithmetic Errors
(2) Definitional Errors
  a. Definitional inconsistencies
  b. Definitional inadequacy
  c. Definition not used
(3) Estimation Errors
(4) Formatting Errors
(5) Timing Errors
(6) Transcription Errors
(7) Lack of Thoroughness
(8) Lack of Source Data
(9) Misunderstood Instructions
(10) Repeat (Carry-Over) Errors—this includes total line errors unless they were arithmetic
(11) Other—identified as to cause
(12) Unknown

These error codes were defined for use in the field and for analysis purposes as follows:

(1) *Arithmetic Errors* were errors in the basic addition or subtraction employed in responding to the SSES questionnaires or where a percentage of an LEA figure was incorrectly calculated and entered onto the SSES form.
(2) *Definitional Errors:*
  a. Definitional inconsistencies occurred when the SEA or LEA used a different definition from that used on this survey for the same term. Examples of this may be seen in the varying definitions for preservice training or the various handicapping conditions.
  b. Definitional inadequacy was used when the definitions provided in the SSES instruments apparently did not meet the needs for this survey.
  c. Definition not used was used if the respondent did not read the definitions provided.
(3) *Estimation Errors* occurred when the respondent had no data at hand for a given data element, was forced to make an estimate, and used an incorrect estimating technique.
(4) *Formatting Errors* were those errors that arose because data were maintained at the SEA or LEA in a different format from that required for completion of the SSES instrument. These types of errors were generally found in conjunction with one or more of the other errors described.
(5) *Timing Errors* occurred when more accurate data would have become available after the SSES instrument was completed.
(6) *Transcription Errors* occurred when numbers were incorrectly transcribed from one form to another.
(7) *Lack of Thoroughness* was used when there appeared to be no reason for an error other than carelessness on the part of the respondent.
(8) *Lack of Source Data* occurred when required data were not available to the respondent.
(9) *Misunderstood Instructions* was used when the respondent did not understand the instructions given for the SSES instrument.
(10) *Repeat (Carry-Over) Errors* occurred when the error was solely the result of a previously reported error and generally appeared in a total line.

(11) *Other Errors* were all errors for which a cause was known other than those above.
(12) *Unknown Errors* were those errors for which the analyst was unable to assign a cause.

The remainder of this section addresses the errors that the field work validation staff discovered. These errors were uncovered as a result of analyzing the differences between data the validators found while in the field and those submitted by the respondent. The causes of the errors were numerous; however, they were classified as best as possible within the error code framework previously defined. In many instances, it was very difficult to classify errors by type, but it did provide a useful means for finding trends or errors that a large number of respondents made. These errors could possibly be reduced by redesigning the question item or the approach in the cluster of questions related to a specific policy issue. It should be pointed out that both random and systematic errors exist in the data provided by the respondents. Owing to the limited time that could be spent at each site during the validation effort, these two types of errors could not be accurately separated or individually quantified. The analysis, therefore, suggested by the validation effort was much more concerned with systematic errors than random errors. This was because systematic errors produce a larger bias in the mean value of the variable than random errors (which, by definition, are random about the mean and net to zero) in general, and systematic errors usually have a single causal factor that could probably be corrected. On the other hand, random errors have many causal factors that produce the random effect. Unfortunately, these can never be completely eradicated. The analysis here will begin by looking at errors by error code, pointing out which errors occurred most frequently, and why. Next, analysis clusters will be examined. Finally, the four questionnaires (district, school, teacher, and pupil) will be discussed, including the types of errors most prevalent in each. This analysis should provide insight into the basic problems with the questionnaires and what might be done to eliminate these problems.

Analysis of Errors by Error Code

Table 13 presents in summary form—for the district, school, teacher, and pupil questionnaires—the errors found for those items that were validated. Figures 8 through 12 graphically display the distribution of errors for all questionnaires, and then errors on the district, school, teacher, and pupil questionnaires, respectively. The error that occurred most frequently was caused by the respondent misunderstanding the instructions. This error comprised 17.86 percent of all the errors. Some of the questions in the SSES instruments required more effort than could be reasonably expected of a respondent. This was particularly true in the handicapped sections on the district and school questionnaires. However, the judgment as to whether a respondent misunderstood the instructions was not an easy one to make and some of the errors in this group may belong to those caused by lack of thoroughness. The causes of the latter can be found in factors such as using the incorrect reference data for providing the data, or misinterpreting the intent of the question or key words in the question. Any complexity in the instructions for the questionnaires resulted from attempts by the SSES instrument designers to get comparable data across LEA's. However, these considerations have to be weighed against respondent burden and the likelihood of the directions being followed explicitly. As one can see from the tables, errors caused by lack of thoroughness occurred 15.29 percent of the time, which was the fourth most frequent error.

The second most frequently occurring error was caused by definitional problems. This error code was subdivided into three different categories: definitional inconsistencies, definitional inadequacies, and definitions not used. The overall occurrence of definitional errors was 16.76 percent of the time.

The majority of these errors were related to definitional inadequacies. The educational system and organization in the United States is highly varied. The methods of teaching and approaches to instruction are numerous. Thus, to design a questionnaire that will collect comparable data from all of these systems is very difficult. To do this, strict attention must be given to the definition of terms used in the questionnaires. Many definitions were placed on the front inside cover of the instruments, explaining the meaning of such terms as "handicapped children," "educationally deprived pupils," "inservice training," and "ungraded classes." However, differences between the LEA's definitions and the terms used in the pretest questionnaires presented serious problems. First, the respondents found it impossible to use some of the definitions provided in the SSES instruments because they did not apply to a given situation. The problem of definitional inadequacy was further compounded by the lack of data sources. For instance, there was generally no source available to answer questions dealing with educationally deprived pupils—even when respondents read, understood, and used the definition for the term. As a result, they tended to

Table 13.--Error summary by type of error

	Error code[a]	Questionnaire								Total	
		District		School		Teacher		Pupil			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	1	17	7.2	15	5.4	9	6.7	0	0	41	5.54
	2	42	14.1	27	9.7	53	39.6	11	12.0	124	16.76
	2a[b]	18	7.7	3	1.1	23	17.2	1	1.1	45	6.08
	2b	14	6.0	17	6.1	22	16.4	7	7.6	60	8.11
	2c	1	.4	7	2.5	8	6.0	3	3.3	19	2.57
	3	10	4.3	27	9.7	0	0	1	1.1	38	5.14
	4	1	.4	1	.4	1	.7	0	0	3	0.40
	5	7	3.0	18	6.5	5	3.7	1	1.1	31	4.19
	6	2	.9	---	---	0	0	0	0	2	0.27
	7	41	17.4	35	12.6	24	17.9	13	14.1	113	15.29
	8	45	19.1	56	20.1	8	6.0	5	5.4	114	15.42
	9	92	17.9	60	21.6	17	12.7	13	14.1	132	17.86
	10	7	3.0	9	3.2	9	6.7	14	15.2	39	5.27
	11	7	3.0	15	5.4	6	4.5	21	22.8	49	6.63
	12	23	9.8	15	5.4	2	1.5	13	14.1	53	7.17
Frequency of errors	Number	235		278		134		92		739	
	Percent	27.35		29.32		16.94		17.13		23.57	
Frequency of no errors	Number	624		670		657		445		233	
	Percent	72.65		70.68		83.06		82.87		76.43	
Frequency of validation	Number of items	859		948		791		537		3,135	

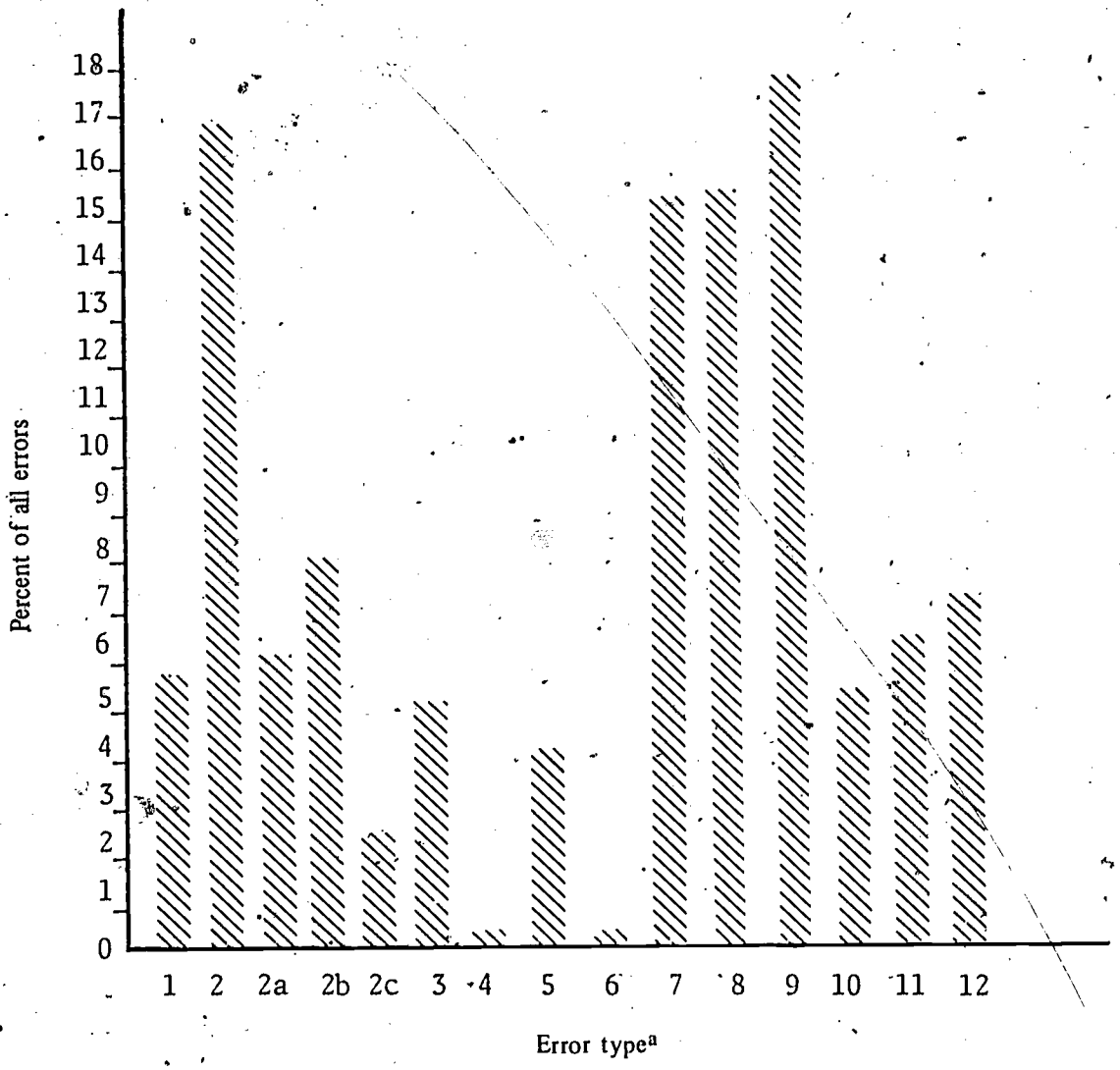
a. See the descriptions of the error codes on pages 67 and 68.

b. Error types 2a, 2b, and 2c are subcategories of error type 2 and have been reported here to permit an analysis of the types of definitional errors encountered. This being the case, the total of each column will always exceed 100% by the sum of 2a + 2b +2c.

use alternative data sources such as the number of children in the ESEA title I programs, or the number of children from low-income families that do not accurately reflect the meaning of educationally deprived. Thus, when a respondent went to an alternative or related data source to provide the information, he also had to manipulate the definition of the key words in the question. Another example can be seen in the definition of handicapped pupils as "any pupils who have been classified as handicapped according to State guidelines." Many LEA's and schools are not familiar with the State guidelines for classifying handicapped children and, in some States, guidelines do not exist. Thus, the definition of handicapped pupils was, in many cases, not useful to the respondent in providing the needed data. More consideration must be given to the definition of the terms in the SSES instruments. These definitions must either be made more comparable with those used by the LEA's and schools, or they must become highly specific to leave no doubt about the intent of the question.

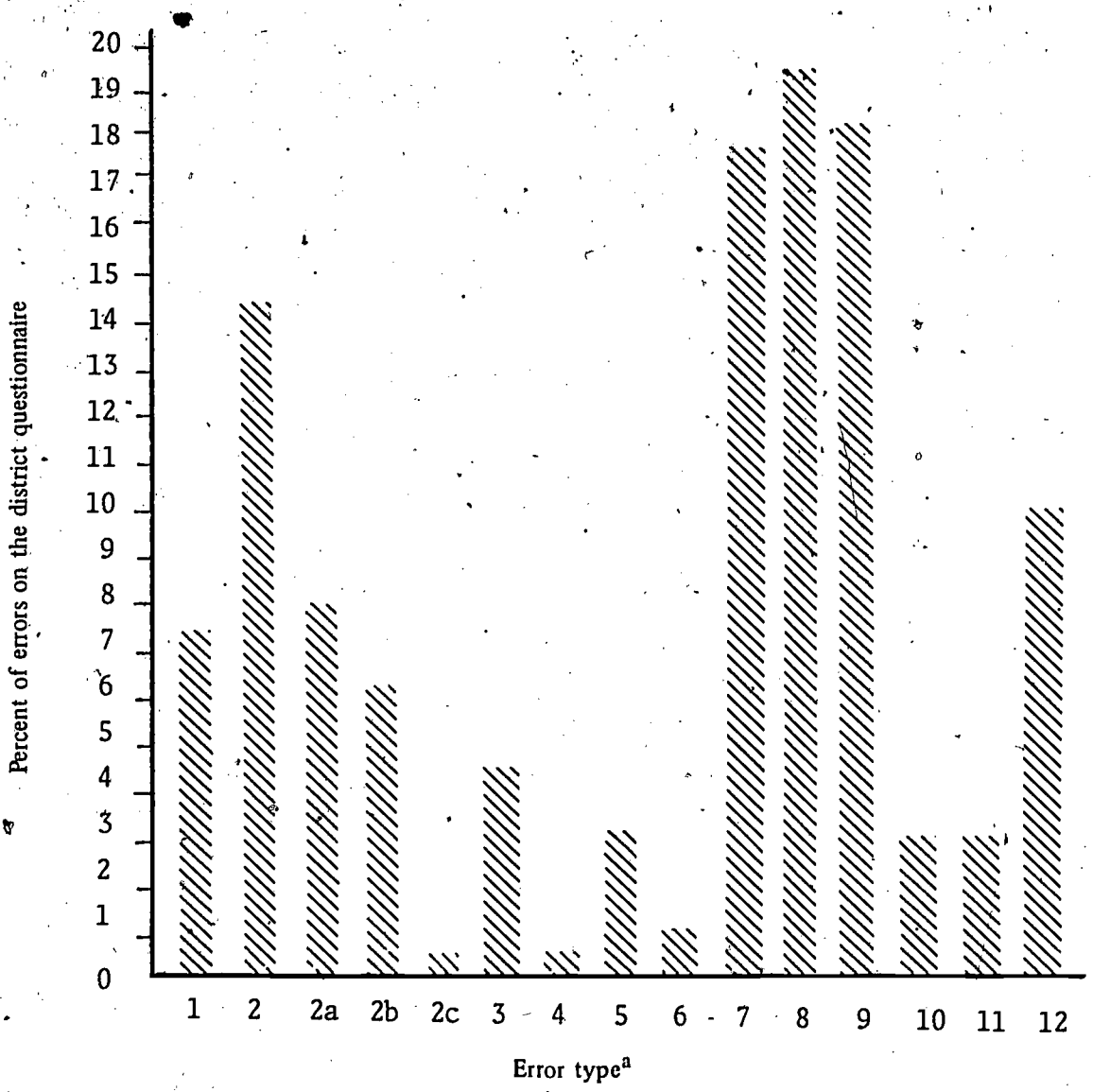
The third most frequently occurring error was caused by lack of source data. Many of the LEA's and schools did not keep records that contained the information the SSES instruments sought. This could be for several reasons: the Federal Government or State agencies may not have required the LEA's to keep this type of information in the past, this type of information is not useful to the LEA, or it cannot be gained easily by the LEA. The lack of source data for many of the items on the questionnaires was a major problem and resulted in 15.42 percent of all errors. Thus, the data users for many of the questions should evaluate whether the LEA's had data sources and, if they didn't, whether estimates will suffice. In those cases where it will not, special efforts should be made to encourage LEA's to collect this type of information. As a result, strong justification for these data will be necessary. Much of

Figure 8.--Distribution of all errors by error type--all questionnaires



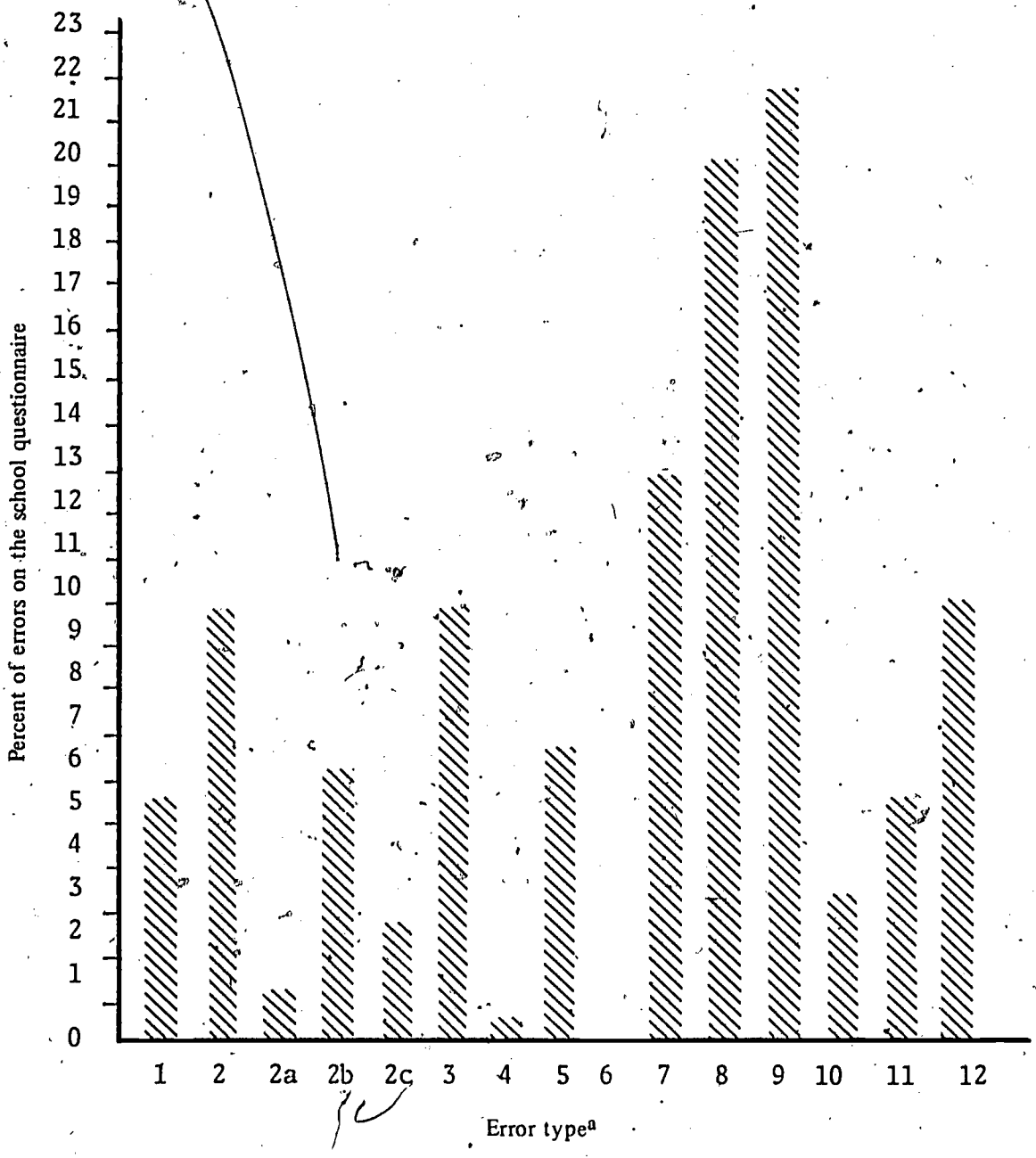
a. See the descriptions of the error codes on pages 67 and 68.

Figure 9.--Distribution of errors on the district questionnaire, by error type



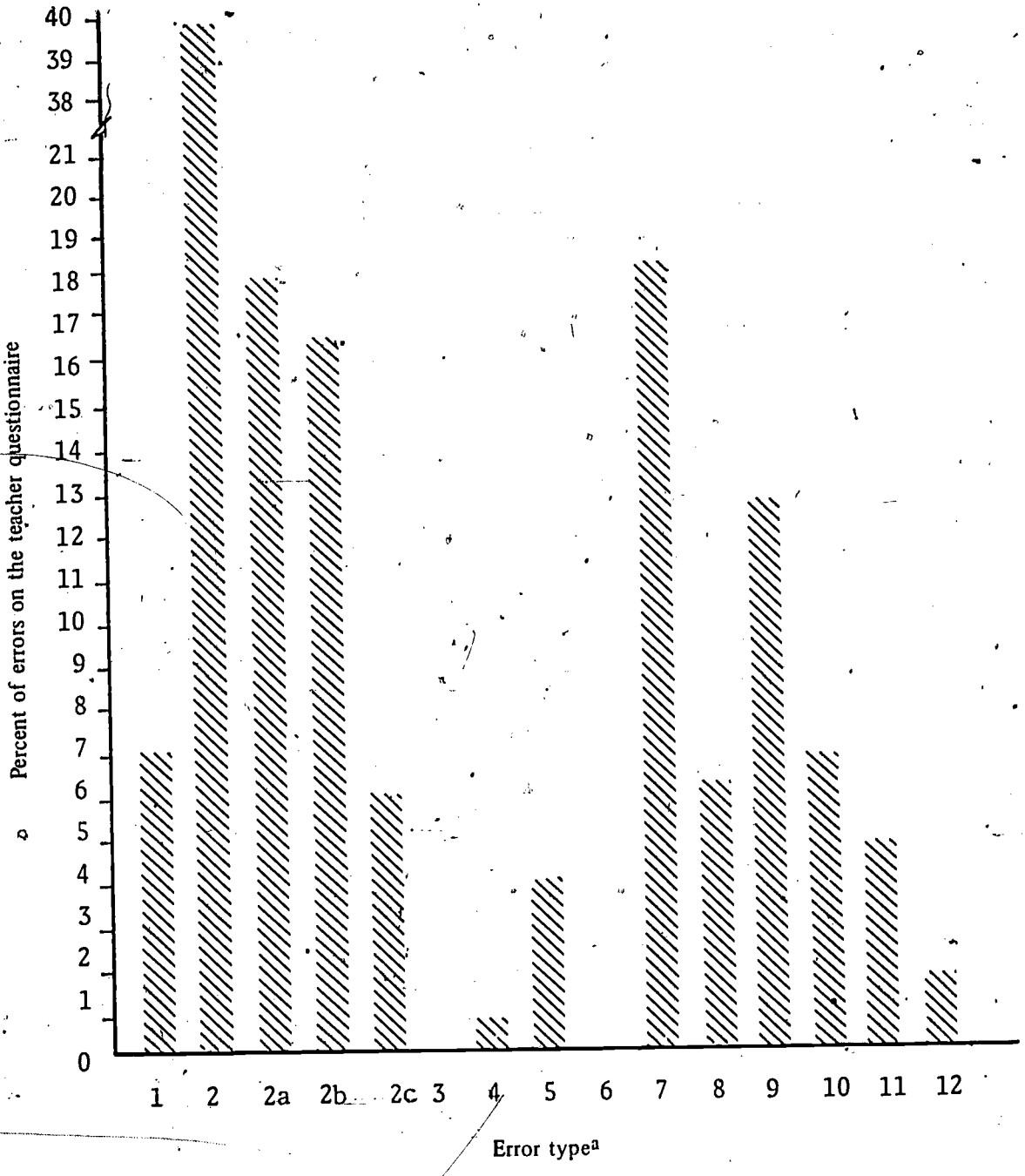
a. See the descriptions of the error codes on pages 67 and 68.

Figure 10.–Distribution of errors on the school questionnaire, by error type



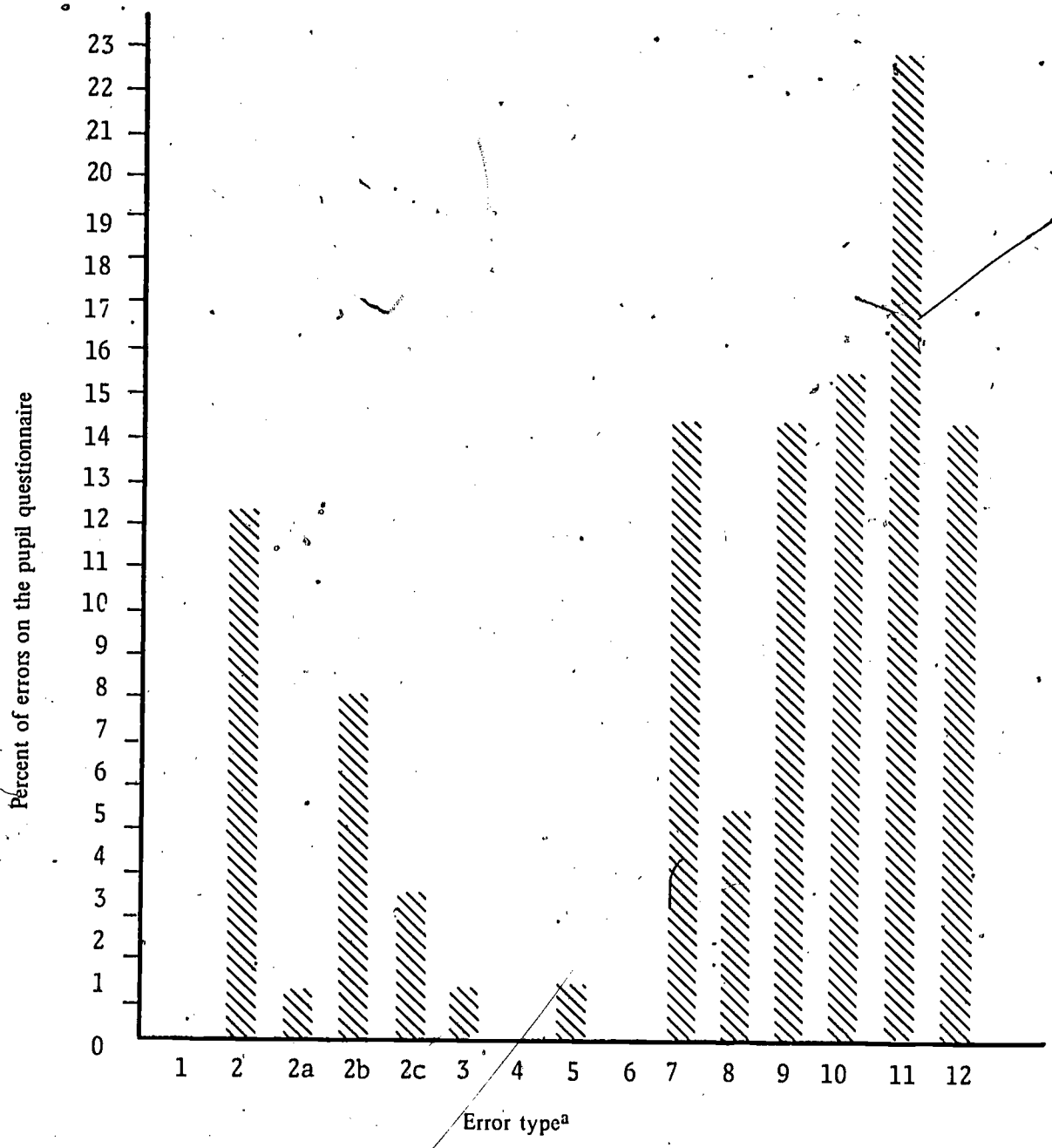
a. See the descriptions of the error codes on pages 67 and 68.

Figure 11.--Distribution of errors on the teacher questionnaire, by error type



a. See the descriptions of the error codes on pages 67 and 68.

Figure 12.--Distribution of errors on the pupil questionnaire, by error type



a. See the descriptions of the error codes on pages 67 and 68.

the data concerning, for instance, the income of the pupil's family, will never be easily obtained since it is quite sensitive information. In addition, some of the information requested on the SSES instruments is of a personal nature, such as how long the student has lived in the United States or the age of the teacher, etc. If this type of information is not already part of the LEA's information process, it will be difficult to convince the LEA's to collect it unless strong justification for its use can be obtained. As mentioned in the paragraph above that discussed errors caused by lack of thoroughness, response burden should be reduced if at all possible. One way of doing this would be to eliminate questions for which no data source is available since they provide a high response burden—especially if the respondent tries to generate the data from scratch.

To sum up, lack of data sources for providing information requested on the SSES instruments was constantly a problem, not only for the respondent, but also for the validation staff attempting to assess the accuracy of the data being provided. It is important to take this type of problem very seriously, to be aware that auditable data cannot be provided, and to consider it in any analyses or statements based on the data. For those items of this type that are indispensable, it is important to initiate action that will encourage LEA's to collect the necessary information.

The four types of errors discussed above were by far the most frequent. The other types of errors occurred much less frequently and did not provide problems as serious as those discussed there. A fair number of errors fell into the category of unknown causes because the validation of many items was very difficult if not impossible. In some cases, when the validator compared the results of his efforts with those provided by the respondent, the differences between the responses could not be resolved, but no clear reason for this could be established. A fair number of miscellaneous errors occurred where there were known causes, but they could not be coded into the framework provided. These are the types of errors that will always occur in any survey. No one type of miscellaneous error occurred frequently enough to cause any major concern; however, their sum was fairly substantial. But it does not appear that any systematic bias was introduced by these miscellaneous errors, a fact that reduces concern about them somewhat.

Repeat or carryover errors comprise 5.27 percent of those errors reported. These errors resulted from errors made earlier in the questionnaire or earlier in the process of providing the data. These errors occurred chiefly in conjunction with arithmetic figures where an arithmetic error was carried over from calculation to calculation. Arithmetic errors occurred nearly as frequently, with 5.54 percent of all errors. The burden of arithmetic calculations in the SSES instruments was minimal and, although the occurrence of these errors cannot be completely avoided, they are not considered to be a major problem.

Format errors, or errors caused by source data being in a form different from that required by the questionnaires, was rarely used by the validators, accounting for only 0.40 percent of all errors, but as can be seen from the preceding discussion, problems of this nature were often coded as other types of errors. Certainly, a problem for all surveys is asking questions in a form that will apply to all respondents. Some respondents will have the data in a form close to, but not exactly the same as that requested. And when it is not the same, respondents must adjust their figures to reflect the data required on the questionnaires. However, for some questions where the data requested was in a form consistently different from the way the LEA's kept it (such as questions on the district questionnaire dealing with per pupil expenditure), revision should be considered.

Timing errors comprised 4.19 percent of all errors largely because the SSES instruments solicited data for the current school year. Much information is not available until the final reports are written for many of the Federal programs—after the school year is completed. Thus, for example, accurate figures for expenditures and revenues do not become available until the end of the fiscal year. While it appears that this is something that cannot be avoided since current data are needed, it is not a major problem for many data items in that estimates are sufficiently accurate to meet user need. Thus, some accuracy will be sacrificed by having current school year data available quickly.

Another timing problem unique to the pretest was that the questionnaires were sent out substantially after the baseline date of January 31 used in the questionnaires. Therefore, many respondents provided data for later in the year than January 31—usually late April or early May. This problem can be avoided in the full-scale implementation of the survey by sending out the questionnaires in early February near the baseline date to be used. Also, implementing the questionnaires at this time of the year will probably reduce the number of errors caused by lack of thoroughness since respondents are less busy earlier in the year and they will be more likely to give a higher level of effort to providing the data.

The only other error types not yet discussed are estimation errors, which occurred 5.14 percent of the time, and transcription errors, which occurred only 0.27 percent of the time.

Estimation errors relate to other problems encountered in completing the SSES instruments. For instance, lack of data sources or data sources existing in different formats from that requested are two examples of what can cause a respondent to make an estimate in which he becomes prone to estimation errors. Many of the questions in the SSES instruments requested estimates or approximations. This was done to relieve the respondent of a certain amount of effort where it was felt data might not be readily available. In other words, if the respondent was highly familiar with the information, his estimate would be just as good as a "hard" data source. But the validators who found data sources for some of these items may have also found differences between what was provided by the respondent from general knowledge and what was documented. In summary, estimation errors occurred infrequently and when they occurred, they could not be considered serious since the question asked for estimates or approximations and, therefore, the respondent followed the instructions.

Transcription errors occurred more rarely than any other type of error, which is as expected. However, if more data sources were available for the respondents to provide the information, transcription errors might increase somewhat.

Analysis of Errors by Clusters

The SSES instruments provide data for more than one user; thus, the questionnaire has several areas on which it collects data. These areas are referred to as clusters of questions. In table 14, the percent of errors for each cluster across all items validated is given for the four questionnaires. The clusters include descriptive characteristics; needs assessment; program information, including ESEA titles I, I Migrant, III, and VII, and programs for the handicapped; pupil achievement; and educational broadcasting. In this section the relative error rates in each of these clusters will be discussed. Some conclusions that can be made from these analyses may be helpful in considering the precision of the data and the existence of data sources.

Table 14.--Frequency of errors

Questionnaire clusters	Questionnaire							
	District		School		Teacher		Pupil	
	Frequency of validation	Percent errors	Frequency of validation	Percent errors	Frequency of validation	Percent errors	Frequency of validation	Percent errors
Descriptive characteristics	132	46	433	36	465	17	242	19
Needs assessment	28	36						
Program information–total	613	24	505	26	263	21	206	16
ESEA title I	170	29	151	29	83	17	62	12
ESEA title I Migrant	55	29	77	21				
ESEA title III	153	18	96	24	30	10	38	5
ESEA title VII	83	8	73	10	36	11	30	3
Handicapped	152	28	108	39	114	29	76	22
Pupil achievement							89	16
Educational broadcasting	36	3	11	27	63	3		

Note: Blank cells indicate that certain clusters of questions on the pretest instruments were not asked at all levels of response.
Frequency of validation is defined as the total number of items in each cluster that were validated multiplied by the number of times the items were validated.

For a validator to determine that an error existed, it was necessary for him to have access to a data source against which to compare the respondent's data. Thus, in those sections that contained hard information, it was possible to validate a much higher percentage of questions than in sections where the information was more subjective or source data was lacking. In the research design, RMC did not attempt to validate very subjective or attitudinal-type data more than twice. Other questions containing hard data, however, were validated more frequently. Thus, for questions where the validator was able to obtain source documents and enter figures from these documents, not only was it possible to validate more questions but also to discover more errors. Many of these errors, however, were quite small. Conversely, in the sections where the information was less concrete, the frequency of validation was much lower and the percent of errors tended to be smaller since sources did not exist for checking. This fact should be kept in mind when comparing the figures in table 14. Also, in keeping with the research design, some questions were validated at all sites, some at one-half of the sites, and some at only two sites. This affects the frequency of validation seen on the table.

The descriptive characteristics section in the district, school, teacher, and pupil questionnaires contained fairly hard and factual information. Thus, this section of the questionnaire was relatively easier to validate than other sections. There are exceptions to this statement, however. For instance, question 8 on the pretest district questionnaire solicited the number of educationally deprived pupils from elementary grades and was almost impossible to validate. Still other questions were difficult to answer and source data did not exist to substantiate or repudiate the data provided by the respondent. The error rate in this section was higher than in any section on the district questionnaire and was relatively high on the school, teacher, and pupil questionnaires. A relatively high error rate indicates that even for questions soliciting hard data it is very difficult to obtain highly precise figures. For instance, question 1 on the pretest district questionnaire asked for the number of public and nonpublic schools in the district. An error rate of 42 percent was found there. Most of these errors were related to problems in establishing the number of nonpublic schools and the grade split requested. The descriptive characteristics sections of the school, teacher, and pupil questionnaires had lower error rates for two reasons: (1) the respondents were more familiar with what they were providing data about, and (2) there were not as many data sources for validating the questions at respectively lower levels (i.e., there were fewer data sources at the school level than at the district and even fewer data sources at the teacher level than at the school, while the data sources at the pupil level were similar to that at the teacher).

In summary, the general characteristics section indicates that, although the data are relatively factual, they are not highly precise. To assess the adequacy of the data for the user, the precision required by the user must be established. The error rate in this section also suggests the difficulty in obtaining comparable data by means of a mailout survey. However, it should not be misunderstood that the information provided by the respondent in these sections was inadequate. What is being pointed out here is that most of the figures had small errors and that the data are sufficiently accurate to meet user needs.

The error rates in the various program sections—which include ESEA titles I, I Migrant, III, and VII, as well as programs for the handicapped—were relatively equal on the school and district questionnaires but were smaller in almost every case on the teacher and pupil questionnaires. This resulted from the fact that more readily available information was asked at the teacher and pupil levels. Usually the information asked for participation in subject areas taught, etc. It was also very difficult to validate the information at the pupil and teacher level since the number of pupils involved, etc., could not be determined before the end of the program year when a report is prepared by the project director. Most of the data sources for program information were at the district level. This data included primarily program applications and in some instances enrollment sheets, interim reports, or memoranda. At the school level, there was very little program information except for what was available from the principal's general knowledge. However, the principal was usually quite familiar with the programs in his school.

Of all the program areas under consideration, the section for the handicapped was the one that produced the highest error rates and the most problems. This was mainly caused by the definitions of handicapped children and their handicapping conditions and the fact that school districts tend not to maintain records on handicapped pupils by type of handicap. Also, sources of revenue for handicapped programs are usually mixed and not easily separated. Further discussion of problems encountered with the handicapped sections on all of the questionnaires can be found in a separate report to NCES.

The last two clusters of questions were pupil achievement in the pupil questionnaire and the educational broadcasting section in all questionnaires but the pupil. The error rates for these sections were quite low. In the

case of the pupil achievement section, this appears to have been caused by lack of source data for validation. Test scores are generally kept in the pupils' cumulative folders and many validators were not allowed access to them. In the case of educational broadcasting, many LEA's did not have this type of program in operation. Therefore, their answers to the questions were either negative or skipped because they did not apply. Thus, the error rate is far lower there than in sections where responses had to be made. It can also be said that it was almost impossible to validate negative responses. For instance, if a principal said that there was no educational broadcasting program in his school, there was no practical way to verify that there actually was one in the school unless it was encountered accidentally.

Analysis of Errors by Questionnaire

In table 13 (shown previously), the distribution of errors by type can be analyzed for each of the questionnaires. In figures 8 through 12 (also shown previously), the distribution of errors by type is graphically represented for each questionnaire. There are some differences in the distribution of errors for each questionnaire. In the following section these differences will be discussed.

The most frequently occurring errors in general were those caused by respondents misunderstanding instructions. However, on the district questionnaire, lack of source data was the most frequent error. On the teacher questionnaire, definitional problems produced significantly more errors, while on the pupil questionnaire miscellaneous errors with known causes were more common than all the other classified error types.

The lack of source data problem on the school and district questionnaires did not seem to cause as much trouble on the pupil questionnaire. The teacher is much more familiar with her classroom and her pupils than a district survey coordinator can be with all the schools and teachers in his district. Thus, the need for source data is much less critical for the teacher to provide information about herself, her classroom, and her pupils. The exception may be questions regarding the pupil's family. However, this reason made it more difficult to validate responses provided by the teacher on the teacher and pupil questionnaires. Although the teacher was familiar with her classroom and her pupils, if errors did occur, they were more difficult to detect because there was no source data for the validator to use.

The percent of errors on the teacher and pupil questionnaires was significantly less than on the school and district questionnaires. Again, this fact must be tempered with the difficulties in validating data on the teacher and pupil questionnaires. However, the questions asked of the teacher were significantly less difficult than those asked of the principal and district survey coordinator. This was caused by the fact that the scope of information requested was much larger for the school and district questionnaires than for the teacher and pupil questionnaires. The exception to this was in the case where a pupil had transferred out of a teacher's class to another school. However, if the child was on the teacher's class role as of January 31, he was eligible to be selected in the pupil sample. When this happened, the teacher sometimes needed to go to other schools to get information about the pupil.

Balancing the low error rate on the pupil and teacher questionnaires as compared with the school and district questionnaires is the increased number of errors caused by lack of thoroughness on the teacher and pupil questionnaires. This can be attributed to the fact that one of the responsibilities of principals and district personnel is the completion of surveys. In addition, their time is not scheduled as that of the teachers for instructional duties. This observation points to the importance of keeping the response burden for the teacher lower than that for the principal and district personnel. The teacher has less time to spend completing surveys of this type and is therefore much less likely to do a good job in providing the information.

RECOMMENDATIONS FOR THE FULL-SCALE RELIABILITY AND VALIDITY STUDY

There are two types of errors that enter into national estimates based on data collected by the SSES. These errors are sampling errors and response errors. If the sample drawn is not a random sample, it may contain a bias and not be representative of the United States school population. This bias may affect the estimates based on the data collected in the survey. However, this section will be concerned only with response errors or measurement errors in the instruments—the other type of error with which survey designers are concerned. Within the area of

response errors, there are two measures of the accuracy of the data reported on an instrument. These measures are reliability and validity.

The reliability of an item on a questionnaire refers to its response stability. Formally, this type of reliability is referred to as time-associated reliability. The ideal method for measuring reliability is to obtain two measurements of the same item by having an individual complete the instrument twice. This method of measuring the reliability of a questionnaire item has two assumptions. First, it assumes that the readministration of the question is completely independent of the first time it was administered; that is, the respondent does not have a memory carry-over. Only if this is true will the two tests be independent. The second assumption is that the value the respondent is providing will not have changed in the period between the administration of the two items. If it has changed, then the two questions are eliciting different responses and therefore should not be compared as two measures of the same quantity. Other ways of testing the reliability of an item include personal interviewing, split halves testing (the case where seemingly unrelated questions in an instrument solicit the same responses), and alternative forms testing (the successive administration of two parallel forms of the same instrument). The latter two methods of testing the reliability of an instrument are usually only applicable in attitudinal testing for measuring the subjective values of an individual.

It should be noted that the reliability of an item does not express the systematic errors made in it. Thus, if the conditions that create a measurement error (which are normally chance occurrences) exist in the first and second administration of the question to the respondent, the error introduced will not be identified. The reliability of a questionnaire item, however, does serve an important function in relating the amount of variation owing to measurement versus true variation in the sample population.

The second way to measure the accuracy of the data reported on a given instrument is the validity of the items. The validity of an item on a survey instrument refers to the question of whether or not the item obtains the response that was sought. Invalid questionnaire items are usually characterized by a systematic error or bias in the response. This, of course, is different from errors resulting from an unreliable question that elicits inconsistent responses. The cause of an invalid questionnaire item is usually the fact that something in the question or instrument is correlated with a variable unrelated to what the question is requesting.

An instrument or item in an instrument may be considered valid or invalid in several ways. First, it can exhibit face validity, meaning that it measures what it appears to be measuring. Second, it can exhibit internal validity, which means that checks or responses within a question or item are logically consistent. And third, it can exhibit external validity, which means that the responses to a question are consistent with external sources or some external measure of objective reality. Basically, then, validity is concerned with whether the data obtained from a certain question are equal to the true value of the data being solicited. Thus, to perform external validity checks on questionnaire items, the true value of the data reported on the item must be known so a comparison between the item response and reality may be made.

As discussed previously, a validity study was conducted on the pretest questionnaires. This validity study served two purposes: (1) to pretest the validation effort and (2) to gain insights into data availability, problems encountered in the field, etc. While the second purpose for the pretest validation effort cannot be truly considered part of a validity study, it was undertaken to make recommendations about questionnaire items as a part of the pretest. The approach taken in the validity study was to train field staff in the task of externally validating the data provided by the respondents for a basic set of questionnaire items on the various instruments. The task of the validator was to meet with the respondent and to review the data sources used by the respondent in completing the SSES documents. The validator could then compare his results with those of the respondent. If differences were found, he discussed the probable cause for these differences with the respondent. The pretest validity study, therefore, was an attempt to measure the external validity of the items submitted by respondents. Validators used source documents available at school district and school building levels as their measure of objective reality. The approach taken was similar to an audit in that record-checks were the basis for the validation study. Because of this, it was difficult for some items to be validated since the type of information elicited by them was subjective in nature. In cases where the validator could not obtain data from basic records for comparison purposes, an attempt was made to gain as much information as possible regarding the types of data sources that did exist to substantiate or refute the information provided by respondents.

As discussed earlier, RMC did not conduct a reliability analysis of the questionnaire items because the validity check effort was considered to be more important than a reliability check of the responses. The basis for this was

the judgment that response errors would be significantly greater than sampling errors and thus the emphasis should be placed on validation as opposed to reliability studies.

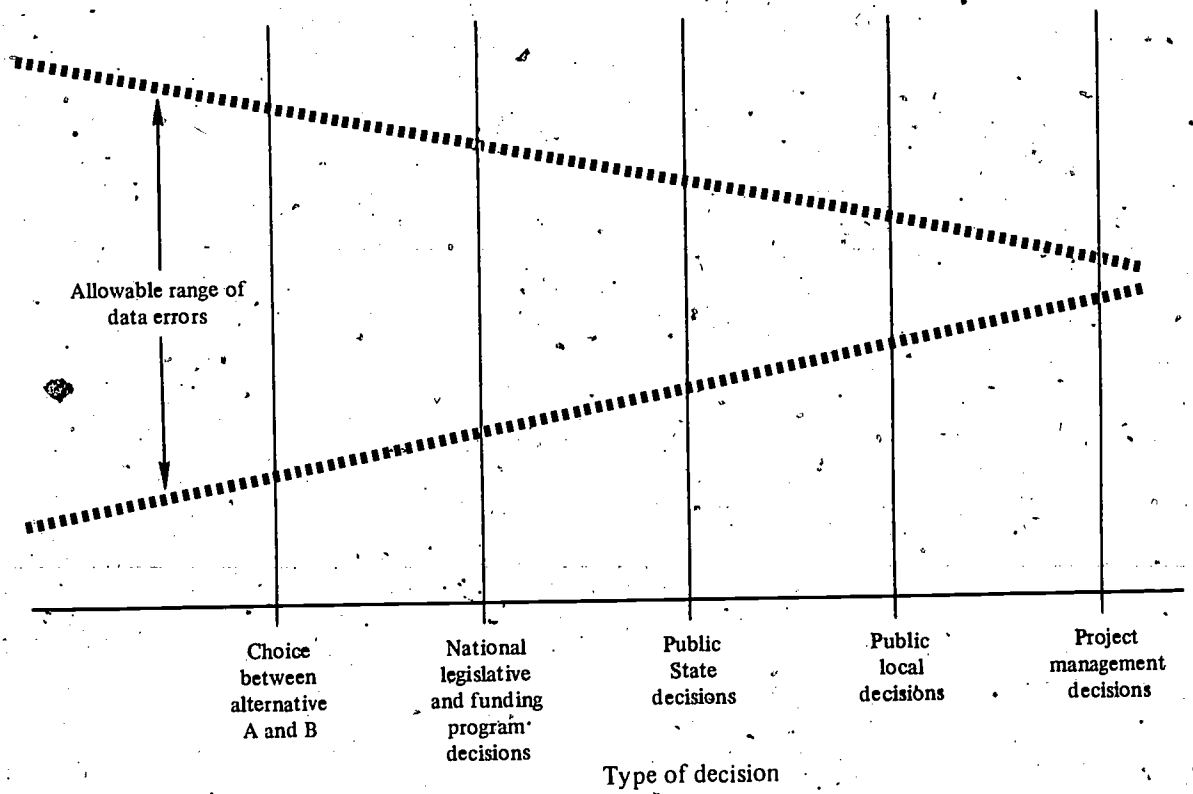
Problems were incurred with "soft" data in the validity study conducted on the pretest of the SSES instruments. Whereas the record-check approach to assessing the accuracy of the data provided by respondents proved very useful for those data items that were not. All school districts maintain extensive records for decisionmaking and reporting purposes as a part of their normal information system. However; many questions on the SSES instruments request information that is not of the type that has been traditionally documented. Further, much data regarding special programs are not available until the completion of the academic year. The SSES instruments, however, were implemented in April and, in future surveys, will be implemented even earlier. Thus, much of the data provided by respondents comes from a working knowledge of their educational system. This approach is reinforced by the wording on the SSES instruments, which frequently requests estimates or approximations. Therefore, the approach of conducting record checks to assess the accuracy of the data provided and thus the validity of the instrument posed serious problems for a number of the questionnaire items.

The SSES instruments that will be used in the full-scale implementation of the survey are basically similar to those implemented during the pretest. Revisions, of course, have been made based on what was learned during the pretest and on changes in user requirements. The instruments include questions that require both "hard" data, such as the number of schools or pupils in the school system, and "soft" data, such as the number of children from low-income families and judgmental or opinion data such as whether a child's home environment is educationally supportive. The instruments will again be applied at the school, district, principal, and teacher levels. At the latter two levels, there is respectively less documentable data, but, on the other hand, there is more initimate knowledge of the respondents' component of the educational system. Since the instruments have two major bases, questions regarding pupil target groups and questions regarding Federal programs, the instruments are divided into several clusters of questions that are related. Therefore, the task of assessing the reliability and validity of the questions must employ a multifaceted approach depending on the type of the question and the precision of the data that the user requires. It will be impossible to use a single approach (such as the record-check validity concept) to assess the adequacy of the data provided on the instruments. For items that cannot be validated using a record-check approach, another method must be employed. One approach that can be used is personal interviews. During validation interviews, it can be determined whether the respondent understood the question and the method he used to provide the estimate, giving the validator the ability to determine the level of confidence he has in the data.

The most important question that affects the development of a reliability and validity study for the SSES instruments is the desired or tolerable accuracy of the data being produced. From RMC's point of view, the answer to this question centers almost entirely on the use to which the data will be put. As represented by figure 13, the allowable range of error (or confidence) is a function of the type of decision that concerns the policymaker. At one extreme, an accurate indication of program activities or estimated consequences is needed for final decisions involving the operation of specific programs. Among these decisions are those related to legislative or funding issues (excluded from policy-oriented concerns is program auditing where exact data statements are required). Other decisions are not as critical and can accept (or may be forced to accept) an increasing range of error and uncertainty in data estimates. At the other extreme, the policymaker who must choose between alternative A and B, as shown in figure 13, need only have data allowing him to correctly identify which alternative program is better. In other words, the sensitivity of the measuring instrument or the validity study (with its accompanying cost implications) should be matched to the difficulty of the measurement task and the required level of data accuracy. Spending excessive time and money to improve data accuracy may preclude the policymaker from being able to make use of the available data. Instead, the policymaker would be forced to make decisions based on data that is older and of lower quality, or worse, without relevant data at all.

The key factor in the development of the reliability and validity study is the analysis plan for the questionnaires themselves. Once the analysis plan has been developed, the analysis rationale will be known and it will be possible to determine which items or clusters of items need to be validated. In some cases, it will be necessary to establish item-by-item validity: for instance, where it is necessary to know the exact number of pupils within a school system or to determine the existence of Federal programs. In other cases, however, the instruments may have been designed to elicit generalized feelings or indications of activities: for instance, does the pupil in question have needs that are being met by the ESEA title I project, or what is the teacher's attitude towards the child? Questions of this nature may be validated by analyzing responses to a cluster of items and relating this analysis to the objective reality as determined in the field.

Figure 13.--Data accuracy relationships



The fact that the SSES is planned for biennial implementation and the instruments themselves tend to be static in nature in that instrument changes tend to be evoluntionary rather than revolutionary, suggest special considerations in the development of a reliability and validity study for the full-scale survey. The reliability and validity study over the long period of time can be an iterative process in which the approach is revised as more becomes known about data accuracy and requirements. For instance, during the first implementation, the key analysis questions can be identified for each cluster of questions. The data items from the questions that are most important can be assessed for their reliability and validity. Then, in succeeding years, other items can be included in the analysis, while the items that have been shown to be reliable and valid in previous years may be just spot-checked. Obviously, because an item has been shown to be valid and reliable in 1 year, it does not necessarily follow that it will be reliable and valid again 2 years later. Monitoring should be conducted on items that prove reliable and valid to be certain that no problems have arisen in the data. Basic stability is assumed, however, unless there are major changes in State or Federal policies.

Based on the previous discussion, there are a number of implications for the reliability and validity study of the SSES instruments for the full-scale implementation. Briefly, the major implications are:

- many items on the SSES instruments cannot be externally validated through the use of record checks;
- a large-scale, but not intensive, validity study needs to be supplemented with an indepth analysis of the validity of instruments at a small number of LEA's;
- a reasonably sized, but nor large-scale, reliability study is required; and
- it is vitally important to know the intended uses and required precision for the data to design an effective reliability and validity study.

It was readily apparent from the pretest of the SSES instruments that much of the data is not available on source documents. Since the status of the information systems in school districts is never static and normally increases in scope, it is possible that this situation will change--especially is the SSES is conducted biennially. For

the present, the fact that data are not currently available must be remembered when planning the reliability and validity study. For the full-scale survey, a number of validity analyses should be performed, one of which will be the record-check approach. The instruments should be reviewed carefully, and those items for which a record check is feasible should be identified. Then, a subsample of these questions should be selected for validation, depending on their importance to the user for analysis and on their importance to the user as to their precision. Thus, only a sample of the questions on the SSES instruments need be selected for external validation through the use of record checks.

To successfully complete a validation study, the validators must be highly experienced and familiar with the way school districts operate. They must be knowledgeable about information systems, organizational structure, reporting requirements, and legislative programs about which the SSES is collecting information. In this way, the validators will be capable of extracting data from their assigned school districts that will be useful to the validation effort. Validators should be knowledgeable about the possible data sources in school districts for various pieces of information. They should be familiar with the types of personnel that exist in school districts and the types of information that are available at each level. Most important, they must have the ability to judge the quality of data that can be obtained from various sources. Experience and expertise of the validation staff is essential to an indepth study of the validity of the SSES instruments onsite. In the initial implementation of the full-scale SSES, it is likely that a large number of the items will not be record-check validated. These items will be the ones requiring respondents to make estimates of quantities they have a reasonable feel for, but no recorded supporting data. An important measure of the adequacy of this type of data will be the reliability of the question or the consistency of the responses given by the respondent. Therefore, it is important to have a reasonably sized reliability study for these types of questions. Also, for questions soliciting attitudinal or opinion information, the problem of respondent memory carryover from the first to the second implementation will not be as severe as is typically the case for hard-data questions. The reason for this is that when the respondent does not have a hard basis from which to answer the question and must make an estimate from his general knowledge of the situation, he is less likely to remember the estimate originally provided. Based on the reliability coefficient for the items that cannot be validated through a record-check approach, the data user will have an estimate of the proportion of variability in responses caused by random errors versus the population variability or sampling variability.

As to the size of the full-scale reliability and validity study, the following recommendations are made:

(1) The reliability study should be conducted by mailout on a selected number of items to 100 school districts with one school and one teacher participating in each. This size is based on the necessity of providing a sample large enough to permit valid conclusions yet is not so large as to impose a significant respondent burden overall.

(2) The two-stage validity study should consist of (1) a mailout validity instrument, again using selected items, to 50 school districts with one school and one teacher each, and (2) an intensive site visit validity study at 30 school districts. This size is required to give the instruments a thorough analysis and may be reduced in subsequent years.

The last major implication for the reliability and validity study of the full-scale SSES is the importance of knowing the intended use of the data and thus the level of precision required. Only with this information as a reference point can a validity study be effectively conducted. The level of precision required must be explicitly stated, preferably in the questionnaire itself, so that the respondent and validator alike understand what is required. If this is not done, the data reported on the instruments may be valid by some external definition and yet not usable for the data user's purposes.

Chapter 8

ANALYSIS PLANS FOR THE FULL-SCALE SSES: RECOMMENDED PROCEDURES

This chapter provides NCES with a set of procedures for developing the analysis plans for the Statistical Survey of Elementary Schools (SSES). The chapter has two major components—first, how analysis plans for large-scale surveys should be developed and, second, how NCES can develop such plans given the current status of the SSES development. References to specific question numbers throughout this chapter refer to the pretest questionnaires and are given for the purpose of example only.

DESIGN AND USE OF ANALYSIS PLANS

Without question, the most important component of any large survey is the analysis plan, for without it, the survey development, implementation, and resulting data will be useless. If the data analysis plan is completely and adequately designed, the writing, revising, justifying, and reporting of data items can be done with accuracy and ease.

There are four major steps in analysis plan development: (1) determination of general data and survey needs related to current policy issues; (2) determination of actual data elements and development of the specifications to define data acceptability; (3) production of data table shells; and (4) production and use of data and data tables. What is important here, is that the design and implementation of survey questionnaires do not occur until the first two steps are completed. A detailed explanation of each of these steps is provided below.

Step 1: Determination of General Data and Survey Needs

There are three areas of concern when defining the general scope and purpose of a large-scale survey: (1) the overriding general purpose or purposes; (2) the general policy questions to be answered; and (3) the theories behind the questions to be asked.

In any large-scale study, the user must first determine why the study is necessary. National surveys are often conducted to evaluate the implementation or effects of an existing program, to monitor an existing program to ensure that Federal requirements are being satisfied, to assess current unmet needs or current methods of program implementation so that new legislation can be written or present legislation revised, to uncover what new methods or theories merit national exposure, or to provide data to the public. Whatever the perceived reasons for a study, it must be understood by and communicated to all respondents and users; all subsequent work should be consistent with this decision.

Once the general use of the study is defined, the survey users must determine the specific policy questions that the data collection will address. Close attention is necessary here to ensure that these policy questions are consistent with the study purposes. In instances where the general purpose of the survey is either evaluation, monitoring, or needs assessment, the policy questions should be tied as closely to the current Federal legislation and regulations as possible. In fact, if the study is an evaluation or monitoring survey, all policy questions that do not have a basis in the current legislation or proposed legislative revisions should not be included in the study design—unless the study serves multiple purposes. In research studies, all questions and theories to be studied should be clearly defined prior to further work. The only difference between policy questions stated for legislation-based studies and those stated

for research studies is that policy questions for research studies need not be restricted to legislative issues. In any case, policy questions or theories should be as clearly and completely stated as possible. For studies designed to provide general needs assessment or general-purpose data, the problem is not one of specifying policy questions, but of limiting the scope of the study. To overcome this, a topic for the general-purpose study, such as "teachers" or "expenditures," should be selected and this decision strictly adhered to. The SSES is basically a monitoring study for the programs involved.

With the general purposes and policy questions for the study defined, all major policy question-related theories must be specified to ensure that the study includes questions or options to verify or refute the most important and relevant theories.

EXAMPLE 1: POLICY-RELATED THEORIES

General Purpose of Survey:	Monitoring ESEA title I implementation.
Policy Question 1:	To what extent are the ESEA title I participants those children who have the most pronounced educational needs?
Rationale for Policey Question 1:	Legislation requires participant children to be selected on the basis of educational deprivation and income.
USOE Policy Theory 1:	Most children participating in ESEA title I programs are educationally deprived, but there are still some instances of incorrect targeting because selection is made solely on the basis of economic need rather than educational need.
Rationale for USOE Theory 1:	The ESEA title I legislation has both economic and educational selection requirements depending on whether districts, schools, or pupils are being selected. There is a history of confusion of these factors resulting in selection of pupils on the basis of economic rather than academic need. Testing the USOE theory would reveal the extent to which this educational/economic confusion still exists.

After these policy-related theories have been stated, only those theories that, if tested, would reveal correctable problems or add new essential facts, should actually result in additional questions or options on a data questionnaire.

Areas of Concern in Step 1.

At first glance it seems that NCES has performed several of the required tasks that comprise step 1. However, the following concerns still exist:

(1) The general purpose of the SSES has never been clearly defined and communicated to the USOE participants. The survey has monitoring, research, and general questions; at the same time it is used for summarizing LEA needs assessment activities. Even though the SSES is a consolidated survey, it should still be limited to one or two purposes.

(2) Policy questions have not been developed for all programs included in the SSES; all survey participants should be required to provide them. In developing these questions, survey participants should remember that policy questions need not be legislatively based if the SSES is to serve research or general data purposes.

(3) No attempt has been made by data users to define policy-related theories to ensure that all relevant issues have been considered in the survey design.

Step 2: Determination of Actual Data Elements and Development of the Specifications to Define Data Acceptability

Once the policy issues and general purposes of the survey are known, the next step in developing analysis plans is specifying the details of the analysis. Each policy question requires one or more different data elements and options; these should be specified in as much detail as possible by the appropriate data user.

EXAMPLE 2: SPECIFICATION OF DATA ELEMENTS

Policy Question 1:	To what extent are the ESEA title I participants those children who have the most pronounced educational needs?
Data Elements Required:	Pupil participation in ESEA title I by subject area of participation. Pupil's educational need by subject. Pupil's grade level and performance by subject.

All data elements necessary for a policy question should be included in the specification of data elements. Note that the data elements specified may result in the development of more than one question on the survey questionnaire or may result in the inclusion of data elements on more than one questionnaire. Once the data elements are determined, the data user should identify the specific options and/or questions needed to provide the data elements and address the policy questions that are specified in the preceding steps.

EXAMPLE 3: SPECIFICATION OF DATA OPTIONS AND QUESTIONS

Policy Question 1:	To what extent are ESEA title I participants those children who have the most pronounced educational needs?
Data element:	Pupil participation in ESEA title I by subject.
Survey Question Topic:	Pupil participation in academic subject in ESEA title I.
Question Options:	*Mark All That Apply* • Reading • Mathematics • Language • Other academic
Policy Theory 1:	Most children participating in ESEA title I programs are educationally deprived, but there are still some instances of incorrect targeting because selection is made on the basis of the economic need of the entire school rather than the educational need of an individual pupil.
Data Element:	Pupil's economic status.
Survey Question Topic:	Teacher's estimate of annual family income.
Question Options:	*Indicate Min/Max Income Levels* • Under $2,000 • $3,000 • $4,000 • $5,000 • $6,000 • $7,000 • $8,000 • $9,000 or more

The detail required by the data elements should be easily provided by the data user (assuming the data user knows just what data are actually needed).

Once the scope of the data needs are fully defined, the specifications for data accuracy may be written. There are many factors that contribute to decisions on data acceptability, and any decision that is made based on an accurate understanding of these factors will probably be correct, provided a conscious decision is made. Among the factors that should be weighed in this decision are availability of alternate data sources, measures of reliability and validity, use and interpretation of the data, and effects of sampling errors and other statistical errors of measurement.

In reviewing the effects of these various facts, one must remember that, except in cases of extraordinarily inaccurate data, it is possible to use almost any data with any level of accuracy if one knows how to report and use it within the framework of an allowable error necessary for user decisionmaking. Interpretation methods that may be used with potentially inaccurate data are defined in step 4.

The most important factor governing the development of specifications for data accuracy is the need for the data. If information is required to address an urgent issue and no source exists for it, almost any data that can be provided for decisionmaking by a study is preferable to a complete lack of data, provided these data are reported cautiously. In this instance, even though accuracy is important, availability of data is even more important and some leniency in data accuracy specifications could be tolerated. On the other hand, if data are available from alternate sources and if the limits of an issue have been well defined in previous studies, refinement of data accuracy and strong control on statistical error is of paramount importance. Specification for data acceptability should then be stringent.

Reliability and validity are of major importance when developing specifications for data accuracy. If a question used in the same reporting situation consistently provokes the same mean response across a subpopulation in repeated trials, the question and the data that result are reliable. If the response provided to any given question is an accurate representation of the condition being reported, the data are valid. The major problem of the SSES and most other large-scale mailout surveys is that the reliability and validity of these surveys cannot be easily determined either positively or negatively. Although the lack of reliability and validity data does not mean that the survey data are inaccurate, caution should always be used in interpreting data for which the accuracy is unknown.

The other question concerning reliability and validity is, "At what level are reliability and validity required?" Many survey items that are inaccurate on an individual respondent basis may be very accurate when reported as a nationally representative characteristic. As discussed later in Step 4, interpretation of the data may compensate for some problems in reliability and validity, but all specifications of data accuracy should include some mention of acceptable reliability and validity measures.

EXAMPLE 4: SPECIFICATION OF ACCEPTABILITY OF DATA RELIABILITY AND VALIDITY

Teacher Question 1: What is your highest level of academic achievement?

(1) A doctoral degree
(2) A master's degree or equivalent
(3) A bachelor's degree
(4) An associate's degree
(5) No degree but some college courses
(6) A high school diploma
(7) Other

Statement of Hypothetical Validity:

95% of the responses to teacher 1 must be valid as verified by school district records.

95% of the responses to options 1-3 and options 4-7 each taken as one unit will be valid as measured by reviews of school district records.

Other alternative data accuracy requirements are possible. As this example indicates, different validity statements may be written depending on the intended use of the questionnaire item. If the analysis requires distinctions between doctor's and master's degree holders but distinctions at the bachelor's level and below are unnecessary, the validity statement would require 95 percent accuracy in responses to options 1 and 2 separately and options 3-7 taken as one unit. In checking the validity of options 3-7, responses made to option 3 that should have been made to option 4, 5, 6, or 7 are not invalid because the analysis treats all responses to these options as the same response.

In developing the specifications of data accuracy, consideration must be given to errors caused by sample design and data analysis. If very stringent or rough estimates are required by the analysis, these requirements must be considered before sample design. A good example is asking data in terms of percents versus actual numbers. A respondent may be able to provide rough estimates as percents. However, the accuracy of that specific item may be such that percents are appropriate for user needs and decisionmaking. Once the sample is determined, it is usually too late to change the sample design to meet the analysis requirements.

Any or all of the factors described above contribute to accuracy specification. Almost any level of accuracy is acceptable as long as the extent of the inaccuracy and its effects on the analysis are known by the data user. Accuracy statements need not be made for every data item individually, but each item should be reviewed against the accuracy statements that are developed in advance to ensure that more stringent requirements are not necessary for specific item uses. Further discussion of the recommended procedures for the development of the reliability and validity study may be found in chapter 7 of this report.

Areas of Concern in Step 2.

(1) USOE users should provide the data options and elements to the contractor for each policy question and policy-related theory. Currently, this work is done by both the user and the contractor in a less than fully efficient manner.

(2) Data users must specify requirements for data accuracy.

(3) Reliability and validity studies that are adequate to define the extent of SSES inaccuracies must be performed.

Step 3: Production of Data Table Shells

If the data user has provided the specifications outlined in steps 1 and 2, the contractor or the Federal project monitor should be in a good position to direct the development of the first draft of the questionnaires without undue strain. During step 3, questionnaire development and table-shell production will run concurrently.

Since steps 1 and 2 are now completed, the analysis plan is fairly well defined and is developed to the point that questionnaires can be designed and the data user can specify the actual table shells required. Considerations in this phase include data intervals to be used in analysis, methods for expressing percentages, what to do with missing responses, item combinations or indices, and data accuracy.

For questions 26, 27, 31, and 33 from the pupil questionnaire used in the pretest, the examples below indicate the different types of specific analysis tables that can be developed to test the policy questions and policy theories that are used in the previous examples in this report. Discussions at the end of these examples will give the needed information for understanding how the factors listed above affect table shell design.

To address the policy question regarding educational needs of ESEA title I participant children in the simplest format, a table like that in example 5 would be used.

This table allows the user to quickly and crudely measure the needs of ESEA title I participants and to provide a rough answer to the policy question. Note the percentages in the table. Percentages are being computed across the row so that the user may readily determine the percentage of all participants who have academic need and the percentage who do not have these needs. If the user wished to report on the percentage of needs being met by ESEA title I, the percentages would be computed down the column instead of across the row. Also note that in this table, row 2 and row 3 do not answer the policy question under study, but rather provide a comparison standard against which ESEA title I data may be compared. For instance, of what use is the knowledge that 45 percent of the ESEA title I participants have academic needs if the user does not know that 37 percent of the nonparticipants

and 39 percent of the total population have academic needs? At the same time that this table is designed, the data user or analysis designer should designate the exact data element for each cell of data to be provided.

In providing the details of data item use, the user will note that all responses or combination or responses to pupil question 26 and to pupil question 31 are accounted for in the table. This requirement should be checked very carefully for every table since programing of these tables will require consideration of and instructions for every possible combination or responses.

EXAMPLE 5: DEVELOPING TABLE SHELLS TO ADDRESS POLICY QUESTION 1

	Pupil has educational need	Pupil does not have educational need	Total
ESEA title I participant	#	#	#
	%	%	100%
Non-participant	#	#	#
	%	%	100%
Total	#	#	#
	%	%	100%

Number of missing: _____

Total in population: _____

Percent of population missing: _____

EXAMPLE 6: SPECIFICATION OF CLASSIFICATION OF RESPONSES IN SIMPLE TABLES

NOTE: The table below is the same as the table in Example 5, except that information concerning the sources of data for each cell have been provided.

	Pupil has educational need (pupil question 26 = yes)	Pupil does not have educational need (pupil question 26 = no)	Total
ESEA Title I participant (pupil question 31 = yes) . .			
Nonparticipant (pupil question 31 = no) . .			
Total			

Number of missing: Nonresponse to either pupil question 26 OR pupil question 31

Total in population: Sum of total and missing

Percent of population in missing: Missing divided by total of pupulation

In examples 5 and 6 you were shown the simplest possible analyses that would permit the user to answer the policy question. This simple analysis leaves one with many unanswered questions, some of which may be addressed in more specific policy questions or related theories and some of which should be raised and addressed in the analysis of this question. In example 5 the user receives data that allow him to determine the extent to which all participants have at least one academic need in some unspecified subject in an attempt to provide an estimate of the number of correctly targeted children. However, the first cell (row 1, column 1) also includes any respondent who participates in ESEA title I reading but only has an academic need in mathematics. Would the data user wish to count this type of response as correct targeting? Conversely, cell three (row 2, column 1) which includes children who do not participate in ESEA title I but do have educational needs, also counts children in non-ESEA title I schools and children in ESEA title I schools who have academic needs not served by the particular program in their school. Would the user want to infer that these students were incorrectly excluded from ESEA title I participation? An example of an additional, more complex data table that clarifies the analyses for the ESEA title I policy question is provided in example 7.

EXAMPLE 7: TABLE SHELL FOR POLICY QUESTION 1

	Pupil has need in reading	Pupil has other need	Pupil has no need	Total
ESEA Title I participant in reading	#	#	#	#
	%	%	%	100%
ESEA Title I academic program participant *not* in reading	#	#	#	#
	%	%	%	100%
Nonparticipant	#	#	#	#
	%	%	%	100%
Total	#	#	#	#
	%	%	%	100%

Number of missing: _____

Total in population: _____

Percent of population in missing: _____

Here, pupil needs in reading are matched to pupil participation in reading. Similar tables can and should be produced using pupil participation in any one or all combinations of reading, mathematics, language, and other academic participation matched with pupil need in the same subject area.

Policy theory 1, which concerns mistargeting of ESEA title I programs to poor pupils rather than needy pupils, requires review of two dimensions—academic and economic need—since poor children with academic needs are correctly selected and poor children with no needs are incorrectly selected. There is a variety of possible tables to address this, including several variations of example 8 shown below. At the very least, the same table design should be used to produce a table in reading (shown below), mathematics, and language. Combinations of subjects such as participation in reading only, mathematics only, language only, reading and mathematics, reading and language, mathematics and language, and reading, mathematics, and language could be compared with the same combination of needs. Detailed tables using combination items such as those outlined above provide useful insights for the sophisticated data user, but should not be developed without accompanying simpler tables.

Once the tables have been completed and all options and item instructions provided, the data analysis plan is essentially complete. Individual questionnaire items and the resulting data analysis tables should be revised on the basis of pretest data, but all changes in the study should be made with the data needs, analysis plans, and policy questions in mind.

EXAMPLE 8: DATA ANALYSIS TABLE SHELLS FOR POLICY THEORY 1

	Pupil has reading need (pupil question 27, option a = yes)			Pupil has no reading need (pupil question 27a is no; or pupil question 27 is is legitimate blank)			Total
	Pupil's family income is			Pupil's family income is			
	Under $3,000	$3,000 to $5,999	$6,000 or more	Under $3,000	$3,000 to $5,999	$6,000 or more	
ESEA Title I participant in reading (pupil question 33a = yes)							
Nonparticipant in ESEA Title I reading (pupil question 33a = no; pupil question 33 is legitimate blank)							
Total							

Number in missing: Pupil question 24 or pupil question 27 or pupil question 33 is nonresponse

Total in population: _____

Percent of population in missing: _____

Areas of Concern in Step 3.

(1) There should be full participation of NCES, the user, and the contractor in the development of analysis plans and table specifications. Users with specific interests should be identified and should then be enlisted in the detailed table development.

(2) Although a contractor would be able to independently develop table shells and item analysis specifications, details about intervals, combinations, cross tabulations to be run, and questionnaire items should be developed in conjunction with the data user.

(3) Survey redevelopment must be done on the basis of an analysis plan. All suggested revisions should be reviewed against the analysis plan before revision.

Step 4: Production and Use of Data and Data Tables

Development and pretesting of the survey questionnaires is completed with the development and pretesting activities that run concurrently with table shell production in step 3. The first activities in step 4 are those associated with survey implementation, editing, and data tape production. Reliability and validity studies should also be completed and the results used to revise the final analysis plans. Throughout the implementation phase of step 4, the data analysis contractor should program and check the programs for production of the data analysis tables.

Upon completion of the edited data tape, the data analysis tables should be produced and the analytic interpretation begun. In using the data tables, the following rules should be considered:

(1) Data tables should be reviewed for accuracy in terms of labeling, data aggregation, weighting, and correct input data immediately upon production. In cases where the data congregate into one or two categories, new tables may be required before the analysis proceeds.

(2) All data tables should be reviewed and interpreted even if the information presented in a specific table will not be reported. This review allows the user to gain a more complete feeling of and understanding for the situation being analyzed.

(3) Report tables in the clearest and simplest formats possible. Most of the public reading a report will not have sophisticated statistical understanding, and simple formats should be used as much as possible.

(4) Report the data accurately. Pupil questionnaire responses do not provide data on pupils but rather data on teachers' impressions of pupil characteristics. This distinction is important because teachers make many of the decisions regarding pupils and their learning experiences. Careful interpretation and reporting is essential in all analyses. Never overstate the case.

(5) Write reports (and to some extent analysis plans and table shells) to minimize the effects of possible reliability and validity problems.

(6) To decrease the effects of data validity or reliability problems, develop analyses that require consistent reporting across several similar items. For example, before pupils are definitely classified for analysis as being in need of bilingual education, classify them by developing an index based on race, target group, ability to speak English, and existence of persistent problems in language. If a pupil is determined to have need in all four categories, the user can be fairly certain that the pupils in question have definite need for bilingual

EXAMPLE 9: USING DATA ACCURATELY WITHIN THE BOUNDS OF RELIABILITY AND VALIDITY PROBLEMS

If the user must analyze pupil question 24 on economic need (see Example 8), he should choose options for the analysis to minimize the effects of possibly invalid data. The options used for economic need are:

- Definitely poor (family income of less than $3,000)
- Possibly poor (family income of $3,000 to $5,999)
- Probably not poor (family income of $6,000 or more).

These categories are tabulated from pupil question 24 as follows:

Definitely poor – Teacher's estimate of *maximum* family income is less than $3,000.
(pupil question 24, column 2, options 1 or 2 are marked)

Possibly poor – Either teacher's estimate of *minimum* family income or of *maximum* family income or both estimates are within the $3,000 to $5,999 range.
(pupil question 24, column 1 or pupil question 24, column 2 have at least one of options 3-5 marked)

Probably not poor – Teacher's estimate of *minimum* family income is $6,000 or more.
(pupil question 24, column 1, at least one of options 6-11 is marked)

Unknown – Teachers' estimates not in above categories.

By establishing categories in this fashion, the user is analyzing the data in a manner that measurably increases the likelihood of valid data. Careful interpretation of these data and categories will also help ensure valid reporting. Note that the only definite statement made is in the "definitely poor" category and that criteria used to place respondents are not only very stringent but also give the benefit of the doubt to the respondent.

services. Conversely, if the pupil has no needs as measured in all four categories, he can safely be considered as definitely not needing assistance. All other pupils can be classified in an "unknown, but may be needy" category.

(7) Check questionable data against alternate outside sources such as Census data, HEW Civil Rights data, etc.

Areas of Concern with Step 4.

(1) There are few users who are likely to write reports on this survey except NCES. All data requestors should be required to specify how the data will be used and then use it.
(2) User procedures should be developed to ensure release of data collected by the SSES to internal USOE users.
(3) Federal program reports should be written either by or in close coordination with Federal program managers to ensure accurate understanding of the data needs and program purposes of the program being reported.

PROCEDURES FOR DEVELOPING SSES ANALYSIS PLANS WITHIN CURRENT PLAN

Now that the steps for analysis plan development have been outlined, the problem becomes one of applying this procedure within the current SSES developmental situation. Much of the work that should have been done on the basis of a completely developed analysis plan has already been completed without its benefit. It is still possible to continue with only minor revision of the past efforts, but the first step that must be taken is the development of a good and complete analysis plan. NCES must take a strong uncompromising role in requiring USOE data users to justify each data item; and NCES and USOE data users must realize that an outside contractor can develop an analysis rationale only after user need has been specified.

Once the analysis rationale has been determined, a contractor may take the lead in preparing the analysis plans or in doing all table-shell production, programing, and table production. However, as only USOE users fully know what is needed, USOE data users must provide a review function for the contractor in the following areas

(1) Determine and communicate the general purpose of the survey.
(2) Designate the policy questions.
(3) Specify the policy-related theories.
(4) Review the specifications for data acceptability.
(5) Review the data elements and data options for each policy question.
(6) Provide guidance on table-shell specifications that include designation of intervals, cross tabulations, categories, and items used.
(7) Review final data analysis plan against pretest information.
(8) Review edit specifications against data analysis plan.
(9) Review data tables for accuracy and acceptable data variance.
(10) Review or provide major input or interpretation into data reports

To assume its proper role and to assist appropriately in the development of the analysis plans, NCES, the contractor, and USOE data users should convene a meeting of USOE management and data staffs to determine what the role of each will be in the development of analysis plans.

USOE, NCES, and all data users must perform the tasks listed below at appropriate times during the development of the analysis plans.

(1) Determine the general scope of the survey. Currently, the SSES performs evaluation, monitoring, needs assessment, research, and general data collection. These multiple uses can be carried off if necessary, but the current survey has encountered some design problems because of these multiple usages. The SSES attempts to perform many functions a fact that adds to the survey complexity and problems. Future SSES's should be more limited in scope.
(2) Keeping the general survey purpose in mind, USOE users should review the policy questions with the contractor and ensure that all questions are legislatively based and that all major legislative issues are covered.

If the survey is a research or general-purpose survey, the scope should be carefully defined and the questions and theories to be addressed should be clearly specified.

(3) All policy-related issues that are legislatively relevant should be defined and clearly stated by USOE users. These theories should have major importance, result in the possible exposure of correctable problems, and require the addition of survey items that would not have been included otherwise.

(4) Data elements and options in a general, unpolished format should be developed by the data users for each policy question and policy-related theory. These will be used by the contractor to develop the questionnaire items and by the USOE staffs in the next step. If current items are acceptable, USOE users should explain the relationship between each questionnaire item and each policy question.

(5) USOE users should devise general specifications for data accuracy for the data elements and options specified in step 4. These statements need not be devised for every item, but should reflect the statistical accuracy requirements of the survey users.

(6) NCES must develop rules governing the review of data tables and the release of data to internal USOE users and release by USOE users to the public, including the issue of whether a feedback system should be developed and, if so, what it should entail.

If all of these activities are performed adequately by USOE data users, the contractor should be in a much stronger position and should be able to develop data analysis plans, data tables and data printouts, and write reports with a high degree of accuracy and utility. Therefore, the contractor would also be in a much better position to provide NCES and USOE with the desired support in these areas.

Appendix A

PRECANVASS REPORT

PRECANVASS TASK

Several information elements were taken into consideration in designing the way the school sample was selected. Most were familiar: total number of schools in the LEA, school enrollment, grades served, enrollment by grade and type of community (urban, suburban, or rural). Since the SSES concerned several specific programs, the additional elements of the presence of Federal program funds and the percent of target groups were considerations for stratifying the school sample. To collect this kind of data, a precanvass of districts was conducted.

The primary purpose of the precanvass was to provide up-to-date information about specific schools so that the pretest would be sent to the schools that had the Federal programs of interest as well as the target groups needed for the supplementary sampling.

In February 1974, the contractor telephoned each of the nine participating States and spoke with the SSES survey coordinator. After agreeing on the districts within a State that were to participate in the pretest, a number of general questions were asked that dealt with survey logistics and the best source in the State or LEA for specific information about individual schools. With the exception of Florida, each of the States indicated that the information resided in State files and that the State education agency (SEA) was the best source of information. In late February 1974, precanvass forms and instructions were sent to the SEA offices in the nine States.

The precanvass forms were in three parts. The first part contained two pages of specific instructions indicating how the respondents were to complete the information on the forms provided. The second part was a computer listing generated from the Public School Universe File that was current as of October 1971 (the latest available in February 1974). Respondents were asked to make corrections and/or additions to the printout concerning each of the elementary schools listed for a given district. The third part was called the Program Information Form and respondents were asked to indicate, by school, the following types of information:

1. Whether the school should be excluded from the pretest for any reason.
2. Presence of programs funded by the Federal sources listed.
3. Approximate percent of listed pupil target groups.

Samples of the instructions and forms appear at the end of this appendix.

Respondents were asked to return data by March 8, 1974, to facilitate the school selection process.

RETURN OF PRECANVASS DATA

By March 8, 1974, no State had responded to the precanvass request. And, in fact, by March 25, only three States had mailed in their forms. Telephone calls made or received by the contractor and OE personnel during the intervening period revealed that in several States the data requested were not available at the State office—even though all of the States but one had originally indicated that the precanvass information could be readily provided from existing State records. Consequently, the forms were either mailed to the individual LEA's or phone calls had to be made for the missing information (generally percent of target groups), thus causing the delays. In addition, two States sent written notes with the precanvass forms stating that they were unhappy with the quality of the data they had been able to supply at the State level. In at least two other States, the problem was only too apparent from the inaccuracy or incompleteness of the returned forms. One State in particular had apparently supplied numbers

instead of percentages for the target groups. Each LEA then had to be called to ascertain whether the figures provided by the State office were indeed percents or numbers. When it was discovered they were numbers, percent conversions had to be made. This particular State did not return the precanvass materials until May 13.

Some States complained, however, that the turnaround time allowed them was too short, and that was certainly part of the problem. During the State interviews, which were conducted as part of the validation field work, most States felt that 2 weeks to a month would be necessary to complete the precanvass at the State level for the full-scale survey. This length of time is needed because, although most States maintain computerized records on the type of information requested by the precanvass, in many instances it is not received from the districts, processed, and put onto tape until after several months of the new school year have passed. Several States cited this as an argument for conducting the precanvass at the LEA level: at the time of the year the SSES would need precanvass information (in the fall preceding the spring mailout), the LEA's are still the best current source.

School sampling procedures were begun on March 29, 1974, in spite of the fact that three of the nine States had not yet responded to the precanvass. As a result, school sampling in two States had to be done on the basis of the 2-year-old Public School Universe File information concerning grade span and enrollment. (The third State had volunteered for district-only participation and did not represent a school sampling consideration.) This was to have repercussions in both of these States: In one State (which did not return its precanvass materials until mid-April), a school included in the sample had closed. In the other State (which did not return its forms until mid-May), one school had been demolished to make way for a new highway. Another had dropped its elementary enrollment and now served only grades 7 and 8, therefore removing it from the scope of an elementary school survey. Since none of these problems were uncovered until the validation field work, three schools were lost from the sample—a situation that might have been avoided with accurate precanvass information. The implications for the full-scale survey should not be viewed lightly in that there will be a substantial increase in the number of districts and schools involved. Accurate and current precanvass data are vital if school sampling procedures are to be conducted with any measure of reliability.

RESULTS OF THE PRECANVASS OPERATION

While the pretest of the precanvass was carried out with some difficulty, it did in fact achieve a more than reasonable rate of completion and the necessary data was received from most States in time to be used in the manner for which it was intended. (The latter would not have been the case, however, had the pretest mailing not been delayed by the OMB clearance procedure. The States took much longer in responding than was expected and, in our opinion, longer than should have been necessary.)

The actual selection of schools for the pretest was not a strict, stratified, random sampling of school within participating districts. This kind of selection was not possible because of the limited size of the pretest sample. The information obtained from the precanvass *was* used in selecting schools, however, to make sure that enough schools of each type were selected for testing all aspects of each questionnaire and of the survey operations.

The following sections present some of the major findings of the precanvass operations, selected summaries of the data, and general conclusions.

Data Presentation

1. The distribution of the 1,437 schools in selected districts in the nine States surveyed is as follows: The number of schools for each State will vary throughout this presentation of results because: (a) some counts are missing for the 101 schools that were selected from the master tape for the pretest mailout, (b) other counts of schools will change according to the number of schools added or deleted in each State, and (c) where States did not provide data for some schools, the base number of schools will change.

State	*Number of Schools*	*State*	*Number of Schools*
Arizona	31	Minnesota	157
Colorado	91	New Jersey	69
Florida	307	Texas	463
Kentucky	69	Virginia	124
Michigan	126	Total	1,437

2. The following statistics reflect reported changes or updates of information supplied from the Public School Universe File.

a. Number of schools that were reported as being added to or deleted from the computer listing supplied.

State	Original	Added	Deleted	Gross change	Percent changed	Net change
Arizona	29	4	2	6	21	+2
Colorado	88	3	0	3	3	+3
Florida	345	0	38	38	11	−38
Kentucky	80	6	17	23	29	−11
Minnesota	158	0	1	1	0.6	−1
New Jersey	67	4	2	6	9	+2
Texas	468	12	17	29	6	−5
Virginia	123	1	0	1	0.8	+1
Total	1,358	30	77	107		−47
Percent		2	6	8		−3

b. Number of schools reported as having changes in grade span.

State/Schools	Number with change	Percent
Arizona/22	3	14
Colorado/76	4	5
Florida/292	72	25
Kentucky/51	31	31
Michigan/120	12	10
Minnesota/157	4	3
New Jersey/55	8	15
Texas/448	208	46
Virginia/124	5	4
Total/1,345	347	26

c. Number of schools reported as having changes in enrollment of 10 percent or more.

State/Schools	Number with change	Percent
Arizona/22	10	45
Colorado/76	53	70
Florida/292	287	98
Kentucky/51	46	90
Michigan/120	53	44
Minnesota/157	9	6
New Jersey/55	42	76
Texas/448	426	95
Virginia/124	3	2
Total/1,345	929	69

d. Number of schools with reported change in the presence of programs for the handicapped.

State	Added	Deleted	Total changed
Colorado	38	1	39
Florida	53	64	117
Kentucky	10	7	17
Michigan	5	3	8
New Jersey	5	3	8
Virginia	6	0	6
Total	117	78	195

3. Schools for which States failed to provide Federal funding and target group information.

State/Schools	Schools not reported	Percent
Michigan/126	54	43
Texas/463	15	3
Total sample/1,437	69	5

4. Schools that were reported as having no Federal funding.

State/Schools	No Federal funding	Percent
Colorado/91	51	56
Florida/307	1	0.3
Kentucky/69	11	16
Michigan/126	24	19
New Jersey/69	25	36
Virginia/124	46	37
Total sample/1,437	158	11

5. The following numbers and percentages of schools were reported to have programs funded by the Federal sources listed.

State/Schools	ESEA I		Migrant		ESEA III		ESEA VII		EHA, B	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Arizona/31	14	45	5	16	17	54	0	--	0	--
Colorado/91	34	37	9	10	10	11	0	--	0	--
Florida/307	86	28	111	36	162	53	2	0.65	0	--
Kentucky/69	54	78	5	7	28	40	0	--	4	6
Michigan/126	38	30	16	13	24	19	5	4	0	--
Minnesota/157	57	36	1	0.64	41	26	0	--	0	--
New Jersey/69	32	46	12	17	5	7	3	4	1	1.5
Texas/463	233	50	85	18	1	0.2	0	--	0	--
Virginia/124	60	48	12	9	7	5	0	--	27	21
Total/1,437	608	42	256	18	295	20	10	0.69	32	2

6. The following is a distribution by pupil target group of the number of reported schools (by State) having one or more percent for each target population.

State/Schools	Migrant	Bilingual	Indian	Handicapped
Arizona/31	1	3	3	2
Colorado/91	2	5	32	67
Florida/307	N/R	N/R	N/R	N/R
Kentucky/69	4	N/R	N/R	40
Michigan/126	16	35	11	31
Minnesota/157	N/R	N/R	N/R	N/R
New Jersey/69	N/R	52	N/R	24
Texas/463	77	5	46	N/R
Virginia/124	6	3	4	51
Total/1,437	106	103	96	215
Percent	7.37	7.16	6.7	15

[N/R means no response provided.]

7. Schools excluded from the pretest (as indicated in the precanvass form by respondents) occurred in the following States.

State/Schools	Schools excluded	Percent
Kentucky/69	37	54
Michigan/126	4	2
Virginia/124	2	3
Total sample/1,437	43	3

8. As part of the validation study, interviews were conducted with representatives of the nine SEA's. (Responses shown are expressed as a percent of those responding to each question.)

(1) Are you the who handled the information collections for the precanvass?

78% = YES

(2) Did you have much difficulty providing requested information?

57% = YES

(3) Did you have all the necessary information on hand in the State office?

57% = No

(4) Did you find it necessary to get some or all information from the districts?

50% = YES

(5) Did you contact any schools to obtain some or all of the information requested?

17% = YES

(6) What do you think is the best place for OE to seek information?

37% = indicated that the school districts would be the best source

Statistical Summary

1. Of the 1,437 schools reported on:

   a. Information Information on Federal funding and target groups was not provided for 69 schools, or 5 percent. However, the schools not reported on occurred entirely in two States.

   b. 158 schools (or 11 percent) were reported as receiving no funding from the Federal sources listed. It should be noted that 97 of these 158 schools (61 percent) were from only two States.

   c. Only 3 percent of the schools were indicated for exclusion from the pretest. This figure is further encouraging in that 84 percent of these schools (37 of 44) were from one State.

2. Percent of schools receiving Federal funds in the districts selected:

ESEA I	42%
ESEA III	20%
ESEA I Migrant	18%
EHA, part B	2%*
ESEA VII	0.69%

3. Schools were counted that indicated at least 1 percent of a particular pupil target group. As a result of such counts, pupil target groups are shown to exist in the following percentages of schools in the districts selected:

Handicapped	14.96%
Migrant	7.37K%
Bilingual	7.16%
Indian	6.70%

   a. The updated data reflected a reported addition or deletion of 107 schools. Thus the file did not have current information regarding the existence of 8 percent of the schools in the districts selected.

   b. Indication of the grade span taught in each school was changed for 332 schools, or 25 percent.

   c. SEA's were instructed to change the enrollment figure listed for each school if it was off by more than 10 percent. The enrollment figures were changed for 929 (or 69 percent) of the schools listed.

   d. The listing showed whether or not a school had a program for the handicapped. "No" was changed to "Yes" for 117 schools and the reverse took place for 78 schools. Thus, this indicator was not up-to-date for 195 (or 14 percent) of the schools.

General Conclusions

1. *Response*

   a. The response to the precanvass was generally good, in that all nine States did respond. However, this was not accomplished without great effort. In addition, if the original schedule had been followed, the inputs

*Total percentage of EHA, part B, programs is probably somewhat inflated since 84 percent of the schools (27 of 32) were from one State.

from a number of States would have been too late to be used. As it was, one State did not respond in time and only partial response was received in time from another State.

b. In the final analysis, information was provided for 95 percent of the schools for which it was requested. In addition, the missing 5 percent was from only two States. The other seven States provided complete information.

c. It would seem that the precanvass achieved its purpose in acquiring funding and pupil target group information for 95 percent of the schools in the selected districts. This would certainly be a more than adequate response for purposes of stratifying the school samples.

2. *Information from the Public School Universe File*

a. A precanvass of sampled districts appears to be necessary for the full-scale survey if only for the purpose of updating information from OE files necessary for school stratification and for survey controls.

(1) Eight percent of the schools on the final updated file would have been in error—either as a result of no longer being in existence or not having been added to the file.

(2) The grade spans served was in error for 25 percent of the schools. Grade span information is quite essential for proper sample selection to ensure that all types of schools are included with equal probability and that only schools with grades prekindergarten through 6 are included. (There were problems with previous Elementary Schools Surveys (ESS's) with regard to including schools in the sample that no longer had the required grades.) Problems of this sort will undoubtedly introduce additional concerns about response weighting.

(3) The nine States precanvassed indicated that the enrollment figures provided were wrong by at least 10 percent for 69 percent of the schools listed. The implications of this finding are obvious.

(4) The indicator for presence of a program for the handicapped was in error for nearly 15 percent of the schools. Use of this indicator, without updating, for school stratification would no doubt present problems.

b. The information available on the Public School Universe File at the time of the precanvass (February 1974) was current as of October 1971. The problems experienced with the data on this file are possibly twofold: the age of the data and errors in creating the file. How much the data on file was incorrect as a result of either of these factors is hard to evaluate. However, it seems reasonable to presume that to make proper use of this file in sample selection, the information contained on it should be current as of the school year in question or at least not more than 1 year old.

3. *Precanvass at the SEA Level*

a. Interviews were conducted with representatives of the nine States involved in the precanvass. In seven States, the interviewee was the person responsible for the precanvass. In the other two States, the person responsible for the precanvass was not available for the interview. (One of these two was the only State which indicated prior to the precanvass that the precanvass could and should be done directly with the districts involved. That State later agreed somewhat reluctantly to provide the information from the SEA.) The responses of these seven States showed:

- 57 percent indicated they had difficulty providing the requested information and further indicated that they did not have all the information in the SEA office.
- 50 percent indicated that they found it necessary to obtain some of the information from the LEA's. Further, 17 percent indicated that they got information directly from the schools.

- 37 percent indicated that the LEA's would be the best source for the information.

b. It is no wonder, then, that the precanvass took much longer than expected. There is no doubt that this operation will take much longer and will be a considerable burden for the States if conducted at the SEA level for the fill-scale survey. The full-scale survey would necessitate precanvassing upwards of 800 districts. The LEA's could provide the information much more quickly and efficiently.

c. Provision of target group percentages:

(1) The percentages of schools reporting 1 or more percent of the four pupil target groups seems quite low. Among the reasons for this are:

- two States reported no pupil target group percentage at all,
- two States did not report any schools for two of the categories, and
- many States provided figures for only some of the schools.

(2) It is likely that a number of States had great difficulty providing this information at the State level (even though eight of the nine States polled prior to the precanvass indicated that they could, and preferred to, provide the information from the SEA). This may be another cause for the low percentages. Perhaps one more inference could be drawn from these low percentages: the numbers of these target pupils are low and thus do not show in the figures for very many schools. If there is, indeed, *any* validity to this supposition, it further adds weight to the argument that the school sample must be stratified by program and pupil target group to achieve adequate representation for those programs and groups that have been so poorly represented in the data from previous ESS's.

(3) The statistics on percent of handicapped pupils are cited as a case in point.

- It is highly likely that many more than 15 percent of the schools have 1 or more percent handicapped pupils. (In fact, if this is not the case, then the data on changes of status [195] of programs for the handicapped is much more significant than previously assumed.)
- Three States did not give information on the percentage of handicapped pupils for *any* of their schools. And yet, handicapped data was the prime example cited by the CEIS Surveys Subcommittee in August 1973 of data that could be easily provided by the SEA.

d. Further argument for eliciting the necessary information through the precanvass directly from the school districts can be made by examining the following sample of problems resulting from the information provided by the precanvass:

- A school in one State was reported as having no ESEA title VII program and no program for the handicapped. The LEA office indicated that this school had both programs. LEA and school records confirmed this.
- In at least one instance, the SEA coordinator handed the precanvass materials to the LEA coordinator for completion.
- Two schools in one district were indicated as having percentages of Indians in their school populations. Both schools were subsequently picked for supplementary sampling of Indians. Neither school, according to the LEA, had *any* Indians.
- Various other errant indicators of the presence or absence of Federal programs were also seen.

4. *Summary*

a. The precanvass is an essential part of presurvey operations because of the need for updated data on schools as well as additional information to properly stratify a sample of schools. The stratification is necessary to

adequately represent Federal programs and pupil target groups that have been inadequately represented in the past.

b. Information from the Public School Universe File, used in the stratification and selection of the school sample in the past, is inadequate at best.

c. The States provided the precanvass information with considerable difficulty. The time required was longer than the survey schedule would normally allow. There were significant gaps in the data and some serious errors were seen—even without any attempt to verify the data provided.

c. It is recommended that a precanvass be conducted early in the 1974-75 school year and the information be solicited from the sampled districts: either by mailing to the districts directly or by having the SEA's distribute the precanvass materials to the districts, with provision for return directly to the contractor.

INSTRUCTIONS FOR COMPLETING THE PRECANVASS SURVEY

There are two separate attachments included here:

A. A computer listing

B. The Program Information Form

A. THE COMPUTER LISTING

The only schools listed are those that have any or all of the grades Prekindergarten through 6. This listing is based on infomration provided for the Elementary and Secondary General Information System (ELSEGIS) for the 1971-72 school year and may need some updating.

We would like you to make any necessary corrections to the listing.

PLEASE MAKE CORRECTIONS IN THE FOLLOWING WAY: DRAW ONE LINE THROUGH THE INCORRECT DATA ITEM AND *PRINT* THE CORRECT INFORMATION *ABOVE* THE INCORRECT INFORMATION.

1. USOE School Code: If you are familiar with your USOE School Codes and they are in error, please make corrections.

2. Correct the name of any schools that are in error. (It is not necessary to add words such as "Elementary" or "School" if they are missing.)

3. At the bottom of the page add any schools having grades Prekindergarten through 6 that are not on the list.

4. Check grade span for each school and correct if in error.

5. If the total number of pupils is wrong by more than 10 percent for any school, please make that correction. (Exact numbers are not expected; your best estimate will suffice.)

6. In the column marked "HDCP PROG" indicate whether or not an individual school has any program for the handicapped that physically operates in that school. Please correct the "Yes" and "No" designations if they are incorrect.

You have completed the first part of the precanvass for the pretest of the SSES.

B. THE PROGRAM INFORMATION FORM

1. In column 1, write down all the school codes as they appear on the correct computer listing.

2. In column 2A, write the name of each school in this district in the order it appears on the computer listing, *including those you have added.* (It is not necessary to write the words "Elementary School" behind each name—for example: Palmdale, Valley View, Sheraton, etc., will suffice.)

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3a. In column 2B, make an "X" beside any school that you feel should be *excluded* from this pretest of the Statistical Survey of Elementary Schools (SSES). (On the reverse side of the Program Information Form, please state briefly the reason for excluding this school.)

3b. In column 3, make an "X" beside any school that does *not* have any programs funded by the following sources:

- ESEA title I (Children from low-income areas and neglected or delinquent children)
- ESEA title I Migrant
- ESEA title III
- ESEA title VII (Bilingual)
- EHA, part B (Education for the Handicapped Act, part B)

4. In column 4, indicate for each school (other than those you marked in column 3) the presence of programs funded by any of the five Federal sources by making an "X" under "YES" or "NO" for each program.

5. In column 5, *estimate* for each school the approximate percentage of each of the listed pupil target groups. If none, write a "0" in the appropriate column(s).

Use the following guidelines as definitions for these target groups.

a. *Migrant pupil:* a child of a migratory agricultural worker who has moved with his family from one LEA to another during the past year in order that a parent or other member of his family might secure temporary or seasonal employment.

b. *Bilingual pupil:* any pupil whose *dominant* language is not English.

c. *Indian:* any pupil who has been classified as a Native American Indian by local guidelines.

d. *Handicapped pupil:* any pupil who has been classified as handicapped according to State guidelines.

6. Please complete the information requested at the bottom of the page and sign your name.

You have completed the precanvass task. Please enclose the corrected computer listing and the program information form in the prepaid envelope and mail as soon as possible so that the pretest can proceed on schedule and be completed before too late in the school year. We appreciate your cooperation and thank you for the time spent on this task.

DIST. CODE NO. 40-16380 DIST. NAME: UNION CITY STATE: NJ
PAGE NO. 1

SCHOOL CODE	SCHOOL NAME	COMMUNITY	GRADE SPAN	TOTAL PUPILS	HDCP. PROG.
00552	EDISON SCH	UNION CITY	K TO 8	1607	NO
0 758	GILMORE SCH	UNION CITY	K TO 8	586	NO
00969	HUDSON SCH	UNION CITY	K TO 8	702	NO
01841	ROBERT WATERS SCH	UNION CITY	K TO 6	1085	NO
0 871	ROOSEVELT SCH	UNION CITY	K ONLY	1027	NO
02224	WASHINGTON SCH	UNION CITY	K TO 6	1028	NO

SSES PRETEST

DISTRICT _____

LEA PROGRAM INFORMATION

STATE _____

District Code

1	2 A	2 B	3	4									5			
				Federal funding information by school									Percentage of target groups by school			
School code	Name Elementary school	Exclude	No Fed. funding	ESEA I		ESEA I Migrant		ESEA III		ESEA VII		EHA Part B		% Migrant	% Bilingual	% Indian	% Handicapped
				Yes	No	Yes	No	Yes	No	Yes	No	Yes	No				

Person Completing This Form:

Name _____ Date _____

Title _____ Signature _____

Appendix B

REVISED QUESTIONNAIRE

PREFACE

BACKGROUND

The questions contained in this appendix have been produced and revised as a result of a comprehensive process of questionnaire revisions and updating. The revisions were necessary to reflect initial user needs and changes in these needs as a result of program shifts, new legislation, and shifting emphasis of analysis issues. In addition, changes have been made as a result of a detailed analysis of the spring 1974 pretest described earlier in this report. The questionnaires contained here must be considered draft questionnaires that would require some additional revision before being implemented as part of a full-scale survey.

The remainder of this section presents the following general questionnaire areas that should be addressed prior to full-scale implementation:

(1) Logistics
(2) Definitions
(3) Level of respondent
(4) Numbers versus percents
(5) Low-income questions
(6) Racial-ethnic questions
(7) Other (specify)
(8) Response intervals
(9) Programs for the handicapped
(10) Respondent burden

LOGISTICS

The following recommendations are made on the questionnaires as they affect logistics:

- The covers of the questionnaires should be printed in different colors to facilitate distribution and avoid confusion about the various levels of respondents.
- Instructions, skip patterns, and words needing definition throughout the questionnaires should be printed in red. The item analysis generally showed that the respondents did not give these areas the necessary attention. This resulted in errors that might have been avoided had instructions, skip patterns, and definitions been in red. The use of red printing for these areas may reduce these types of errors and facilitate editing and error resolution once the questionnaires are returned.
- Because of the large volume of pupil and teacher questionnaires planned for the full-scale survey, the questionnaires should be prepared for optical scanning to reduce processing time and costs.
- The School List of Special Programs should be printed on the cover of the teacher questionnaire so that programs applicable to the specific teachers are identified prior to distribution of the survey materials.

DEFINITIONS

The definitions contained in the questionnaires were developed using OE handbooks as a basis in conjunction with users and contractor staff meetings. These definitions should be updated where specific recommendations are made as part of the item analysis. Among these are:

- Consideration should be given to defining the term "regular school programs."
- Add "including preschool" to the definition of prekindergarten.
- The term "preservice training" should be revised to include any training given to a teacher by the school district or school before the school year begins.
- Consideration should be given to clarifying the terms "participating" and "participants" in Federal programs.

A copy of the definitions used for the pretest are included at the end of this preface. The definitions should be part of each questionnaire as a fold-out page in the same manner as they appeared for the pretest.

LEVEL OF RESPONDENT

In the pretest, certain items were included at multiple levels of response. Therefore, many items were asked of two, three, or even four levels of respondents. The item analysis, and the recommendations found there, should be reviewed with the objective of selecting the optimal respondent. However, it should be remembered that some of these items appear at more than one respondent level for analysis purposes. In cases where there is no clear dominance or need for inclusion to satisfy analysis requirements, the item should be duplicated at two levels and reanalyzed based upon the validity and reliability study of the full-scale survey. Chapter 5 of the text summarizes the analysis of the selection of optimal respondents.

NUMBERS VERSUS PERCENTS

In the pretest, certain items were tested to determine whether some data were more accurate or readily available using number or percent alternatives on different forms of the same question. Generally, number responses appeared to solicit better data. Specific recommendations for each of these items are included in the item analysis. Where percents are used or whenever the analysis plan for an item necessitates computation of percents on a national basis, the percentage basis must be included as an item on the questionnaires. For available base numbers, such as public school enrollment by grade currently collected as part of the ELSEGIS, NCES has the option to merge files for acquiring the data.

LOW-INCOME QUESTIONS

The questions on all questionnaires that solicited the definitions of low income were included specifically for the pretest. A review of the responses to this item should be made to determine whether there is any consistency among respondents regarding the concept of what constitutes low income. If there is, the questions asking for the definition may be dropped for the full-scale survey. If there is not, consideration might be given to addressing the entire low-income issue in another manner.

RACIAL-ETHNIC QUESTIONS

All racial-ethnic questions should be reviewed to ensure that they reflect the current terminology used by OMB or the Office of Civil Rights (OCR). The OCR lists might be most useful in terms of lessening respondent burden since many school districts provide information on the OCR survey yearly and are thus familiar with the terminology used there.

OTHER (SPECIFY)

In many questionnaire items, closed end response alternatives were developed for the pretest over many months with the help of the data users. However, to ensure that the full-scale survey would include all possible responses, "Other (specify)" was added at the end of many pretest items. A review of the frequency distributions for each of the items was made to identify high (greater than 10 or 20 percent) response in this category. Wherever "Other (specify)" solicited a high response, recommendations were made in the item analysis regarding reviewing the written responses to identify additional response alternatives. This must be done for the teacher and pupil questionnaires so they may be processed more efficiently—especially given the projected volume for these questionnaires on the full-scale survey.

RESPONSE INTERVALS

For those items soliciting a number response on the pretest pupil and teacher questionnaires, a line was used for the respondent to enter the actual number. In the early stages of questionnaire return, intervals were established to produce frequency distributions of the data. The distributions of the pretest data were reviewed and recommendations about specific intervals were made in the item analysis for every relevant question on the teacher and pupil questionnaires. The data requested on these two questionnaires can be easily reduced to categorical responses. Data users indicated prior to the pretest that the responses provided by categorical responses were precise enough for the intended analysis requirements and that these items should be open end only for the pretest to establish response intervals. Consequently, changing these items to categorical responses will not only save processing time and money but will also provide data that is quite adequate for user needs.

PROGRAMS FOR THE HANDICAPPED

A review of the results of the validation study indicated that the handicapped section contained the greatest percentage of errors (ranging from 22 to 39 percent) of any section in three of the four questionnaires (schools, teacher, and pupil). The item analysis presents some specific comments for each item and a special paper highlighting these problems is available for study at NCES.

Meetings were held with the Bureau of Education for the Handicapped (BEH) to discuss the pretest results and request new data requirements. BEH must obtain information relating to policy issues for their programs and recent legislative changes. By far the most important for both of these concerns are the court decisions and State legislation requiring school districts to provide services and education for all handicapped children residing in the school district. Until recently, many handicapped children were receiving services and education from nonpublic schools. Owing to recent and pending legislation, there is reason to believe that there will be dramatic changes in the numbers of handicapped children enrolled in the public school system throughout the country. In addition, there is an increasing emphasis at the Federal, State, and local levels on placing handicapped pupils into regular classes ("mainstreaming"). Therefore, BEH must have data available to address these and other issues. In an effort to provide data for the user, numerous questions were included on all questionnaires to obtain cost information, description of services and activities for the handicapped, and, in some cases, fine breakdowns of data by type of handicap, grade level, and type of services offered. Unfortunately, the pretest results generally showed that there are significant validity problems with these data items as presented in the item analysis, which shows the error rate on each question. However, an example might give an indication of the magnitude of the problem.

Question 91 of the pretest district questionnaire contained a matrix requesting data on services offered by type of handicapped (286 cells). As a result of recent revisions, the question now includes three grade distribution categories that increase the number of cells to 858. The field validation for this item was particularly difficult and the field staff felt there were major problems in the validity of this item. In some cases, extremely low response rates indicated the failure of respondents to answer the question at all. In addition, there may be a great deal of editing and error resolution required for these items if they are left blank. The revised question contained in this volume is even more complex and, consequently, respondent burden has increased.

Because of the problems discussed above, a series of meetings should be conducted with BEH representatives to approach the problem in a different way. Simply stated, BEH has a number of pressing policy issues that need hard information for decisionmaking. Since this information is not currently available, BEH has requested a number of data items that they believe will satisfy their needs. The contractor suggests that the additional meetings with BEH should focus on the identification of specific policy issues as opposed to designing data items. The policy issues may then be developed to obtain information requirements, discuss data-collection strategy (i.e., mail survey versus interviews), provide analysis rationale and plans, and design the specific data items. Only those items that have face validity should be included in the spring survey. Whenever there is doubt about the face validity of a question, its inclusion on the SSES should be approached cautiously. If there is doubt about the face validity of *many* items, NCES should consider whether these items are appropriate for the SSES or could be better obtained through a different vehicle or special study. The accuracy required of specific data items must be addressed within the framework of its use for decisionmaking (see chapter 7 of the text).

RESPONDENT BURDEN

The pretested version of the four questionnaires elicited a great deal of useful data from the respondents in the LEA's that participated. However, this information was not obtained without a good deal of effort on the part of the respondents. The front of each questionnaire asked for an estimate of the time required for completion. These figures have been summed and averaged for all respondents to a given questionnaire. It is felt that these averages are representative of actual respondent burden because the LEA's selected for the pretest were reasonably representative of the LEA's across the Nation.

Using the results of the pretest, the respondent burden for a subsample of the four questionnaires is summarized below:

Questionnaire	Number	Average time required for completing	Median	Range
District	37	10 hrs., 34 mins.	8 hrs.	1 hr., 20 mins. to 40 hrs.
School	63	3 hrs., 7 mins.	2 hrs., 22 mins.	40 mins. to 12 hrs., 30 mins.
Teacher	380	59 mins.	Not computed	10 mins. to 6 hrs., 55 mins.
Pupil	956	57 mins.	Not computed	10 mins. to 6 hrs., 55 mins.

The revised versions of the questionnaires contained in this volume are likely to change the respondent burden as follows:

District Questionnaire: There are 21 fewer items in the new version of the district questionnaire than in the pretest version. This represents a 10 percent reduction in the total number of items, but is not at all indicative of the change in respondent burden. RMC estimates that it will take the average respondent to the district questionnaire considerably longer to complete it because of the complicated items in the handicapped section.

School Questionnaire: The new school questionnaire has five more items than the pretested version for an increase of over 8 percent. The principal impact on response burden is likely to be felt in the handicapped section where more detailed breakouts of data are now required.

Teacher Questionnaire: The new teacher questionnaire has seven additional items, for an increase of over 11 percent. These changes will not necessarily have any effect on the overall response burden, but there is some concern about whether teachers can provide the required information in the program participation section without closer interaction between the sampled teachers and the principal's office than that which occurred during the pretest.

Pupil Questionnaire: The new pupil questionnaire has ten fewer items than the pretested version. This reduction of over 20 percent is likely to have considerable positive effect on the overall response burden since 8 of the 10 items that were dropped were difficult questions concerning pupil achievement test scores.

LIST OF DEFINITIONS

1. ***Basic Academic Skills*** – Any instruction, regardless of instructional methods used, in the subject areas of mathematics, reading, English language arts, science, social studies, and similar subject areas.

2. ***Educationally Deprived*** – Any pupils who have need for special educational assistance in order that their level of educational attainment may be raised to that appropriate for children of their age. The term includes pupils who are handicapped or whose needs for such special educational assistance result from poverty, neglect, delinquency, or cultural or linguistic isolation from the community at large.

3. ***Full-Time Equivalent*** – The amount of employed time that a salaried staff member is available to a school (or LEA) relative to a full-time employee. It is derived by dividing the total hours a week that an employee is available by the number of hours a full-time employee is expected to be in a school (or LEA). Several examples can best demonstrate this calculation. It will be assumed in these examples that a full-time employee is required to work 40 hours a week.

   - A part-time teacher who works 20 hours a week would be counted as a 20 hours/40 hours = 0.5 full-time equivalent teacher.
   - A psychologist who is employed full-time by the LEA is only available to a school for 4 hours a week would be counted as a 4 hours/40 hours = 0.1 full-time equivalent on the School Questionnaire.
   - However, on the District Questionnaire, this same psychologist would be counted as a 1.0 full-time equivalent.

4. ***Handicapped Pupils*** – Any pupils who have been classified as handicapped according to state guidelines. This includes pupils who have the following handicaps and for that reason could require special educational or related services:

   a. ***Trainable Mentally Retarded*** – Mentally retarded pupils who are capable of only very limited meaningful achievement in the traditional basic academic skills but who are capable of profiting from programs of training in self-care and simple job or vocational skills.

   b. ***Educable Mentally Retarded*** – Mentally retarded pupils who are educable in the academic, social, and occupational areas even though moderate supervision may be necessary.

   c. ***Seriously Emotionally Disturbed*** – Pupils who have been identified by professionally qualified personnel as having an emotional handicap of such a nature and severity as to require one or more special services, particularly with reference to their education, whether or not such services are available. These services — for conditions such as autism, schizophrenia, and other psychotic conditions — include but are not limited to institutional care, other professional treatment or care, and instruction in special classes for exceptional pupils on a full- or part-time basis.

   d. ***Learning Disabled*** – Pupils who have learning dysfunctions that limit their ability to learn or function in a regular educational program. These pupils exhibit disorders in one or more of the basic processes involved in understanding or using spoken or written language. These may be manifested in disorders of listening, talking, and the cognitive processes involved in reading, writing, spelling, or arithmetic. This includes conditions that have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. This term does not include pupils who have learning problems that are primarily the results of visual, hearing, or motor handicaps; mental retardation, emotional disturbance; or environmental disadvantage.

   e. ***Deaf-Blind*** – Pupils who have both auditory and visual impairments, the combination of which causes such severe communications and other educational problems that the individual cannot be properly accommodate in special educational programs designed solely for the hearing handicapped pupil or for the visually handicapped pupil.

   f. ***Deaf*** – Pupils in whom the sense of hearing is nonfunctional for the purposes of life (inability to hear connected language with or without the use of amplification). This general group is made up of congenitally deaf and adventitiously deaf.

   g. ***Hard of Hearing*** – Pupils in whom the sense of hearing, although defective, is functional with or without a hearing aid. The hearing loss is generally of a nature and severity as to require one or more special educational services.

   h. ***Blind*** – Pupils who are sightless or have severely impaired vision, according to the applicable legal definition. Blindness is commonly defined in ophthalmological terms as follows: Having central visual acuity of 20/200 or less in the better eye with corrective glasses; or having a field defect in which the peripheral field is restricted to such an extent that the widest diameter of the visual field subtends an angular distance no greater than 20 degrees.

   i. ***Partially Seeing*** – Pupils who have impaired vision, usually defined according to the Snellen scale as having better than 20/200 central visual acuity in the better eye after correction but with a progressive eye difficulty or with a serious limitation in one or more other visual functions. In most cases, pupils having between 20/70 and 20/200 central visual acuity are considered to have a serious visual limitation and to require a special educational program.

   j. ***Speech Impaired*** – Pupils who have a severe impairment in emitting sounds, words or phrases — including extreme difficulties such as stuttering, voice disorders, and receptive or expressive oral language disorders — that adversely affects the performance of a pupil in the regular school program. This is not to be confused with a language (or communications) difficulty arising from lack of experience with the language of instruction. Speech difficulties expected to disappear with the child's normal development are not included here.

   k. ***Orthopedically Handicapped (Crippled)*** – Pupils who have an orthopedic condition of a type that might restrict normal opportunity for education or self-support. This term is generally considered to include pupils have impairments caused by congenital anomaly (e.g., clubfoot, absence of some limb, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, encephalitis, and other neurological involvement that may results in conditions such as cerebral palsy or epilepsy, etc.), and impairments caused by accident (e.g., fractures or burns that cause contractures, etc.).

   l. ***Other Health Impaired*** – Pupils who are handicapped in their educational progress because of limited strength, vitality, and alertness due to chronic health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, diabetes, or other illness.

5. ***Inservice Training*** – Any program provided by the LEA that contributes to the professional or occupational growth and competence of staff members during the time of their service to the LEA. For the purposes of this survey, inservice training should include the major emphasis of the training — not one-hour or less courses, seminars, etc., that are given on a one-time basis only. See also ***Preservice Training***.

CONTINUED

6. ***Multigraded Class*** – A class including more than one grade and in which pupils may be identified by grade level: e.g., a single class consisting of some grade 5 and some grade 6 pupils. See also *Ungraded Class.*

7. ***Persistent Academic Problems*** – Any problem in the subject areas of mathematics, reading, English language arts, science, social studies, or similar subject areas that has occurred frequently or that has been a consistent problem for an extended period of time.

8. ***Prekindergarten*** – A beginning group of class organized to provide educational experience for children during the year or years preceding kindergarten, which is a part of the sequential program of the elementary school and is under the direction of a qualified teacher.

9. ***Preservice Training*** – Any training provided by the LEA for newly hired teachers between the time they were first hired and the time they actually began teaching at the LEA. See *Inservice Training* for any training that occurs after the teacher has begun teaching in the LEA.

10. ***Special Educational Services for the Handicapped*** – Courses of study designed for pupils who have been classified as handicapped according to state guidelines. This course of study does not include pupils with reading problems, behavioral problems, or other kinds of learning difficulties, unless these are secondary problems associated with one of the handicapping conditions in definition 4.

    Handicapped pupils may receive educational services in a self-contained classroom, in a special school, in a resource room, in an itinerant teacher program, or in a combination of these activities. Also reported in this category are pupils who receive speech correction therapy and handicapped pupils whose needs are met in the regular classroom.

    Related Services for the Handicapped – Special activities undertaken by a LEA, other than those described above, that are intended to enable handicapped pupils to acquire the best education that they are capable of acquiring. This may include transportation, testing, health services, etc.

11. ***Target Groups:***

    a. ***Educationally Deprived*** – Any pupils who have need for special educational assistance in order that their level of educational attainment may be raised to that appropriate for children of their age. The term includes pupils who are handicapped or whose needs for such special educational assistance result from poverty, neglect, delinquency, or cultural or linguistic isolation from the community at large.

    b. ***Academically Gifted*** – Pupils who have been identified by professionally qualified personnel as being mentally gifted in the subject areas of mathematics, reading, English language arts, science, social studies, or similar subject areas.

    c. ***Migrant Pupils (Child of Migrant Agricultural Worker)*** – A child of a migratory agricultural worker who has moved with his family from one LEA to another during the past year in order that a parent or other member of his family might secure temporary or seasonal employment in an agricultural activity.

    - ***Interstate Migrant*** – As defined for federal compensatory education programs, a child who has moved with a parent or guardian within the past year across state boundaries in order that a parent, guardian, or other member of his immediate family might secure temporary or seasonal employment in an agricultural activity.

    - ***Intrastate Migrant*** – As defined for federal compensatory education programs, a child who has moved with a parent or guardian within the past year across school district boundaries within a state in order that a parent, guardian, or other member of his immediate family might secure temporary or seasonal employment in an agricultural activity.

    - ***Settled Out or Five-Year Provisional Migrant*** – Children of migrant agricultural workers who have lived in this school district for at least five years but are receiving services this year as a migrant pupil.

    d. ***Handicapped Pupils*** – Any pupil who has been classified as handicapped according to state guidelines. See also definition 4.

    e. ***Neglected or Delinquent Pupils*** – A delinquent child is one who has committed a delinquent act and is in need of care or rehabilitation. For the purpose of ESEA Title I, such a child must be in the custody of and living in an institution primarily for delinquent children.

    A neglected child is one whose parents, guardian, or custodian have neglected to provide him/her with the support or education required by law, or medical care necessary to his/her well-being, or who has been abandoned by parents or custodian. For the purpose of ESEA Title I, such a child must be in the custody of and living in an institution primarily for neglected children.

12. ***Teaching Station*** – Any part of the school (usually but not always a classroom) where formal instruction takes place. Open air areas are not included within this definition, such as outdoor playgrounds, baseball fields, etc.

13. ***Ungraded Class*** – A class that is not organized on the basis of grade and has no standard grade designation. This includes regular classes that have no grade designations and special classes for exceptional students that have no grade designations. Such a class is likely to contain students of different ages who are frequently identified according to level of performance in one or more areas of instruction rather than according to grade level or age level. Ungraded classes sometimes are referred to as "nongraded." See also *Multigraded Class.*

14. ***Welfare*** – Welfare as used here is intended to mean the system for providing goods or services to financially indigent or physically incapacitated persons or families for the purpose of sustaining a minimal lifestyle for an indeterminate period. Eligibility requirements are established by law or ordinance at the funding sources, which may be either local, state, or federal.

DISTRICT QUESTIONNAIRE

A

GENERAL CHARACTERISTICS

1. As of October 1, 1974, how many public and non-public elementary schools (schools containing any or all of the grades prekindergarten through 6) and secondary schools (schools containing any or all of the grades 7 through 12) are located in this school district? (In "b" and "c," if a school has grades that overlap elementary and secondary levels, count that school as both elementary and secondary. If there are no schools in a category, write "0.")

	Public Schools	Non-Public Schools
a. Unduplicated total number of schools	_____	_____
b. Number of elementary schools (grades prekindergarten-6)	_____	_____
c. Number of secondary schools (grades 7-12)	_____	_____

2a. On or about October 1, 1974, what was the public school membership for grades prekindergarten, kindergarten through 6, and grades 7 through 12 in this school district? (Include pupils in Special Education and Head Start classes)

	Number of Pupils
a. Membership in prekindergarten	_____
b. Membership in grades kindergarten-6	_____
c. Membership in grades 7-12	_____
d. Total membership	_____

b. On or about October 1, 1974, how many teachers (full- and part-time) are employed in this school district for grades prekindergarten, kindergarten through 6, and grades 7-12?

	Number of Teachers
a. Prekindergarten	_____
b. Grades kindergarten-6	_____
c. Grades 7-12	_____
d. Total	_____

3. Which of the following best describes the population of the area in which this school district is located? (Mark one)

- ☐ Large city, 500,000 or more
- ☐ Large city, 200,000-500,000 population
- ☐ City or suburb, 50,000-200,000 population
- ☐ City or town, 10,000-50,000 population
- ☐ Rural area or town with less than 10,000 population

4. Approximately what percent of the pupils in grades prekindergarten through 6 in this school district are from low-income families? (If none, write "0")

_____ Percent of pupils in grades prekindergarten-6

5. What is your definition of low income?

_____

6. Approximately how many of the pupils in grades prekindergarten through 6 in this school district are members of the following groups? (If none in a category, write "0")

		Number of Pupils in Grades Prekindergarten-6
a.	American Indian	_____
b.	Black/Negro	_____
c.	Oriental	_____
d.	Hispanic	_____
e.	White/Caucasian	_____
f.	Other (Specify): _____	_____
g.	Total	_____

7. Approximately how many of the pupils in grades prekindergarten through 6 in this school district are from homes where the primary or dominant language is other than English? (If none, write "0")

_____ Number of pupils in grades prekindergarten-6

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8a. Have you tested 6th grade reading and received results during this school year (1974-75) to date?

☐ Yes
☐ No (Go to 8c)

8b. (If yes to 8a) During the 1974-75 school year, approximately how many 6th grade pupils in this school are reading one or more years below grade level according to current test data based on national norms?

_____ Number of 6th grade pupils reading one or more years below grade level (Go to Q. 9)

8c. (If no to 8a) Have you tested reading for any other grade and received results during this school year (1974-75) to date?

☐ Yes
☐ No (Go to Q. 9)

8d. (If yes to 8c) During the 1974-75 school year, approximately how many pupils in the nearest grade below grade 6 for which you do have current test data based on national norms are reading one or more years below grade level? (Please specify the number of pupils and the grade for which you are reporting)

_____ Number of pupils reading one or more years below grade level
_____ Grade for which you are reporting

---

9. Approximately how many of the pupils in grades prekindergarten through 6 in this school district would you define as educationally deprived? (If none, write "0")

_____ Number of pupils in grades prekindergarten-6

---

10. During school year 1974-75, does this school district provide any programs or projects funded entirely or partially by the following federal sources? (Mark all that apply)

		Elementary Program	Secondary Program	No Program
a.	ESEA Title I (children from low-income areas, and neglected or delinquent children)	☐	☐	☐
b.	ESEA Title I Migrant	☐	☐	☐
c.	ESEA Title II (libraries)	☐	☐	☐
d.	ESEA Title III, Section 306	☐	☐	☐
e.	ESEA Title VII (bilingual)	☐	☐	☐
f.	Education for the Handicapped, Part B (formerly ESEA Title VI)	☐	☐	☐
g.	Emergency School Aid Act (ESAA)	☐	☐	☐
h.	USDA School Food Programs	☐	☐	☐
i.	Vocational Education Amendments of 1968	☐	☐	☐
j.	Communications Act of 1934, Title III, Part IV (Grants for Noncommercial Educational Broadcasting; Corporation for Public Broadcasting)	☐	☐	☐
k.	Other federal sources (Specify): _____	☐	☐	

11. Does this school district currently employ nonprofessional personnel (aides) to work with children in any of the following programs? (Mark all that apply)

- ☐ No nonprofessionals (aides) employed by this school district
- ☐ ESEA Title I
- ☐ ESEA Title I Migrant
- ☐ ESEA Title III, Section 306
- ☒ ESEA Title VII
- ☐ Education for the Handicapped Act, Part B (formerly ESEA Title VI)

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12. What were the expenditures in grades prekindergarten through 6 and grades 7 through 12 for fiscal year 1974 (i.e., last year) from federal, and state and local sources in this school district? Do not include capital outlay and debt service. Include the 100 through 800 series of accounts, as listed in OE Handbook II (1957 Edition).

		Federal	State and Local
a.	Total expenditures for grades prekindergarten-6	$_____	_____
b.	Total expenditures for grades 7-12	$_____	_____

13. What was the per pupil expenditure of federal program money for participating pupils in grades prekindergarten through 6 for fiscal year 1974 from the following sources? (If none in a category, write "0")

		$ Per Pupil in Grades Prekindergarten-6
a.	ESEA Title I	_____
b.	ESEA Title I Migrant	_____
c.	ESEA Title III, Section 306	_____
d.	ESEA Title VII	_____
e.	Education for the Handicapped Act, Part B (formerly ESEA Title VI)	_____

B

NEEDS ASSESSMENT

14. Has a formal (structured) needs assessment applicable to elementary schools been conducted by this school district since the 1968-69 school year?

☐ Yes
☐ No (Go to Section C, page 7)

15. In what year was the last needs assessment conducted for each of the following programs (e.g., 1969-70, etc.)? (If none in a category, write "0")

		Year Last Needs Assessment Conducted
a.	ESEA Title I	
b.	ESEA Title III, Section 306	
c.	ESEA Title VII	
d.	Other federal programs	
e.	Programs for handicapped children	
f.	Other special state or local programs	
g.	Other (Specify): _____	

16. Which of the following methods or standards were used as part of the most recent needs assessment conducted by this school district? (Mark all that apply)

- ☐ Conference with parents
- ☐ Conference with pupils
- ☐ Staff or teacher conference
- ☐ Survey of parents
- ☐ Survey of pupils
- ☐ Survey of staff or teachers
- ☐ Pupil standardized test scores
- ☐ Pupil grades
- ☐ Pupil IQ scores
- ☐ Other (Specify): _____

17. According to the most recent needs assessment, which of the following were identified as major needs in this school district? (Mark all that apply)

- ☐ Curriculum revision

Improvement of pupil achievement in the academic areas of:

- ☐ Reading
- ☐ Mathematics
- ☐ English language arts (excluding reading)
- ☐ Other academic subject area (Specify): _____

- ☐ Cultural enrichment programs
- ☐ Guidance and counseling services
- ☐ Health services
- ☐ Food services
- ☐ Other services (Specify): _____
- ☐ More staff
- ☐ Inservice training
- ☐ New or replacement of equipment, materials, or facilities
- ☐ Evaluation
- ☐ Dissemination of existing information
- ☐ School library/media center
- ☐ Other (Specify): _____

C

PROGRAM INFORMATION

ESEA TITLE I (children from low-income areas, and neglected or delinquent children)

Note: Questions 18-31 deal only with ESEA Title I projects for educationally deprived children (from low-income areas), and neglected or delinquent children. ESEA Title I Migrant projects will be addressed as a separate section.

18. During school year 1974-75, does this school district have any ESEA Title I projects for educationally deprived children (from low-income areas), or neglected or delinquent children? (Do not include ESEA Title I Migrant here)

- ☐ Yes
- ☐ No (Go to Q. 32, page 10)

19. Do any of these ESEA Title I projects serve pupils in grades prekindergarten through 6? (Do not include ESEA Title I Migrant here)

- ☐ Yes
- ☐ No (Go to Q. 32, page 10)

20. Do all of these ESEA Title I projects operate only in the summer?

- ☐ Yes (Go to Q. 27)
- ☐ No

21. How many elementary public and non-public schools are serving eligible attendance areas for ESEA Title I during school year 1974-75? (If none in a category, write "0." Do not include ESEA Title I Migrant here.)

_____ Number of public elementary schools
_____ Number of non-public elementary schools

22. How were public elementary schools chosen for participation in ESEA Title I projects? (Mark one. Do not include ESEA Title I Migrant here.)

Schools were selected to participate on the basis of a comparison of:

- ☐ the average number of pupils from low-income families in the school district to the number of such pupils in the selected schools
- ☐ the average percent of pupils from low-income families in the school district to the percent of such pupils in the selected schools
- ☐ Other (Specify): _____

23. What was the school district average number (or percent) of pupils from low-income families per school used as the cutoff point for selection of ESEA Title I participant schools? (Provide only one response--either a number or a percent. Do not include ESEA Title I Migrant here.)

_____ Number OR _____ Percent of pupils

24. During school year 1974-75, how many elementary public and non-public schools are participating in ESEA Title I projects? (Do not include schools where projects operate only in the summer. If none in a category, write "0." Do not include ESEA Title I Migrant here.)

_____ Number of public elementary schools
_____ Number of non-public elementary schools

25. During school year 1974-75, approximately how many public and non-public school pupils in grades prekindergarten through 6 are participating in ESEA Title I projects? (Do not include summer sessions. If none in a category, write "0." Do not include ESEA Title I Migrant here.)

_____ Number of public school pupils in grades perkindergarten-6
_____ Number of non-public school pupils in grades prekindergarten-6

26. Estimate the amount of revenue this school district will spend for all ESEA Title I (excluding ESEA Title I Migrant) projects for elementary schools during fiscal year 1974-75. (Include Parts A, B, and C)

$_____

27. Estimate the amount of revenue this school district will spend for ESEA Title I summer (excluding ESEA Title I Migrant) projects for elementary schools during fiscal year 1974-75. (If none, write "0")

$_____

28. Does this school district currently have a district-wide parent advisory council for elementary-level ESEA Title I projects? (Do not include ESEA Title I Migrant here)

☐ Yes
☐ No (Go to Q. 32)

29. Are members of the district wide parent advisory council selected by the parents of the children to be served by the elementary-level ESEA Title I project? (Do not include ESEA Title I Migrant here)

☐ Yes
☐ No

30. Approximately what percent of the district-wide parent advisory council members are parents of children eligible to be served by ESEA Title I projects or are representative of the attendance areas to be included in the ESEA Title I project? (Mark one. Do not include ESEA Title I Migrant here.)

- ☐ None
- ☐ 1-50%
- ☐ 51-100%

31. What are the major functions of the district-wide parent advisory council? (Mark all that apply. Do not include ESEA Title I Migrant here.)

- ☐ Identifying unmet needs through formal needs assessment
- ☐ Identifying unmet needs through other means
- ☐ Planning programs to meet identified needs
- ☐ Review of applications for federal funds
- ☐ Evaluation of programs
- ☐ Implementation or monitoring of programs
- ☐ Other (Specify): _____

ESEA TITLE I MIGRANT

32. During school year 1974-75, does this school district have any ESEA Title I Migrant projects for pupils in grades prekindergarten through 6?

- ☐ Yes
- ☐ No (Go to Q. 38)

33. During what time of the year do the ESEA Title I Migrant projects in this school district operate? (Mark all that apply)

- ☐ Fall
- ☐ Spring
- ☐ Summer

34. During school year 1974-75, how many elementary public and non-public schools are participating in ESEA Title I Migrant projects? (If none in a category, write "0")

_____ Number of public elementary schools
_____ Number of non-public elementary schools

35. During school year 1974-75, approximately how many public and non-public school pupils in grades prekindergarten through 6 are participating in ESEA Title I Migrant projects in each of the following categories (see definition 11c)? (If none in a category, write "0")

	Number of Public School Pupils in Grades Prekindergarten-6	Number of Non-Public School Pupils in Grades Prekindergarten-6
a. Interstate migrant	_____	_____
b. Intrastate migrant	_____	_____
c. Settled-out or five-year provisional migrant	_____	_____

36. Estimate the amount of revenue this school district will spend for all ESEA Title I Migrant projects for elementary schools during school year 1974-75. (Include Parts A, B, and C)

$_____

37. Estimate the amount of revenue this school district will spend for ESEA Title I Migrant summer projects for elementary schools during school year 1974-75. (If none, write "0")

$_____

ESEA TITLE III, SECTION 306

38. Has this school district ever received ESEA Title III funds?

- ☐ Yes
- ☐ No (Go to Q. 61, page 17)

39. Is this school district currently participating in an ESEA Title III project funded under the state plan?

- ☐ Yes
- ☐ No

40. Is this school district currently participating in any ESEA Title III, Section 306, projects?

- ☐ Yes
- ☐ No (Go to Q. 57, page 15)

41. Is the ESEA Title III, Section 306, in this school district a state facilitator or developer/demonstration project funded under fiscal year 1974?

- ☐ Yes (Go to Q. 61, page 17)
- ☐ No

42. Do any of the ESEA Title III, Section 306, projects serve elementary schools?

- ☐ Yes
- ☐ No (Go to Q. 61, page 17)

Note: Questions 43-53 ask about the elementary-level ESEA Title III, Section 306, project in this school district. If this school district currently has more than one ESEA Title III, Section 306, project for elementary schools in operation, answer these questions in terms of the project most recently approved and begun with Section 306 funds.

43. During school year 1974-75, how many elementary public schools are participating in the ESEA Title III, Section 306, project? (If none in a category, write "0")

_____ Number of public elementary schools

44. Is the elementary-level ESEA Title III, Section 306, project in this school district designed specifically for direct pupil participation as opposed to teacher training?

- ☐ Direct pupil participation
- ☐ Indirect pupil participation (Go to Q. 47)

45. During school year 1974-75, approximately how many public school pupils in grades prekindergarten through 6 are directly participating in the ESEA Title III, Section 306, project? (If none, write "0")

_____ Number of public school pupils in grades prekindergarten-6

46. What are the three major criteria used in the selection of pupils in grades prekindergarten through 6 for direct participation in the ESEA Title III, Section 306, project in this school district? (Mark the three most important criteria)

- ☐ No special criterion employed
- ☐ Standardized achievement test scores
- ☐ Other standardized test scores
- ☐ Pupil grades
- ☐ Special needs of pupils (e.g., handicaps, problems in discipline, attitude)
- ☐ Teacher recommendations based on educational needs
- ☐ Teacher recommendations based on other needs
- ☐ Low income of family
- ☐ Parent or pupil request
- ☐ Other (Specify): _____

47. What is the major criterion used in the selection of elementary schools as recipients of ESEA Title III, Section 306, projects or services? (Mark one)

- ☐ Individual schools are not selected, or all schools can participate
- ☐ Percent of pupils with low achievement in school
- ☐ Percent of pupils with special needs in school (e.g., handicaps, language other than English, attitude)
- ☐ Percent of pupils from low-income families in school
- ☐ Lack of necessary programs from other sources in school
- ☐ Location of school
- ☐ Enrollment size of school
- ☐ Percent of minority pupils in school or percent of non-minority pupils in school
- ☐ Teacher request
- ☐ Other (Specify): _____

48. Which of the following best describes the major emphasis of the elementary-level ESEA Title III, Section 306, project in this school district? (Mark one)

- ☐ Prekindergarten or early childhood education
- ☐ Education for the handicapped
- ☐ Environmental education
- ☐ Reading instruction
- ☐ Education of the disadvantaged
- ☐ Child abuse
- ☐ Project Information Packages (PIP)
- ☐ Other (Specify): _____

49. Which of the following groups are direct recipients of elementary-level services funded by the ESEA Title III, Section 306, project? (Mark all that apply)

- ☐ School district and school administrators
- ☐ Teachers
- ☐ Guidance personnel
- ☐ Parents
- ☐ Teacher aides
- ☐ Pupils
- ☐ Other (Specify): _____

50. For which of the following elementary target groups is the ESEA Title III, Section 306, project specifically designed--either through direct pupil participation or teacher training, etc.? (Mark all that apply)

- ☐ No specific target group
- ☐ Educationally deprived pupils
- ☐ Academically gifted pupils
- ☐ Migrant pupils
- ☐ Handicapped pupils
- ☐ Neglected or delinquent pupils
- ☐ Pupils from low-income families
- ☐ Pupils from homes where the primary or dominant language is other than English
- ☐ Prekindergarten children
- ☐ Other target group (Specify): _____

51. To what degree does the ESEA Title III, Section 306, project serve elementary-level non-public schools? (Mark all that apply)

- ☐ Not at all (Go to Q. 54)
- ☐ Direct participation of non-public school pupils in instructional or other services provided for public school pupils
- ☐ Direct participation of non-public school teachers in training provided for public school teachers
- ☐ Provision of materials or portable equipment
- ☐ Other (Specify): _____

52. During school year 1974-75, approximately how many non-public school pupils in grades prekindergarten through 6 benefit in any way from the services marked in Q. 51?

_____ Number of non-public school pupils in grades prekindergarten-6

53. How many elementary-level non-public schools are served by the ESEA Title III, Section 306, project?

_____ Number of non-public elementary schools

54. Does this school district currently have an advisory council for elementary-level ESEA Title III, Section 306, projects?

- ☐ Yes
- ☒ No (Go to Q. 57)

55. Which of the following participate as members of the elementary-level ESEA Title III, Section 306, advisory council? (Mark all that apply)

- ☐ Parents
- ☐ Representatives of community organizations
- ☐ Teachers
- ☐ School administrators
- ☐ School district personnel
- ☐ Representatives of non-public schools
- ☐ Other (Specify): _____

56. What are the major functions of the advisory council? (Mark all that apply)

- ☐ Identifying unmet needs through formal needs assessment
- ☐ Identifying unmet needs through other means
- ☐ Planning program to meet identified needs
- ☐ Review of applications for federal funds
- ☐ Evaluation of programs
- ☐ Other (Specify): _____

57. Has federal funding ever been discontinued for any elementary-level ESEA Title III, Section 306, project in this school district because the grant period for the project had expired?

- ☐ Yes
- ☐ No (Go to Q. 61, page 17)

Note: Questions 58-60 ask about the discontinuation of federal funding for the ESEA Title III, Section 306, project because of grant expiration. If federal funding has been discontinued for more than one elementary-level ESEA Title III, Section 306, project, answer these questions in terms of the project that had the highest level of federal funding.

58. What was the last school year of federal funding for that project?

School year _____ (e.g., 1969-70, etc.)

59. After federal funding was discontinued, were elementary-level services similar to those provided by the ESEA Title III, Section 306, project ever continued through state or local support?

☐ Yes
☐ No (Go to Q. 61)

60. Compared with the services provided by the federally funded ESEA Title III, Section 306, project, describe the level of services for elementary schools provided by state or local funding during the first year after federal funding was discontinued, and describe services provided during school year 1974-75. (Mark one for each year. If school year 1974-75 is the first year after federal funding ended, mark school year 1974-75 only)

	First Year After Federal Funding Ended	School Year 1974-75
a. Services were expanded	☐	☐
b. Services were continued with approximately the same level of staff and participants	☐	☐
c. Services were continued, but with reduced staff or participants	☐	☐
d. Services were discontinued altogether	☐	☐
e. Don't know	☐	☐

ESEA TITLE VII (bilingual)

61. During school year 1974-75, how many ESEA Title VII projects serve elementary schools? (If none, write "0" and go to Q. 75, page 22)

_____ Number of ESEA Title VII projects for elementary schools

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NOTE: Questions 62-68 ask about the ESEA Title VII project in this school district. If you have indicated in Q. 61 that this school district currently has more than one ESEA Title VII project for elementary schools in operation, answer these questions in terms of the project with the highest level of funding for school year 1974-75.

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62. For school year 1974-75, indicate: (a) the number of elementary schools in which the ESEA Title VII project physically operates, (b) the number of elementary schools from which pupils are selected for participation in the ESEA Title VII project (regardless of whether or not the ESEA Title VII project is physically located in that school, and (c) the number of non-public elementary schools from which pupils are selected for participation in ESEA Title VII projects. (If none in a category, write "0")

_____ a. Public elementary schools in which the ESEA Title VII project physically operates

_____ b. Public elementary schools from which pupils are selected for participation in the ESEA Title VII project

_____ c. Non-public elementary schools from which pupils are selected for participation in the ESEA Title VII projects

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63. During school year 1974-75, approximately how many public and non-public school pupils in grades prekindergarten through 6 are participating in the ESEA Title VII project? (If none in a category, write "0")

_____ Number of public school pupils in grades prekindergarten-6

_____ Number of non-public school pupils in grades prekindergarten-6

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64. Indicate below which of the following services are part of the ESEA Title VII project for pupils in grades prekindergarten through 6 in this school district during school year 1974-75. (Mark all that apply)

- ☐ Academic instruction in the basic subject areas of mathematics or reading
- ☐ History and cultural heritage associated with dominant language
- ☐ Non-English language arts
- ☐ Other academic subject areas
- ☐ Vocational subjects
- ☐ Guidance and counseling
- ☐ Testing services
- ☐ Staff development
- ☐ Community involvement
- ☐ Other (Specify): _____

Note: Questions 65-68 ask about salaried staff members who provide services on a regular basis to the ESEA Title VII project for pupils in grades prekindergarten through 6. The term "ESEA Title VII staff members" should include all staff--no matter what the source of funding for their salaries--who provide services to ESEA Title VII participants on a regular basis. Intermittent or unpaid volunteers are to be excluded. If you indicated in Q. 61 above that this school district currently has more than one ESEA Title VII project for elementary schools in operation, answer questions 65-68 in terms of the project with the highest level of funding for the school year 1974-75.

65. In column A, indicate the number of salaried staff members (full- and part-time) in the ESEA Title VII project for pupils in grades prekindergarten through 6. (Count each staff member only once. If none in a category, write "0.")

In column B, indicate the number of these staff members who are full-time only. (If none in a category, write "0")

In column C, indicate the number of these staff members who are fluent in the non-English language of the ESEA Title VII project. (If none in a category, write "0")

	A Total Number of ESEA Title VII Staff Members	B Number of Full-Time Staff Members	C Number of Staff Members Fluent in the ESEA Title VII Non-English Language
a. Administrators . . .	_____	_____	_____
b. Teachers or other professionals	_____	_____	_____
c. Other salaried staff members (teacher aides, parents serving as aides, other community members, and all paid volunteers). .	_____	_____	_____

66. Has this school district provided inservice training for ESEA Title VII staff members relevant to the operation of the ESEA Title VII project for pupils in grades prekindergarten through 6?

☐ Yes
☐ No (Go to Q. 69)

67. How many of the following kinds of ESEA Title VII staff members have received inservice training relevant to the operation of the ESEA Title VII project for pupils in grades prekindergarten through 6? (If none in a category, write "0")

		Number of ESEA Title VII Staff Members
a.	Administrators	_____
b.	Teachers or other professionals	_____
c.	Other salaried staff members (teacher aides, parents serving as aides, other community members, and all paid volunteers)	_____

68. Which of the following describe the three major emphases of the inservice training provided for ESEA Title VII staff? (Mark the three most important emphases)

- ☐ Theory and methods relating to bilingual language instruction
- ☐ Techniques in teaching English as a second language (ESL)
- ☐ Acquisition of the non-English language
- ☐ Relationship of language to self-concept
- ☐ Understanding of the learning styles of children from different cultures
- ☐ Methods of assessing skill, language, and knowledge acquisition
- ☐ Techniques of individualizing instruction
- ☐ Subject area courses for staff members taught in the non-English language
- ☐ Cultural heritage of children whose dominant language is other than English
- ☐ Utilization of paraprofessionals and community resources
- ☐ Development of materials
- ☐ Other (Specify): _____

69. Does this school district (or any of its schools) currently have a parent advisory council specifically for elementary-level ESEA Title VII projects?

- ☐ Yes
- ☐ No (Go to Q. 72)

70. Which of the following is the primary criterion used to select elementary-level ESEA Title VII parent advisory council members? (Mark one)

- ☐ Appointed by schoolboard or school officials
- ☐ Elected by parents or community representatives
- ☐ Volunteered to serve
- ☐ Other (Specify): _____

71. What are the major functions of the parent advisory council? (Mark all that apply)

- ☐ Identifying unmet needs through formal needs assessment
- ☐ Identifying unmet needs through other means
- ☐ Planning programs to meet identified needs
- ☐ Review of applications for federal funds
- ☐ Evaluation of programs
- ☐ Other (Specify): _____

72. Has federal funding ever been discontinued for any elementary-level ESEA Title VII project in this school district because the grant period for the project had expired?

- ☐ Yes
- ☐ No (Go to Programs for the Handicapped)

Note: Questions 73-74 ask about the discontinuation of federal funding for the ESEA Title VII project because of grant expiration. If federal funding has been discontinued for more than one elementary-level ESEA Title VII project, answer these questions in terms of the project that had the highest level of federal funding.

73. After federal funding was discontinued, were elementary-level bilingual education services similar to those provided by the ESEA Title VII project ever continued through state or local support?

- ☐ Yes
- ☐ No (Go to Programs for the Handicapped)

74. Compared with the services provided by the federally funded ESEA Title VII project, describe the level of bilingual education services for pupils in grades prekindergarten through 6 provided by state or local funding during the school year 1974-75. (Mark one)

- ☐ Services are discontinued altogether
- ☐ Services are continued, but with reduced staff or participants
- ☐ Services are continued at approximately the same level of staff and participants
- ☐ Services are expanded

PROGRAMS FOR THE HANDICAPPED

Note: Questions 75-102 ask about the handicapped in this school district. "Handicapped" refers to pupils who have been classified as handicapped according to state guidelines. Where questions ask about types of handicapped pupils, report multihandicapped pupils according to their major handicapping condition.

75. Does this LEA provide any special educational or related services to handicapped pupils?

- ☐ Yes (Mark all that apply)
  - ☐ Prekindergarten
  - ☐ Kindergarten-6
  - ☐ Grades 7-12
- ☐ No (Go to Section, D, page 37)

76. In your estimation, what is the number of handicapped pupils who need special educational or related services but are not receiving them during school year 1974-75?

_____ Number of handicapped pupils in prekindergarten
_____ Number of handicapped pupils in grades kindergarten-6
_____ Number of handicapped pupils in grades 7-12

77. During school year 1974-75, approximately how many handicapped pupils who have the following types of handicaps (see definition 4) are provided special educational or related services by this school district? (Count each child only once according to his major handicapping condition. If none in a category, write "0.")

		Number of Handicapped Pupils		
		Prekindergarten	Kindergarten-6	Grades 7-12
a.	Trainable mentally retarded			
b.	Educable mentally retarded			
c.	Seriously emotionally disturbed			
d.	Learning disabled			
e.	Deaf-blind			
f.	Deaf			
g.	Hard of hearing			
h.	Blind			
i.	Partially seeing			
j.	Speech impaired			
k.	Orthopedically handicapped			
l.	Other health impaired			
m.	Other (Specify): _____			

78. From the list below, mark the special educational or related services that this school district makes available to handicapped pupils. (Mark all that apply for each grade distribution category)

	Prekindergarten	Kindergarten-6	Grades 7-12
a. Diagnostic assessment	☐	☐	☐
b. Guidance and counseling specifically for the handicapped	☐	☐	☐
c. Parent guidance and counseling	☐	☐	☐
d. Emotional and social development skills	☐	☐	☐
e. Instruction in basic academic skills	☐	☐	☐
f. Tutoring	☐	☐	☐
g. Language development skills	☐	☐	☐
h. Speech therapy	☐	☐	☐
i. Auditory training	☐	☐	☐
j. Visual motor training	☐	☐	☐
k. Physical therapy	☐	☐	☐
l. Training in mobility skills	☐	☐	☐
m. Training in self-care skills	☐	☐	☐
n. Special resources (e.g., itinerant tutors, aides, etc.)	☐	☐	☐
o. Resource room teachers	☐	☐	☐
p. Learning centers	☐	☐	☐
q. Other special services (e.g., provision for flexible scheduling)	☐	☐	☐
r. Pupil transportation	☐	☐	☐
s. Other (Specify): _____	☐	☐	

79. Is there a systematic set of criteria in this school district for recognizing or identifying handicapped pupils who may need to be referred for diagnostic assessment?

☐ Yes
☐ No

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80. During school year 1974-75, what special educational or related services are specifically provided by the funding sources shown below for handicapped pupils in each of the grade distribution categories? (Mark all that apply in each vertical column)

A = Prekindergarten
B = Kindergarten-6
C = Grades 7-12

		Education for the Handicapped Act, Part B (formerly ESEA Title VI)			VEA 68			ESEA Title I			ESEA Title III			Other Federal			State			Local		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
a.	No services provided	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
b.	Diagnostic assessment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
c.	Guidance and counseling specifically for the handicapped	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
d.	Parent guidance and counseling	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
e.	Emotional and social development skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
f.	Instruction in basic academic skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
g.	Tutoring	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
h.	Language development skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
i.	Speech therapy	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
j.	Auditory training	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
k.	Visual motor training	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
l.	Physical therapy	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
m.	Training in mobility skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
n.	Training in self-care skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
o.	General health care	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
p.	Special resources (e.g., itinerant tutors, aides, etc.)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
q.	Resource room teachers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
r.	Learning centers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
s.	Other special services (e.g., provision for flexible scheduling)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
t.	Pupil transportation	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
u.	Other (Specify): _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

81. During school year 1974-75, what special educational or related services are provided by federal funding sources to pupils who have the following types of handicaps in each of the grade distribution categories shown below? (Mark all that apply in each vertical column)

A = Prekindergarten
B = Kindergarten-6
C = Grades 7-12

	Trainable Mentally Retarded	Educable Mentally Retarded	Seriously Emotionally Disturbed	Learning Disabled	Deaf-blind	Deaf	Hard of Hearing	Blind	Partially Seeing	Speech Impaired	Orthopedically Handicapped	Other Health Impaired	Other (Specify):
	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
a. Diagnostic assessment	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
b. Guidance and counseling specifically for the handicapped	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
c. Parent guidance and counseling	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
d. Emotional and social development skills	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
e. Instruction in basic academic skills	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
f. Tutoring	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
g. Language development skills	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
h. Speech therapy	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
i. Auditory training	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
j. Visual motor training	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
k. Physical therapy	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
l. Training in mobility skills	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
m. Training in self-care skills	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
n. General health care	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
o. Special resources (e.g., itinerant tutors, aides, etc.)	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
p. Resource room teachers	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
q. Learning centers	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
r. Other special services (e.g., provision for flexible scheduling)	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
s. Pupil transportation	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐
t. Other (Specify): _____	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐	☐☐☐

82. During school year 1974-75, approximately how many of the following types of handicapped pupils receive special educational or related services in this school district that are funded by the sources indicated? (Classify each pupil according to his major handicapping condition; pupils may be counted in more than one vertical column if they receive services from more than one source. If none in a category, write "0")

		Education for the Handicapped Act, Part B			All Other Federally Funded Programs for the Handicapped*			State and Local Programs for the Handicapped		
		Prekinder-garten	Kinder-garten-6	Grades 7-12	Prekinder-garten	Kinder-garten-6	Grades 7-12	Prekinder-garten	Kinder-garten-6	Grades 7-12
a.	Trainable mentally retarded									
b.	Educable mentally retarded									
c.	Seriously emotionally disturbed									
d.	Learning disabled									
e.	Deaf-blind									
f.	Deaf									
g.	Hard of hearing									
h.	Blind									
i.	Partially seeing									
j.	Speech impaired									
k.	Orthopedically handicapped									
l.	Other health impaired									
m.	Other (Specify): _____									

* Such as VEA 68, ESEA Title I, ESEA Title III, and all other federal funding except EHA, Part B.

83. In column A, indicate the total number of salaried staff members (full- and part-time) in this school district who provide any special educational or related services to the following types of handicapped pupils in grades prekindergarten through 6. (Staff members may be counted more than once if they teach or provide services to more than one type of handicapped pupil. If none in a category, write "0.")

In column B, if possible, provide full-time equivalents for these same staff members. (If none in a category, write "0")

		A: Total Number of Staff Members of Grades Prekindergarten-6		B: Number of Full-Time Equivalent Staff Members of Grades Prekindergarten-6	
		Fully Certificated	Not Fully Certificated	Fully Certificated	Not Fully Certificated
a.	Trainable mentally retarded				
b.	Educable mentally retarded				
c.	Seriously emotionally disturbed				
d.	Learning disabled				
e.	Deaf-blind				
f.	Deaf				
g.	Hard of hearing				
h.	Blind				
i.	Partially seeing				
j.	Speech impaired				
k.	Orthopedically handicapped				
l.	Other health impaired				
m.	Other (Specify): _____				
n.	Total				

84. In column A, indicate the total number of salaried staff members (full- and part-time) in this school district who provide special educational or related services to the handicapped in grades prekindergarten through 6. Exclude teachers in regular classes. (Count each staff member only once. If none in a category, write "0.")

In column B, if possible, provide full-time equivalents for these same staff members. (If none in a category, write "0")

		A Total Number of Staff Members of Grades Prekindergarten-6		B Number of Full-Time Equivalent Staff Members of Grades Prekindergarten-6	
		Fully Certificated	Not Fully Certificated	Fully Certificated	Not Fully Certificated
a.	Administrators				
b.	Teachers				
c.	Speech therapists				
d.	Psychologists				
e.	Educational diagnosticians				
f.	Social workers				
g.	Physical therapists				
h.	Occupational therapists				
i.	Teacher aides and other paraprofessionals				
j.	Other (Specify): _____				

85. How many additional staff members does this school district plan to employ during the next school year (1975-76) in budgeted positions who will provide special educational or related services to handicapped pupils. (If none in a category, write "0" and go to Q. 87)

_____ Prekindergarten
_____ Kindergarten-6
_____ Grades 7-12

86. How many of these do you expect will be fully certificated by the state to teach handicapped pupils? (If none in a category, write "0")

_____ Prekindergarten
_____ Kindergarten-6
_____ Grades 7-12

87. If this school district had sufficient funds to hire as many additional staff members to provide special educational or related services for the handicapped as it would like, how many would be hired?. (If none in a category, write "0")

_____ Prekindergarten
_____ Kindergarten-6
_____ Grades 7-12

88. Indicate whether the following activities are part of the services offered in this school district's programs for the handicapped. (Mark all that apply in each grade distribution category)

		Prekindergarten	Kinder-garten-6	Grades 7-12
a.	Workshops for teachers.	☐	☐	☐
b.	Tuition assistance for teachers	☐	☐	☐
c.	Inservice training other than workshops	☐	☐	☐
d.	Programs for parents of the handicapped	☐	☐	☐
e.	Information dissemination programs	☐	☐	☐
f.	Placement in schools having no architectural barriers	☐	☐	☐
g.	Other (Specify): _____	☐	☐	☐

89. How many teachers of grades prekindergarten through 6 in this school district are receiving <u>any</u> special training during this school year in areas that would aid them in working with the various types of handicapped pupils specified below? (Teachers may be counted more than once if they are receiving training aimed at more than one type of handicapped pupil. If none in a category, write "0")

		Number of Teachers	
		Prekindergarten	Kindergarten-6
a.	Trainable mentally retarded	____	____
b.	Educable mentally retarded	____	____
c.	Seriously emotionally disturbed	____	____
d.	Learning disabled	____	____
e.	Deaf-blind	____	____
f.	Deaf	____	____
g.	Hard of hearing	____	____
h.	Blind	____	____
i.	Partially seeing	____	____
j.	Speech impaired	____	____
k.	Orthopedically handicapped	____	____
l.	Other health impaired	____	____
m.	Other (Specify):		
	_____	____	____

90. What was the first year of funding for handicapped pupils in grades prekindergarten through 6 in this school district (e.g., 1969-70, etc.)?

		First Year of Funding
a.	Education for the Handicapped Act, Part B (formerly ESEA Title VI)	_____
b.	VEA 68	_____
c.	ESEA Title I	_____
d.	ESEA Title III	_____
e.	Other federally funded programs for the handicapped	_____
f.	State programs for the handicapped	_____
g.	Local programs for the handicapped	_____

91. Do complementary or interdependent services exist among programs for handicapped pupils in grades prekindergarten through 6 and ESEA Title I, ESEA Title III, ESEA Title VII, or other federal programs, including VEA 68?

☐ Yes
☐ No (Go to Q. 93, page 34)

92. For each horizontal row below, mark the appropriate columns for federal program activities that are coordinated with programs for the handicapped in grades prekindergarten through 6 in this school district. (Mark all that apply)

	ESEA Title I	ESEA Title III	ESEA Title VII	All Other Federal Programs, Including VEA 68
a. Programs for the handicapped are never coordinated with other federally funded program activities	☐	☐	☐	☐
b. Common participants in needs assessment	☐	☐	☐	☐
c. Common information used in needs assessment		☐	☐	☐
d. Coordination in the review and updating of needs	☐	☐	☐	☐
e. Common participants in selection of services	☐	☐	☐	☐
f. Coordination in providing sequential services to follow pupils from school to school	☐	☐	☐	☐
g. Staff shared by more than one service	☐	☐	☐	☐
h. Common information used to determine eligibility of pupils	☐	☐	☐	☐
i. Pupils participate in more than one service	☐	☐	☐	☐
j. Joint efforts in setting priorities for needs	☐	☐	☐	☐
k. Common participants in pupil selection	☐	☐	☐	☐
l. Joint funding	☐	☐	☐	☐
m. Other forms of coordination (Specify): _____	☐	☐	☐	☐

93. To what groups is information about federal, state, or local programs for the handicapped usually disseminated within and outside this school district? (Mark all that apply)

- ☐ None
- ☐ Within this LEA
- ☐ Other LEAs
- ☐ Public school staff
- ☐ Non-public school staff/private or state instructional staff
- ☐ Parents of children receiving services
- ☐ Parents of children needing services
- ☐ Business and industry representatives
- ☐ State education agency personnel
- ☐ General public
- ☐ Other (Specify): _____

94. Can this school district compute per pupil expenditures for the handicapped on the basis of type of handicap?

- ☐ Yes
- ☐ No

95. Indicate below the source of funds that pays the most toward developing, initiating, or replicating programs designed to serve handicapped pupils in grades prekindergarten through 6 in this school district. (Mark one on each horizontal row)

		Federal Funds	State Funds	Local Funds
a.	Develop projects	☐	☐	☐
b.	Initiate projects	☐	☐	☐
c.	Replicate projects	☐	☐	☐

CONTINUED, EXPANDED, OR REPLICATED PROGRAMS FOR THE HANDICAPPED THAT WERE BEGUN WITH EHA, PART B FUNDS

96. Have Education for the Handicapped Act (EHA), Part B (or ESEA Title VI) funds for handicapped pupils ever been discontinued in this school district because the grant period had expired?

☐ Yes (Mark all that apply)

- ☐ Prekindergarten
- ☐ Kindergarten-6
- ☐ Grades 7-12

☐ No (Go to Section D, page 37)

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97. After federal funding was discontinued because of grant expiration, were any services for handicapped pupils similar to those provided by EHA, Part B, continued through state or local support?

☐ Yes (Mark all that apply)

- ☐ Prekindergarten
- ☐ Kindergarten-6
- ☐ Grades 7-12

☐ No (Go to Section D, page 37)

Note: Questions 98-102 concern the continuation, expansion, or replication of any services begun with EHA, Part B, funds for elementary pupils by state or locally supported programs.

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98. During school year 1974-75, approximately how many pupils, by type of handicap, do these continued, expanded, or replicated programs serve? (If none in a category, write "0")

		Number of Handicapped Pupils		
		Prekindergarten	Kindergarten-6	Grades 7-12
a.	Trainable mentally retarded			
b.	Educable mentally retarded			
c.	Seriously emotionally disturbed			
d.	Learning disabled			
e.	Deaf-blind			
f.	Deaf			
g.	Hard of hearing			
h.	Blind			
i.	Partially seeing			
j.	Speech impaired			
k.	Orthopedically handicapped			
l.	Other health impaired			
m.	Other (Specify): _____			

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99. For the 1974-75 school year, what are the expenditures from state and local sources for continued, expanded, or replicated programs for handicapped pupils begun with EHA, Part B, funds? (If none in a category, write "0")

		$ for Prekindergarten	$ for Kindergarten-6	$ for Grades 7-12
a.	State sources	_____	_____	_____
b.	Local sources	_____	_____	_____
c.	Total	_____	_____	_____

100. During the years that EHA, Part B, funding was present in this school district, what was the average annual expenditure of EHA, Part B, funds for handicapped pupils? (If none in a category, write "0")

$ _____ Prekindergarten
$ _____ Kindergarten-6
$ _____ Grades 7-12

101. Without EHA, Part B, funding what is the average annual expenditure for continued, expanded, or replicated programs? (If none in a category, write "0")

$ _____ Prekindergarten
$ _____ Kindergarten-6
$ _____ Grades 7-12

102. Generally speaking, what is the major emphasis of the expenditures for continued, expanded, or replicated programs for handicapped pupils? (Mark one)

- ☐ Planning and development
- ☐ Operations (e.g., services to pupils, teacher training)
- ☐ Evaluation
- ☐ Parent programs
- ☐ Dissemination

D

EDUCATIONAL BROADCASTING

103. Does this school district currently hold a license from the Federal Communications Commission to operate television, radio, or other transmittal systems for instructional purposes?

- ☐ Yes
- ☐ No (Go to Q. 105)

104. Which of the following does this school district operate? (Mark all that apply for each grade distribution)

		Prekindergarten-6	Grades 7-12
a.	UHF or VHF non-commercial television broadcast station	☐	☐
b.	Translator--UHF or VHF	☐	☐
c.	Instructional Television Fixed Service (ITFS)	☐	☐
d.	Broadcast FM radio station (10 watts or greater)	☐	☐
e.	Campus carrier radio system	☐	☐
f.	Coaxial cable ("R.F.") (closed circuit)	☐	☐
g.	Community Antenna Television (CATV) (closed circuit)	☐	☐
h.	Other (Specify): _____	☐	☐

105. Does this school district currently have a contract with an agency for television or radio programming or transmittal systems?

- ☐ Yes
- ☐ No (Go to COMMENTS, page 39)

106. Which of the following are covered under this contract? (Mark all that apply)

- ☐ UHF or VHF non-commercial television broadcast station
- ☐ Translator--UHF or VHF
- ☐ Instructional Television Fixed Service (ITFS)
- ☐ Broadcast FM radio station (10 watts or greater)
- ☐ Campus carrier radio system
- ☐ Coaxial cable ("R.F.") (closed circuit)
- ☐ Community Antenna Television (CATV) (closed circuit)
- ☐ Other (Specify): _____

107. What is the total amount of funds budgeted for all schools (elementary and secondary) during this school year under this contract? (Report to nearest $1,000. If none in a category, write "0")

$ _____ Television
$ _____ Radio

108. Which elementary grade levels are covered by the instructional television or radio programming provided under this contract? Indicate equivalent grade levels for ungraded or multigraded classes other than for the handicapped. (Mark all that apply)

If no elementary grades are covered, check here ☐ and go to COMMENTS, page 39.

Television		Radio	
a. *Prekindergarten*	☐	a. *Prekindergarten*	☐
b. Kindergarten	☐	b. Kindergarten	☐
c. Grade 1	☐	c. Grade 1	☐
d. Grade 2	☐	d. Grade 2	☐
e. Grade 3	☐	e. Grade 3	☐
f. Grade 4	☐	f. Grade 4	☐
g. Grade 5	☐	g. Grade 5	☐
h. Grade 6	☐	h. Grade 6	☐
i. Ungraded classes for the handicapped	☐	i. Ungraded classes for the handicapped	☐

109. Approximately how many pupils in grades prekindergarten through 6 are served under the television and radio contracts? (If none in a category, write "0")

_____ Pupils in grades prekindergarten-6 served by television contracts
_____ Pupils in grades prekindergarten-6 served by radio contracts

COMMENTS

You have completed this questionnaire. However, if you have any comments you would like to make regarding the clarity of the questions, definitions, and instructions used in this questionnaire, please use the rest of this page. THANK YOU FOR YOUR HELP.

SCHOOL QUESTIONNAIRE

A

GENERAL SCHOOL CHARACTERISTICS

1. What grades are taught in this school? Indicate equivalent grade levels for ungraded or multigraded classes other than for the handicapped. (Mark all that apply)

- ☐ Prekindergarten
- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6
- ☐ Grade 7
- ☐ Grade 8
- ☐ Grade 9
- ☐ Grade 10
- ☐ Grade 11
- ☐ Grade 12
- ☐ Ungraded classes for the handicapped

Note: The next two questions ask about pupil membership on or about October 1. Question 2 asks about the current school year (1974-75), while Question 3 asks about last year (1973-74).

2a. What was the total pupil membership in this school on or about October 1, 1974? (Include pupils in Special Education and Head Start classes)

_____ Total number of pupils

b. What was the total pupil membership in grades prekindergarten through 6 in this school on or about October 1, 1974? (Include pupils in Special Education and Head Start classes)

_____ Number of pupils in grades prekindergarten-6

3. Please provide the following information about last year's (1973-74) pupil membership. (Include pupils in Special Education and Head Start classes. If none in a category, write "0.")

	A Total Pupils Including Migrants	B Migrant Pupils Only
a. Membership during the period from approximately October 1, 1973, through the end of 1973-74 school year	_____	_____
b. Number of new pupils entering school during the same period (count re-entries as new entries)	_____	_____
c. Number of pupils withdrawing from school during the same period (include transfers between schools and dropouts)	_____	_____

4. In column A, indicate how many teachers (full- and part-time) of grades prekindergarten through 6 in this school are members of the following groups. (Count each teacher only once. If none in a category, write "0.")

In column B, indicate how many pupils in grades prekindergarten through 6 in this school are members of these groups. (Count each pupil only once. If none in a category, write "0.")

	A Number of Teachers of Grades Prekindergarten-6	B Number of Pupils in Grades Prekindergarten-6
a. American Indian	_____	_____
b. Black/Negro	_____	_____
c. Oriental	_____	_____
d. Hispanic	_____	_____
e. White/Caucasian	_____	_____
f. Other (Specify): _____	_____	_____

5. Does this school employ teachers aides or other nonprofessional personnel?

- ☐ Yes
- ☐ No (Go to Q. 7)

6. Are any of these personnel specifically assigned to work with children in any of the following? (Mark all that apply)

- ☐ ESEA Title I
- ☐ ESEA Title I Migrant
- ☐ ESEA Title III, Section 306
- ☐ ESEA Title VII
- ☐ Programs for the handicapped

7. Which of the following best describes the population of the area in which this school is located? (Mark one)

- ☐ Large city, 500,000 or more
- ☐ Large city, 200,000-500,000 population
- ☐ City or suburb, 50,000-200,000 population
- ☐ Small city, 10,000-50,000 population
- ☐ Rural area or town with less than 10,000 population

8. Approximately how many of the pupils in this school are from low-income families? (If none, write "0")

_____ Number of pupils

9. What is your definition of low income?

_____

10. Approximately how many of the pupils in grades prekindergarten through 6 in this school are from families where the primary or dominant language is other than English? (If none, write "0")

_____ Number of pupils

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11. Approximately how many of the pupils in grades prekindergarten through 6 in this school are from families earning $3,000 or less and are also from families where the primary or dominant language is other than English? (If none, write "0")

_____ Number of pupils

12. How would you characterize the English-speaking ability of most of the pupils in this school? (Mark one)

- ☐ Very limited--conduct little or no conversation in English
- ☐ Limited--converse in English, but with more difficulty than would be expected of children English-speaking homes
- ☐ Good--converse in English with little or no difficulty

13a. Have you tested 6th grade reading and received results during this school year (1974-75) to date?

- ☐ Yes
- ☐ No (Go to 13c)

13b. (If yes to 13a) During the 1974-75 school year, approximately how many 6th grade pupils in this school are reading one or more years below grade level according to current test data based on national norms?

_____ Number of 6th grade pupils reading one or more years below grade level (Go to Q. 14)

13c. (If no to 13a) Have you tested reading for any other grade and received results during this school year (1974-75) to date?

- ☐ Yes
- ☐ No (Go to Q. 14)

13d. (If yes to 13c) During the 1974-75 school year, approximately how many pupils in the nearest grade below grade 6 for which you do have current data based on national norms are reading one or more years below grade level? (Please specify the number of pupils and the grade for which you are reporting)

_____ Number of pupils reading one or more years below grade level
_____ Grade for which you are reporting

14. Approximately how many of the pupils in this school would you define as educationally deprived? (If none, write "0")

_____ Number of pupils

15. Are there any bilingual projects in this school funded by any sources other than ESEA Title VII?

- ☐ Yes
- ☐ No

16. During school year 1974-75, does this school provide any elementary-level programs or projects funded entirely or partially by the following sources? (Before attempting to answer this question, please check the District List of Special Programs. Mark all that apply.)

- ☐ ESEA Title I (children from low-income areas, and neglected or delinquent children)
- ☐ ESEA Title I Migrant
- ☐ ESEA Title II (libraries)
- ☐ ESEA Title III, Section 306
- ☐ ESEA Title VII (bilingual)
- ☐ Education for the Handicapped Act, Part B (formerly ESEA Title VI)
- ☐ Emergency School Aid Act (ESAA)
- ☐ USDA School Food Programs
- ☐ Communications Act of 1934, Title III, Part IV (Grants for Non-commercial Educational Broadcasting Facilities; Corporation for Public Broadcasting)
- ☐ Other federal sources

17. During school year 1974-75, does this school provide any elementary-level programs or projects funded entirely or partially by federal sources that are specifically designed to meet the needs of the following target groups? (Mark all that apply)

- ☐ No specific target group
- ☐ Educationally deprived pupils
- ☐ Academically gifted pupils
- ☐ Migrant pupils
- ☐ Handicapped pupils
- ☐ Neglected or delinquent pupils
- ☐ Pupils from low-income families
- ☐ Pupils from homes where the primary or dominant language is other than English
- ☐ Other target group (Specify): _____

B

PROGRAM INFORMATION

ESEA TITLE I (children from low-income areas, and neglected or delinquent children)

Note: Questions 18-28 deal only with ESEA Title I projects for educationally deprived children (from low-income areas), and neglected or delinquent children. ESEA Title I Migrant projects will be addressed as a separate section.

18. Does this school have an ESEA Title I project for educationally deprived children (from low-income areas), or neglected or delinquent children? (Do not include ESEA Title I Migrant here)

- ☐ Yes
- ☐ No (Go to Q. 29, page 10)

Note: If this school currently has more than one ESEA Title I project component in operation, answer the remaining questions in this section for all project components.

---

19. What grades does the ESEA Title I project in this school serve? Indicate equivalent grade levels for ungraded or multigraded classes. (Mark all that apply. Do not include ESEA Title I Migrant here.)

- ☐ Prekindergarten
- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6
- ☐ Grades 7-12

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Note: If the ESEA Title I project in this school does not serve pupils in grades prekindergarten through 6, check here ☐ and go to Q. 29, page 10.

20. Does the ESEA Title I project in this school operate only in the summer? (Do not include ESEA Title I Migrant here)

☐ Yes (Go to Q. 29, page 10)
☐ No

21. During the 1974-75 school year, approximately how many pupils in grades prekindergarten through 6 participate in the ESEA Title I project in this school? (Do not include summer sessions. If you are answering for more than one project, do not count any pupil more than once. Do not include ESEA Title I Migrant here.)

_____ Number of pupils in grades prekindergarten-6

22. Indicate below those services that are provided as part of the ESEA Title I project in this school for pupils in grades prekindergarten through 6. (Mark all that apply. Do not include ESEA Title I Migrant here.)

☐ Reading instruction
☐ Mathematics instruction
☐ English language arts instruction (excluding reading)
☐ Bilingual instruction
☐ English as a second language
☐ Other academic instruction
(Specify): _____
☐ Guidance and counseling services
☐ Attendance and social work services
☐ Health services (including medical and dental examinations, instruction in health and health care)
☐ Food services
☐ Other services (Specify): _____

23. On what basis were pupils selected to participate in the ESEA Title I project? Respond only for those project components in which pupils receive instruction as part of the ESEA Title I project. (Mark three in each vertical column. Do not include ESEA Title I Migrant here.)

	Mathematics	Reading	English Language Arts (excluding reading)
a. Pupils were not selected to receive Title I services in this subject area	☐	☐	☐
b. Basis of selection is unknown	☐	☐	☐
c. No special criterion employed	☐	☐	☐
d. Standardized achievement test scores	☐	☐	☐
e. Other standardized test scores	☐	☐	☐
f. Pupil grades	☐	☐	☐
g. Special needs of pupils (e.g., handicaps, problems in discipline, attitude)	☐	☐	☐
h. Teacher recommendations based on educational needs	☐	☐	☐
i. Teacher recommendations based on other needs	☐	☐	☐
j. Low income of family	☐	☐	☐
k. Parent or pupil request	☐	☐	☐
l. Other (Specify): _____	☐	☐	☐

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24. How is instruction provided in the ESEA Title I project? (Mark one. Do not include ESEA Title I Migrant here.)

- ☐ Pupils receive instruction all day in their regular classrooms as part of an ESEA Title I project
- ☐ Pupils receive instruction part of the day in their regular classrooms as part of an ESEA Title I project
- ☐ Pupils go outside of their regular classrooms for part of the day to receive instruction as part of an ESEA Title I project

25. Does this school currently have a parent advisory council for the ESEA Title I project? (Do not include ESEA Title I Migrant here)

- ☐ Yes
- ☐ No (Go to Q. 29)

26. Are members of the school-level parent advisory council selected by the parents of the children to be served by the ESEA Title I project? (Do not include ESEA Title I Migrant here)

- ☐ Yes
- ☐ No

27. Approximately what percent of the school-level parent advisory council members are parents of children eligible to be served by ESEA Title I or are representative of the attendance areas to be included in the ESEA Title I project? (Mark one. Do not include ESEA Title I Migrant here.)

- ☐ None
- ☐ 1-50%
- ☐ 51-100%

28. What are the major functions of the school-level parent advisory council? (Mark all that apply. Do not include ESEA Title I Migrant here.)

- ☐ Identifying unmet needs through formal needs assessment
- ☐ Identifying unmet needs through other means
- ☐ Planning programs to meet identified needs
- ☐ Review of applications for federal funds
- ☐ Evaluation of programs
- ☐ Implementation or monitoring of programs
- ☐ Other (Specify): _____

ESEA TITLE I MIGRANT

29. Is there an ESEA Title I Migrant project in this school?

- ☐ Yes
- ☐ No (Go to Note before Q. 35)

30. What grades does the ESEA Title I Migrant project in this school serve? Indicate equivalent grade levels for ungraded or multigraded classes. (Mark all that apply)

- ☐ Prekindergarten
- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6
- ☐ Grades 7-12

Note: If the ESEA Title I Migrant project in this school does not serve pupils in grades prekindergarten through 6, check here ☐ and go to the Note before Q. 35.

31. During what time of the year does the ESEA Title I Migrant project in this school operate? (Mark all that apply)

- ☐ Fall
- ☐ Spring
- ☐ Summer

32. During the 1974-75 school year, approximately how many pupils in grades prekindergarten through 6 participate in the ESEA Title I Migrant project in this school?

_____ Number of pupils in grades prekindergarten-6

33. Indicate below those services that are provided as part of the ESEA Title I Migrant project in this school for pupils in grades prekindergarten through 6. (Mark all that apply)

- ☐ Reading instruction
- ☐ Mathematics instruction
- ☐ English language arts instruction (excluding reading)
- ☐ Bilingual instruction
- ☐ English as a second language
- ☐ Other academic instruction
  (Specify): _____
- ☐ Occupational skills familiarization
- ☐ Guidance and counseling services
- ☐ Attendance and social work services
- ☐ Health services (including medical and dental examinations, instruction in health and health care)
- ☐ Food services
- ☐ Clothing
- ☐ Other services (Specify): _____

34. How is instruction provided in the ESEA Title I Migrant project? (Mark one)

- ☐ Pupils receive instruction all day in their regular classrooms as part of an ESEA Title I Migrant project
- ☐ Pupils receive instruction part of the day in their regular classrooms as part of an ESEA Title I Migrant project
- ☐ Pupils go outside of their regular classrooms for part of the day to receive instruction as part of an ESEA Title I Migrant project

ESEA TITLE III, SECTION 306

Note: Please contact your district survey coordinator if you do not know the answers to any of questions 35-41.

35. Is there an ESEA Title III, Section 306, project in this school?

- ☐ Yes
- ☐ No (Go to Q. 42, page 13)

36. Is the ESEA Title III, Section 306, project in this school designed specifically for direct pupil participation as opposed to teacher training?

- ☐ Direct pupil participation
- ☐ Indirect pupil participation (Go to Q. 42)

37. What grades does the ESEA Title III, Section 306, project in this school serve? Indicate equivalent grade levels for ungraded or multigraded classes. (Mark all that apply)

- ☐ Prekindergarten
- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6
- ☐ Grades 7-12

Note: If the ESEA Title III, Section 306, project in this school does not serve pupils in grades prekindergarten through 6, check here ☐ and go to Q. 42.

38. During the 1974-75 school year, approximately how many pupils in grades prekindergarten through 6 participate in the ESEA Title III, Section 306, project in this school?

_____ Number of pupils in grades prekindergarten-6

39. Is your ESEA Title III, Section 306, project specifically designed for the following elementary target groups? (Mark all that apply)

- ☐ No specific target group
- ☐ Educationally deprived pupils
- ☐ Academically gifted pupils
- ☐ Migrant pupils
- ☐ Handicapped pupils
- ☐ Neglected or delinquent pupils
- ☐ Pupils from low-income families
- ☐ Pupils from homes where the primary or dominant language is other than English
- ☐ Prekindergarten children
- ☐ Other target group (Specify): _____

40. Which of the following best describes the major emphasis of the ESEA Title III, Section 306 project in this school for pupils in grades prekindergarten through 6? (Mark one)

- ☐ Prekindergarten or early childhood education
- ☐ Education for the handicapped
- ☐ Environmental education
- ☐ Reading instruction
- ☐ Education of the disadvantaged
- ☐ Child abuse
- ☐ Project Information Packages (PIP)
- ☐ Other (Specify): _____

41. What are the three major criteria used in the selection of pupils in grades prekindergarten through 6 for direct participation in the ESEA Title III, Section 306, project in this school? (Mark the three most important criteria)

- ☐ Basis of selection is unknown
- ☐ No special criterion employed
- ☐ Standardized achievement test scores
- ☐ Other standardized test scores
- ☐ Pupil grades
- ☐ Special needs of pupils (e.g., handicaps, problems in discipline, attitude)
- ☐ Teacher recommendations based on educational needs
- ☐ Teacher recommendations based on other needs
- ☐ Low income of family
- ☐ Parent or pupil request
- ☐ Other (Specify): _____

ESEA TITLE VII (bilingual)

42. Is there an ESEA Title VII project in this school?

- ☐ Yes
- ☐ No (Go to Note before Q. 50, page 16)

43. What grades does the ESEA Title VII project in this school serve? Indicate equivalent grade levels for ungraded or multigraded classes. (Mark all that apply)

- ☐ Prekindergarten
- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Grade 6
- ☐ Grades 7-12

Note: If the ESEA Title VII project in this school does not serve pupils in grades prekindergarten through 6, check here ☐ and go to the Note before Q. 50, page 16.

44. During the 1974-75 school year, approximately how many elementary pupils participate in the ESEA Title VII project in this school?

_____ Number of pupils in grades prekindergarten-6

45. During the 1974-75 school year, approximately how many of the pupils in grades prekindergarten through 6 who participate in the ESEA Title VII project in this school speak the following languages as their primary or dominant language? (If none in a category, write "0")

	Number of Pupils in Grades Prekindergarten-6
a. An American Indian language	_____
b. An Oriental language	_____
c. Spanish	_____
d. English	_____
e. Other (Specify): _____	_____

46. How would you characterize the English-speaking ability of most of the pupils in grades prekindergarten through 6 who participate in the ESEA Title VII project in this school? (Mark one)

- ☐ Very limited--conduct little or no conversation in English
- ☐ Limited--converse in English, but with more difficulty than would be expected of children from English-speaking homes
- ☐ Good--converse in English with little or no difficulty

47. What are the major criteria used in the selection of pupils in grades prekindergarten through 6 for participation in the ESEA Title VII project in this school? (Mark the major criteria)

		Pupils Whose Primary or Dominant Language is English	Pupils Whose Primary or Dominant Language is Other Than English
a.	Pupil surname	☐	☐
b.	Pupils' English-speaking ability	☐	☐
c.	Scores from tests to determine language dominance of pupil	☐	☐
d.	Scores from standardized achievement test written in English	☐	☐
e.	Scores from standardized achievement test written in the primary or dominant language of the pupil	☐	☐
f.	Pupil grades	☐	☐
g.	Teacher recommendations	☐	☐
h.	Low income of family	☐	☐
i.	Other (Specify): _____	☐	☐

48. Indicate below which of the following services are part of the ESEA Title VII project for pupils in grades prekindergarten through 6 in this school. (Mark all that apply)

- ☐ Academic instruction in the basic subject areas of mathematics or reading
- ☐ History and cultural heritage associated with dominant language
- ☐ Non-English language arts
- ☐ Other academic subject areas
- ☐ Vocational subjects
- ☐ Guidance and counseling
- ☐ Testing services
- ☐ Staff development
- ☐ Community involvement
- ☐ Other (Specify): _____

49. Are the parents of children who participate in the ESEA Title VII project involved in any of the following activities related to the ESEA Title VII project? (Mark all that apply)

- ☐ Volunteer tutor aide (unpaid)
- ☐ Community liaison
- ☐ Field-trip aide
- ☐ Adult classes in English as a second language (ESL)
- ☐ Paraprofessional aide (paid)
- ☐ Planning, implementation, and evaluation of programs
- ☐ None of the above

PROGRAMS FOR THE HANDICAPPED

Note: Questions 50-62 ask about the handicapped pupils in this school. "Handicapped" refers to pupils who have been classified as handicapped according to state guidelines. Where questions ask about types of handicapped pupils, report multihandicapped pupils according to their major handicapping condition.

50. During the 1974-75 school year, approximately how many handicapped pupils attend this school? (If none, write "0" and go to Section C, p. 22)

_____ Number of handicapped pupils

51. Does this school provide special educational or related services for these pupils?

- ☐ Yes
- ☐ No (Go to Section C, p. 22)

52. Using the list below, indicate the types of handicapped pupils you serve. (Mark all that apply for each grade distribution category)

	Prekindergarten	Kindergarten-6	Grades 7-12
a. Trainable mentally retarded	☐	☐	☐
b. Educable mentally retarded	☐	☐	☐
c. Seriously emotionally disturbed	☐	☐	☐
d. Learning disabled	☐	☐	☐
e. Deaf-blind	☐	☐	☐
f. Deaf	☐	☐	☐
g. Hard of hearing	☐	☐	☐
h. Blind	☐	☐	☐
i. Partially seeing	☐	☐	☐
j. Speech impaired	☐	☐	☐
k. Orthopedically handicapped	☐	☐	☐
l. Other health impaired	☐	☐	☐
m. Other (Specify): _____	☐	☐	☐

53. What services for handicapped pupils are provided by this school? (Mark all that apply for each grade distribution category)

		Prekindergarten	Kindergarten-6
a.	Diagnostic assessment	☐	☐
b.	Guidance and counseling specifically for the handicapped	☐	☐
c.	Parent guidance and counseling	☐	☐
d.	Emotional and social development skills	☐	☐
e.	Instruction in basic academic skills	☐	☐
f.	Tutoring	☐	☐
g.	Language development skills	☐	☐
h.	Speech therapy	☐	☐
i.	Auditory training	☐	☐
j.	Visual motor training	☐	☐
k.	Physical therapy	☐	☐
l.	Training in mobility skills	☐	☐
m.	Training in self-care skills	☐	☐
n.	General health care	☐	☐
o.	Special resources (e.g., itinerant tutors, aides, etc.)	☐	☐
p.	Resource room teachers	☐	☐
q.	Learning centers	☐	☐
r.	Other special services (e.g., provision for flexible scheduling)	☐	☐
s.	Pupil transportation	☐	☐
t.	Other (Specify): _____	☐	☐

54a. Do the handicapped pupils in grades prekindergarten through 6 in this school have needs that are not being met at all at the present time?

☐ Yes
☐ No (Go to Q. 55)

54b. In your estimation, how many handicapped pupils in prekindergarten and kindergarten through 6 are not receiving any special educational or related services, but should be? (If none in a category, write "0")

_____ Number of handicapped pupils in prekindergarten
_____ Number of handicapped pupils in kindergarten-6

54c. Which of the special educational or related services indicated below are needed but are not being provided to handicapped pupils in this school? (Mark all that apply for each grade category distribution)

		Prekindergarten	Kindergarten-6
a.	Diagnostic assessment	☐	☐
b.	Guidance and counseling specifically for the handicapped	☐	☐
c.	Parent guidance and counseling	☐	☐
d.	Emotional and social development skills	☐	☐
e.	Instruction in basic academic skills	☐	☐
f.	Tutoring	☐	☐
g.	Language development skills	☐	☐
h.	Speech therapy	☐	☐
i.	Auditory training	☐	☐
j.	Visual motor training	☐	☐
k.	Physical therapy	☐	☐
l.	Training in mobility skills	☐	☐
m.	Training in self-care skills	☐	☐
n.	General health care	☐	☐
o.	Special resources (e.g., itinerant tutors, aides, etc.)	☐	☐
p.	Resource room teachers	☐	☐
q.	Learning centers	☐	☐
r.	Other special services (e.g., provision for flexible scheduling)	☐	☐
s.	Pupil transportation	☐	☐
t.	Other (Specify): _____	☐	☐

55. Which of the following approaches are employed in this school to serve handicapped pupils? (Mark the three major approaches)

- ☐ Mainstreaming into regular classrooms
- ☐ Regular classes with special consultants
- ☐ Regular classes with itinerant teachers
- ☐ Resource room
- ☐ Part-time Special Education classes
- ☐ Full-time Special Education classes
- ☐ Other (Specify): _____

56. Which of the following special equipment or materials are available for use by handicapped pupils in this school? (Mark all that apply)

- ☐ Programmed learning materials
- ☐ Audiovisual equipment or materials
- ☐ Special equipment or materials for speech therapy
- ☐ Sensory aids
- ☐ Physical therapy equipment or supplies
- ☐ Mobility aids
- ☐ Special play equipment or materials
- ☐ Other (Specify): _____

57. How many teachers (full- and part-time) of grades prekindergarten through 6 in this school provide special educational or related services to handicapped pupils? (If none, write "0")

_____ Number of teachers of grades prekindergarten-6

58. How many teachers in this school are certificated by this state to teach handicapped pupils? (If none, write "0")

_____ Number of teachers

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59. How many teachers (full- and part-time) of grades prekindergarten through 6 in this school provide special educational or related services to handicapped pupils in the following? (Teachers may be counted more than once if they teach or provide services in more than one category. If none in a category, write "0.")

	Number of Teachers of Grades Prekindergarten-6
a. Regular classes	
b. Special classes for the handicapped	
c. Individualized instruction	

60. Are any of the following specialists on staff in this school to provide instructional support for handicapped pupils? (Mark all that apply)

- ☐ Speech therapists
- ☐ Psychologists
- ☐ Educational diagnosticians
- ☐ Social workers
- ☐ Physical therapists
- ☐ Occupational therapists
- ☐ Other (Specify): _____

61. Is this school physically designed to accommodate children with orthopedic handicaps (i.e., washroom facilities, drinking fountains, ramps)?

- ☐ Yes
- ☐ No

62. What are the major criteria used in determining the eligibility of elementary-level participants in special educational or related services for handicapped pupils? (Mark the three major criteria)

- ☐ Standardized test scores
- ☐ Grades
- ☐ Recommendations of teachers or professional staff members
- ☐ Parental requests
- ☐ Agency referrals
- ☐ Type of handicap
- ☐ Severity of handicap
- ☐ Medical referrals
- ☐ Other (Specify): _____

C

EDUCATIONAL BROADCASTING

63. What is the total number of teaching stations in this school and how many of these are being used for instructional purposes in this school year?

_____ Total number of teaching stations
_____ Number of teaching stations in use

64. In column A, indicate the total number of televisions and videotape recorders in this school that are owned by the school (or the district) for instructional purposes. (If none in a category, write "0")

In column B, enter the number of these that are in working condition; i.e., the quality of picture and sound are suitable for instruction. (If none in a category, write "0")

	A Total Number	B Number in Working Condition
a. Televisions		
b. Videotape recorders		

65. Using your best professional judgment, rate the closed circuit television system and programming for your school as of January 31, 1975. (If these are not available to this school, mark that alternative. Mark only one choice in each horizontal row.)

	Not Available	Excellent	Good	Fair	Poor
a. Adequacy (suitability) of closed circuit television system for instruction	☐	☐	☐	☐	☐
b. Quality of closed circuit television programming for instruction	☐	☐	☐	☐	☐

66. For which subject or activity areas does this school use television programming for in-school instruction for pupils? (Mark all that apply)

- ☐ None
- ☐ Remedial reading
- ☐ Other reading
- ☐ Other English language arts
- ☐ Languages other than English
- ☐ Mathematics
- ☐ Science
- ☐ Social studies
- ☐ Environmental quality and pollution
- ☐ Occupational familiarization
- ☐ Music/art
- ☐ Other (Specify): _____

COMMENTS

You have completed this questionnaire. However, if you have any comments you would like to make regarding the clarity of the questions, definitions, and instructions used in this questionnaire, please use the rest of this page. THANK YOU FOR YOUR HELP.

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TEACHER QUESTIONNAIRE

A
PERSONAL CHARACTERISTICS

1. What is your highest level of academic achievement? (Mark one)

- O A doctoral degree
- O Specialist degree (MA+30)
- O A master's degree or equivalent
- O A bachelor's degree
- O An associate's degree
- O No degree, but some college courses
- O A high school diploma
- O Other (Specify): _____

2. Do you hold a state teaching certificate?

- O Yes
- O No

3. What is your sex?

- O Male
- O Female

4. How would you describe yourself? (Mark one)

- O American Indian
- O Black/Negro
- O Oriental
- O Hispanic
- O White/Caucasian
- O Other (Specify): _____

5. How old are you? (Mark one)

- O Under 21
- O 21–25
- O 26–30
- O 31–35
- O 36–40
- O 41–45
- O 46–50
- O 51–55
- O 56–60
- O 61–65
- O 66 or older

6. How many years, including this year, have you taught in any grade *prekindergarten* through 12? Include both public and private school experience. (Mark one)

- ① Less than one year
- ② At least 1 year, but less than 3 years
- ③ At least 3 years, but less than 6 years
- ④ At least 6 years, but less than 10 years
- ⑤ At least 10 years, but less than 20 years
- ⑥ 20 years or more

7. What is your current annual salary from this school district?

$ _____

8. Are you currently a full-time employee of this school district?

- O Yes
- O No

9. How many years, including this year, have you worked at this school? (Mark one)

- ① Less than one year
- ② At least 1 year, but less than 3 years
- ③ At least 3 years, but less than 6 years
- ④ At least 6 years, but less than 10 years
- ⑤ At least 10 years, but less than 20 years
- ⑥ 20 years or more

10. Since June 1974, have you received any preservice training provided by the school district or school?

- O Yes
- O No (Go to Q. 13)

11. How many clock hours of preservice training have you received since June 1974? If your preservice training included college courses, be sure to indicate clock hours—not semester or quarter hours. (Mark one)

- O Less than 5 hours
- O 6–10
- O 11–15
- O 16–20
- O 21–25
- O 26–30
- O 31–35
- O 36–40
- O More than 40 hours

12. In which of the following areas have you received preservice training since June 1974? (Limit your responses to the most important areas)

- O General orientation and administrative information
- O Academic instruction in reading
- O Academic instruction in other subjects
- O Individualized instruction
- O Team teaching
- O Identification of pupil problems
- O Treatment of pupil problems
- O Evaluation methods
- O Dissemination strategies
- O Bilingual/bicultural education
- O Education of handicapped pupils
- O Other areas (Specify): _____

13. Have you received any inservice training from the school district or school since June 1974?

- O Yes
- O No (Go to Q. 17)

14. How many clock hours of inservice training have you received since June 1974? If your inservice training included college courses, be sure to indicate clock hours—not semester or quarter hours. (Mark one)

- O Less than 5 hours
- O 6–10
- O 11–15
- O 16–20
- O 21–25
- O 26–30
- O 31–35
- O 36–40
- O More than 40 hours

15. In which of the following areas have you received inservice training since June 1974? (Limit your responses to the most important areas)

- O College courses in using television or radio in instruction
- O Academic instruction in reading
- O Academic instruction in other subjects
- O Individualized instruction
- O Team teaching
- O Identification of pupil problems
- O Treatment of pupil problems
- O Evaluation methods
- O Dissemination strategies
- O Bilingual/bicultural education
- O Education for handicapped pupils
- O General administrative procedures and recordkeeping
- O Other emphasis (Specify): _____

16. For which of the following target groups was the inservice training in which you participated specifically designed? (Mark all that apply)

- O No specific target group
- O Educationally deprived pupils
- O Academically gifted pupils
- O Migrant pupils
- O Handicapped pupils
- O Neglected or delinquent pupils
- O Pupils from low-income families
- O Pupils from homes where the primary or dominant language is other than English
- O Other target group (Specify): _____

17. Which of the sources listed below provide funds for any projects in which you teach? (Please check with your principal if you don't know the answer to this question. Mark all that apply.)

- O ESEA Title I (children from low-income areas, neglected or delinquent children)
- O ESEA Title I Migrant
- O ESEA Title III, Section 306
- O ESEA Title VII (bilingual)
- O Education for the Handicapped Act, Part B (formerly ESEA Title VI)
- O Other programs for the handicapped
- O Communications Act of 1934, Title III, Part IV (Grants for Noncommercial Educational Broadcasting Facilities; Corporation for Public Broadcasting)

18. During the course of the school year, you may have had to pay extra attention to some aspects of teaching. Please look at the list below and indicate which items are of special concern to you. (Mark all that apply)

- O Many pupils enter below grade level and need special or remedial help
- O The range of ability among pupils is so large that it is difficult to prepare lessons that are suitable for the whole class
- O Many pupils have special or individual learning difficulties requiring special curricula or special classes
- O Many pupils are so able that they are bored by the standard class material or pace
- O Many pupils have behavioral problems that result in a great deal of learning time being spent on discipline

19. During an average school day, how much time do you have to yourself to prepare lessons or work with individual pupils (excluding lunch period)? (Mark one)

- O None
- O 15 minutes or less
- O Between 15 minutes and an hour
- O An hour or more

B
CLASS CHARACTERISTICS

Note: For all the remaining questions in this questionnaire, the term "this class" refers to the class for which you are also completing Pupil Questionnaires.

20. Indicate below the grade or type of home-room class for which you are reporting. (Mark one)

- O Prekindergarten
- O Kindergarten
- O Grade 1
- O Grade 2
- O Grade 3
- O Grade 4
- O Grade 5
- O Grade 6
- O Ungraded class for handicapped pupils
- O Ungraded class (other than for handicapped pupils)
- O Multigraded class

21. How many pupils are enrolled in this class?

_____ Number of pupils

22. What language—other than English—do you use to instruct this class? Do not include any instruction you might give when teaching a foreign language. (Mark one)

- O None (English is the only language used)
- O An American Indian language
- O An Oriental language
- O Spanish
- O Other language (Specify): _____

23. In what subject areas do you use the language that you indicated in question 22? (Mark all that apply)

- O Reading
- O Mathematics
- O English language arts (excluding reading)
- O Other (Specify): _____

24. How many of the pupils in this class are members of the following groups? (If none in a category, write "0")

	Number of Pupils
a. American Indian	
b. Black/Negro	
c. Oriental	
d. Hispanic	
e. White/Caucasian	
f. Other (Specify): _____	

25. Approximately how many of the pupils in this class are from homes where the primary or dominant language is other than English?

_____ Number of pupils

26. In an average week, are most of the below-average readers in this class assigned any of the following? (Mark all that apply)

- O Additional reading time in class (while other pupils are engaged in other activities)
- O Special reading classes outside the regular class (within school hours)
- O After-school tutoring
- O Supplementary homework
- O Other (Specify): _____
- O None of the above

27. In an average week, are most of the below-average pupils in math assigned any of the following? (Mark all that apply)

- O Additional math time in class (while other pupils are engaged in other activities)
- O Special math classes outside the regular class (within school hours)
- O After-school tutoring
- O Supplementary homework
- O Other (Specify): _____
- O None of the above

28. Approximately how many of the pupils in this class do you expect will be able to work at grade level or above next year?

_____ Number of pupils

29. In your judgment, how many of the pupils in this class are likely to complete:

	Number of Pupils
a. Elementary school	
b. High school	
c. Some college	

C
SPECIAL PROGRAM PARTICIPATION

Note: Please check with your principal if you don't know the answers to any of the questions in this section.

The term "this class" refers to the class for which you are also completing Pupil Questionnaires.

30. Do any pupils in this class participate in projects funded by ESEA Title I? (Do not include ESEA Title I Migrant here)

O Yes
O No (Go to Q. 34)

31. How is instruction provided in the ESEA Title I projects? (Mark one. Do not include ESEA Title I Migrant here.)

O Pupils receive instruction all day in the regular classroom as part of an ESEA Title I project
O Pupils receive instruction part of the day in the regular classroom as part of an ESEA Title I project
O Pupils go outside of the regular classroom for part of the day to receive instruction as part of an ESEA Title I project

32. How many pupils in this class participate in projects funded by ESEA Title I? (Do not include ESEA Title I Migrant here)

_____ Number of pupils

33. How many pupils in this class participate in ESEA Title I projects in the following subject areas? (Pupils may be counted more than once if they participate in more than one subject area. If none in a category, write "0." Do not include ESEA Title I Migrant here.)

	Number of Pupils
a. Reading	_____
b. Mathematics	_____
c. English language arts (excluding reading)....	_____
d. Bilingual instruction...	_____
e. English as a second language	_____
f. Other (Specify): _____ ..	_____

34. Do any pupils in this class participate in projects funded by ESEA Title I Migrant?

O Yes
O No (Go to Q. 38)

35. How is instruction provided in the ESEA Title I Migrant projects? (Mark one)

O Pupils receive instruction all day in the regular classroom as part of an ESEA Title I Migrant project
O Pupils receive instruction part of the day in the regular classroom as part of an ESEA Title I Migrant project
O Pupils go outside of the regular classroom for part of the day to receive instruction as part of an ESEA Title I Migrant project

36. How many pupils in this class participate in projects funded by ESEA Title I Migrant?

_____ Number of pupils

37. How many pupils in this class participate in ESEA Title I Migrant projects in the following subject areas? (Pupils may be counted more than once if they participate in more than one subject area. If none in a category, write "0")

	Number of Pupils
a. Reading.....	
b. Mathematics.....	
c. English language arts (excluding reading)...	
d. Bilingual instruction..	
e. English as a second language	
f. Other (Specify): _____ ..	

38. Do any pupils in this class participate in projects funded by ESEA Title III, Section 306?

O Yes
O No (Go to Q. 40)

39. How many pupils in this class participate in projects funded by ESEA Title III, Section 306?

_____ Number of pupils

40. Do any pupils in this class participate in projects funded by ESEA Title VII?

O Yes
O No (Go to Note before Q. 45)

41. How many pupils in this class participate in projects funded by ESEA Title VII?

_____ Number of pupils

42. Approximately what percent of the time is the instruction in this class provided in the language of the ESEA Title VII project in this school? (Mark one)

O None
O 1—25%
O 26—50%
O 51—75%
O More than 75%

43. Do you have a teacher,aide who assists you in the classroom?

O Yes
O No (Go to Note before Q. 45)

44. What percent of the teacher aide's time is spent in the following activities in the classroom? (If no time is spent in an activity, enter a zero. The total should equal 100%.)

	Percent of Time
a. Clerical or administrative duties	
b. Custodial duties	
c. Preparation of materials ..	
d. Class instruction	
e. Test administration	
f. Reinforcement activities with small groups	
g. Individual pupil attention.	
h. Other (Specify): _____ .	100%

Note: Questions 45-54 ask about your experience teaching handicapped pupils. "Handicapped" refers to pupils who have been classified as handicapped according to state guidelines.

45. Are there any handicapped pupils in this class?

O Yes
O No (Go to Q. 48)

46. How many handicapped pupils are in this class?

_____ Number of handicapped pupils

47. How have these pupils been classified according to state guidelines? (Please check with your principal if you don't know the answer to this question. Mark all that apply.)

O Trainable mentally retarded
O Educable mentally retarded
O Seriously emotionally disturbed
O Learning disabled
O Deaf-blind
O Deaf
O Hard of hearing
O Blind
O Partially seeing
O Speech impaired
O Orthopedically handicapped
O Other health impaired
O Other (Specify): _____

48. Do you teach any handicapped pupils in this school?

O Yes
O No (Go to Section D)

49. How many handicapped pupils do you teach in this school?

_____ Number of handicapped pupils

50. Are you certificated by this state to teach or provide services for handicapped pupils?

O Yes
O No

51. How many years have you taught or provided services for handicapped pupils? (Mark one)

O Less than 1 year
O 1–2 years
O 3–5 years
O 6–10 years
O 11–20 years
O More than 20 years

52. In the last five years, have you received any special training that prepared you for providing special educational or related services to handicapped pupils?

O Yes
O No (Go to Section D)

53. What kind of special training have you received to date during this school year (1974-75) that prepared you for providing special educational or related services to handicapped pupils? (Mark all that apply)

O None (Go to Section D)
O Undergraduate Special Education courses
O Postgraduate Special Education courses
O Workshops/institutes/inservice training
O Other (Specify): _____

54. How many clock hours of special training have you received to date during this school year (1974-75)? If this special training included college courses, be sure to indicate clock hours--not semester or quarter hours.

_____ Clock hours

D

EDUCATIONAL BROADCASTING

Note: The term "this class" refers to the class for which you are also completing Pupil Questionnaires.

55. Is a television set (in good working condition, with quality of picture and sound suitable for instruction) readily available to pupils in this class for instructional purposes?

- O Yes
- O No (Go to Q. 59)

56. Approximately how many hours a week during the 1974-75 school year is a television set (in good working condition, with quality of picture and sound suitable for instruction) readily available to pupils in this class for instructional purposes? (Mark one)

O 1 hour or less	O 10	O 20	O 30	O 40 hours or more
O 2	O 11	O 21	O 31	
O 3	O 12	O 22	O 32	
O 4	O 13	O 23	O 33	
O 5	O 14	O 24	O 34	
O 6	O 15	O 25	O 35	
O 7	O 16	O 26	O 36	
O 8	O 17	O 27	O 37	
O 9	O 18	O 28	O 38	
	O 19	O 29	O 39	

57. Approximately how many hours a week during the 1974-75 school year does this class use television in school for instructional purposes? (Mark one)

- O None (Go to Q. 59)

O 1 hour or less	O 6	O 12	O 18
O 2	O 7	O 13	O 19
O 3	O 8	O 14	O 20 hours or more
O 4	O 9	O 15	
O 5	O 10	O 16	
	O 11	O 17	

58. In which of the subject areas below does this class use television for in-school instruction? (Mark all that apply)

- O Art
- O Remedial reading
- O Other reading
- O English language arts (excluding reading)
- O Languages other than English
- O Health and safety in daily living, physical education, and recreation
- O Home economics
- O Industrial arts
- O Mathematics
- O Music
- O Natural sciences
- O Social sciences/social studies
- O Special Education
- O Environmental quality and pollution
- O Public affairs
- O Occupational familiarization
- O Other (Specify): _____

59. During the 1974-75 school year, approximately what percent of this class uses the television series Villa Alegre for in-school viewing? (Mark one)

- O None
- O 1—25%
- O 26—50%
- O 51—75%
- O More than 75%

60. During the 1974-75 school year, approximately what percent of this class uses the television series The Electric Company for in-school viewing? (Mark one)

- O None (Go to Q. 68, page 10)
- O 1—25%
- O 26—50%
- O 51—75%
- O More than 75%

61. Approximately how many times a week during the 1974-75 school year does this class use the television series The Electric Company for in-school viewing? (Mark one)

- O None
- O Once a week or less
- O 2
- O 3
- O 4
- O 5
- O 6
- O 7
- O 8
- O 9
- O 10 times a week or more

62. For which types of pupils in this class do you feel The Electric Company is most useful? (Mark one)

① Pupils with below average ability
② Pupils with average ability
③ Pupils with above average ability
④ Equally useful for all types of pupils
⑤ Not very useful for any type of pupil

63. To what extent has the use of The Electric Company television series made this class use other television programming more during this school year (1974-75) than in past school years? (Mark one)

① A great deal
② Somewhat
③ Very little
④ Not at all
⑤ I don't know

64. In what setting do most of the pupils in this class view The Electric Company television series at school? (Mark all that apply)

- O Individually
- O Some of the pupils view it in small groups
- O The class views it as a unit (for example, self-contained classroom)
- O By "doubling up" with other classes in the teaching station with the television set
- O In an auditorium or other large room
- O Other (Specify): _____

65. When viewing The Electric Company, are the pupils in this class free to decide where they will sit?

- O Yes
- O No

66. Are any of the following activities performed by the pupils in this class as part of viewing The Electric Company? (Mark "Yes" or "No" for each)

	Yes	No
a. Advance preparation (for example, the pupils are given a special introduction to the program or a review of the program guide)	O	O
b. Active participation during the program (for example, pupils sounding out words or letters, singing along with the songs, asking/answering questions while the program is being viewed, etc.)	O	O
c. Follow-up after the program (for example, reviewing words or concepts presented in the program, asking/answering questions after the program is over, etc.)	O	O

67. During the 1975-75 school year, how much have the pupils in this class learned about each of the skills listed below as a result of viewing The Electric Company television series? (For each skill, mark the one box that best describes how much your pupils have learned and then go to COMMENTS, page 11)

	Pupils have learned . . .				
	1 A great deal	2 Somewhat	3 Very little	4 Not at all	5 I don't know
a. Decoding skills (i.e., phonetic skills: strategies for translating graphic symbols into speech sounds)	O	O	O	O	O
b. Punctuation (i.e., understanding the function of common punctuation symbols)	O	O	O	O	O
c. Reading comprehension (i.e., extracting meaning from sentences or extended passages)	O	O	O	O	O
d. Sight words (i.e., phonetically irregular words taught as whole words)	O	O	O	O	O
e. Using contexts (i.e., utilizing information from the rest of the sentence to figure out unfamiliar words)	O	O	O	O	O

(Go to COMMENTS, page 11)

68. Which of the following help to explain why this class is not using the television series The Electric Company during the 1974-75 school year for in-school viewing? (Mark all that apply)

- O There is no television available for use by this class.
- O The program is not being shown on a television channel that can be received in this class.
- O The television receiver available to this class is VHF (channels 2-13) and the signal for The Electric Company is UHF (channels 14-83).
- O The person responsible for instruction (principal, teacher, or supervisor) in this class does not feel that television is a very useful medium for instruction in reading or other instruction areas.
- O The person responsible for instruction in this class considers the content of The Electric Company to be inappropriate for the instructional needs of the pupils.
- O The pupils in this class are viewing The Electric Company at home; it's not necessary to use it in school.
- O The person responsible for instruction in this class prefers to have the pupils view a television program of local origin rather than one that is produced elsewhere.
- O It doesn't fit in with the regular reading instruction program in this class.
- O The Electric Company program is not in "good taste"; i.e., the "tone" and "style" of the program is unacceptable to the person responsible for instruction in this class.
- O The person responsible for instruction in this class lacks sufficient experience to use a television approach for the teaching of reading.
- O The program is not on at a suitable time of the day.
- O The person responsible for instruction in this class doesn't know enough about The Electric Company series to arrive at a decision regarding the desirability of using it in a reading instruction program for the pupils in this class.
- O Other (Specify): _____

COMMENTS

You have completed this questionnaire. However, if you have any comments you would like to make regarding the clarity of the questions, definitions, and instructions used in this questionnaire, please use the rest of this page. THANK YOU FOR YOUR HELP.

PUPIL QUESTIONNAIRE

A
GENERAL CHARACTERISTICS

1. In what grade or type of homeroom is this pupil enrolled now? (Mark one)

① *Prekindergarten*
② Kindergarten
③ Grade 1
④ Grade 2
⑤ Grade 3
⑥ Grade 4
⑦ Grade 5
⑧ Grade 6
⑨ *Ungraded class* for handicapped pupils
⑩ Ungraded class (other than for handicapped pupils)
⑪ *Multigraded class*

2. If this pupil is in an ungraded or a multigraded class, what is his equivalent grade level? If this pupil is handicapped, answer in terms of reading level. (Mark one)

○ This pupil is not in an ungraded or multigraded class

○ *Prekindergarten*
○ Kindergarten
○ Grade 1
○ Grade 2
○ Grade 3
○ Grade 4
○ Grade 5
○ Grade 6

3. When did this pupil first enroll in this school? (Mark one)

① At the beginning of this school year
② After the beginning of this school year
③ Last year
④ 2 years ago
⑤ 3 years ago
⑥ 4 years ago or more
⑦ I don't know

4. Not counting this school, how many elementary schools has this pupil attended since beginning first grade? (Mark one)

○ None
○ 1
○ 2
○ 3
○ 4–5
○ 6–10
○ More than 10
○ I don't know

5. How many days was this pupil absent from school between the beginning of the current school year and January 31, 1975? (Mark one)

○ No absences
○ 1–5 days
○ 6–10 days
○ 11–15 days
○ 16–20 days
○ 21–30 days
○ More than 30 days

6. In your judgment, how likely is this pupil to complete: (Mark one for each horizontal row)

	Very likely	Not very likely
a. Elementary school	①	②
b. High school	①	②
c. Some college	①	②

7. In your judgment, how does this pupil's general academic performance compare with others in his class? (Mark one)

① His academic performance is consistently better than the average for his class
② His academic performance is about the same as the average for his class
③ His academic performance is below the average for his class

8. Consider this pupil's general academic performance at three points in time during this school year: (a) when the pupil entered this class, (b) now, and (c) as anticipated at the end of the school year. (Mark one in each vertical column)

	a. Entering	b. Now	c. End of Year
a. Below grade level	①	①	①
b. At grade level	②	②	②
c. Above grade level	③	③	③

9. Does this pupil receive the majority of his instruction in any of the following areas from you? (Mark all that apply)

○ Reading
○ Mathematics
○ English language arts (excluding reading)
○ Other academic subject areas
○ None of these

10. Can this pupil be classified as any of the following (see definition 11)? (Mark all that apply)

- O Educationally deprived
- O Academically gifted
- O Migrant pupil
- O Handicapped
- O Neglected or delinquent
- O Child from low-income family
- O Child from home where primary or dominant language is other than English
- O None of these

11. What is this pupil's sex?

- O Male
- O Female

12. How would you characterize this pupil? (Mark one)

- ① American Indian
- ② Black/Negro
- ③ Oriental
- ④ Hispanic
- ⑤ White/Caucasian
- ⑥ Other (Specify): _____

13. Where was this pupil born? (Mark one)

- O The United States (50 states plus D.C.)
- O Puerto Rico
- O Canada
- O An Oriental Country
- O Cuba
- O Mexico
- O Central American Country
- O South American Country
- O Other Country (Specify): _____
- O I don't know

14. How long has this pupil lived in the United States? (Mark one)

- O Since birth
- O Over 11 years
- O 9–11 years
- O 6–8 years
- O 3–5 years
- O 1–2 years
- O Less than 1 year
- O I don't know

15. How long has this pupil lived in this area? (Mark one)

- O Since birth
- O Over 11 years
- O 9–11 years
- O 6–8 years
- O 3–5 years
- O 1–2 years
- O Less than one year
- O I don't know

16. Has this pupil's father, mother, or guardian had a career in the military or foreign service with the U.S. government?

- ① Yes
- ② No
- ③ I don't know

17. What is the primary or dominant language spoken in this pupil's home? (Mark one)

- O English
- O An American Indian language
- O An Oriental language
- O Spanish
- O Other (Specify): _____
- O I don't know

18. This pupil's ability to converse in English is: (Mark one)

- ① Very limited – he conducts little or no conversation in English
- ② Limited – he converses in English, but with more difficulty than would be expected of a child from an English-speaking home
- ③ Good – he converses in English with little or no difficulty

19. Counting this pupil, how many people are currently living in this pupil's household? (Mark one)

- O 2
- O 3
- O 4
- O 5
- O 6
- O 7
- O 8 or more
- O I don't know

20. Would you classify this pupil as one coming from a low-income family?

- O Yes
- O No

21. What is your definition of low-income?

_____

22. In your opinion, how educationally supportive is this pupil's home environment? (Mark one)

① Very supportive
② Moderately supportive
③ Not very supportive
④ I don't know

23. Does this pupil have *persistent academic problems* that require special assistance or placement into a special program to address his specific needs?

O Yes
O No (Go to Q. 25)

24. In what subject areas does this pupil have these problems? (Mark all that apply)

O Reading
O Mathematics
O English language arts (excluding reading)
O Other academic subject area (Specify): _____

25. Is this pupil performing one or more years below grade level (as measured by standardized achievement tests) in any of the following subject areas? (Mark "Yes" or "No" for each)

If this pupil is in prekindergarten or kindergarten, mark here O and go to Q. 26.

	Yes	No	Don't know
a. Reading	①	②	③
b. Mathematics	①	②	③
c. English language arts (excluding reading)	①	②	③
d. Other academic subject area (Specify): _____	O	O	O

26. Does this pupil have any persistent problems that require professional assistance or other types of special assistance? (Mark all that apply)

O This pupil does not have any persistent problems
O Physical or sensory handicap
O Social or emotional problem
O Mental handicap
O Medical or dental problem
O Other (Specify): _____

27. In your judgment, can this pupil be defined as educationally deprived?

O Yes
O No

B
FEDERAL PROGRAM PARTICIPATION

Note: Please check with your principal if you don't know the answers to any of the questions in this section.

28. Does this pupil participate in any projects funded by ESEA Title I? (Do not include ESEA Title I Migrant here)

O Yes
O No (Go to Q. 30)

29. What are the subject or activity areas of the services provided to this pupil through ESEA Title I? (Do not include ESEA Title I Migrant here. Mark all that apply.)

O Reading instruction
O Mathematics instruction
O English language arts instruction (excluding reading)
O Bilingual instruction
O English as a second language
O Other academic instruction (Specify): _____
O Guidance and counseling services
O Attendance and social work services
O Health services (including medical and dental examinations, instruction in health and health care)
O Food services
O Other services (Specify): _____

30. Does this pupil participate in any projects funded by ESEA Title I Migrant?

O Yes
O No (Go to Q. 32)

31. What are the subject or activity areas of the services provided to this pupil through ESEA Title I Migrant? (Mark all that apply)

- O Reading instruction
- O Mathematics instruction
- O English language arts instruction (excluding reading)
- O Bilingual instruction
- O English as a second language
- O Other academic instruction (Specify): _____
- O Occupational skills familiarization
- O Guidance and counseling services
- O Attendance and social work services
- O Health services (including medical and dental examinations, instruction in health and health care)
- O Food services
- O Clothing
- O Other services (Specify): _____

32. Does this pupil participate in any projects funded by ESEA Title III, Section 306?

- O Yes
- O No (Go to Q. 35)

33. What are the subject or activity areas of the services provided to this pupil through ESEA Title III, Section 306, funds? (Mark all that apply)

- O Reading instruction
- O Mathematics instruction
- O English language arts instruction (excluding reading)
- O Other academic instruction (Specify): _____
- O Guidance and counseling services
- O Attendance and social work services
- O Health services (including medical and dental examinations, instruction in health and health care)
- O Food services
- O Other services (Specify): _____

34. On what basis was this pupil selected to participate in the ESEA Title III, Section 306, project? (Mark one)

- ① Basis of selection is unknown
- ② No special criterion employed
- ③ Standardized achievement test scores
- ④ Other standardized test scores
- ⑤ Pupil grades
- ⑥ Special needs of pupils (e.g., handicaps, problems in discipline, attitude)
- ⑦ Teacher recommendations based on educational needs
- ⑧ Teacher recommendations based on other needs
- ⑨ Low income of family
- ⑩ Parent or pupil request
- ⑪ Other (Specify): _____

35. Does this pupil participate in any projects funded by ESEA Title VII?

- O Yes
- O No (Go to Section C)

36. On what basis was this pupil selected to participate in the ESEA Title VII project? (Mark all that apply)

- O Pupil's surname
- O Pupil's English-speaking ability
- O Scores from tests to determine language dominance of pupil
- O Scores from standardized achievement test written in English
- O Scores from standardized achivement test written in the primary or dominant language of the pupil
- O Pupil grades
- O Teacher recommendations
- O Low income of family
- O Other (Specify): _____

37. Indicate below the services provided to this pupil as part of the ESEA Title VII project? (Mark all that apply)

- O Academic instruction in the basic subject areas of mathematics or reading
- O History and cultural heritage associated with dominant language
- O Non-English language arts
- O Other academic subject areas
- O Vocational subjects
- O Guidance and counseling
- O Testing services
- O Staff development
- O Community involvement
- O Other (Specify): _____

C
PROGRAMS FOR THE HANDICAPPED

Note: Questions 38-47 ask about this pupil's participation in programs for the handicapped. "Handicapped" refers to pupils who have been classified as handicapped according to state guidelines.

Please check with your principal if you don't know the answers to any of the questions in this section.

38. Is this pupil classified as handicapped?

O Yes
O No (Go to COMMENTS, page 6)

39. Please specify how this pupil is handicapped (see definition 4). (Base your answer on state guidelines. Please check with your principal if you don't know the answer to this question. Mark all that apply.)

O Trainable mentally retarded
O Educable mentally retarded
O Seriously emotionally disturbed
O Learning disabled
O Deaf-blind
O Deaf
O Hard of hearing
O Blind
O Partially seeing
O Speech impaired
O Orthopedically handicapped
O Other health impaired
O Other (Specify): _____
O I don't know

40. Did this pupil receive any prekindergarten (early childhood) education?

O Yes
O No
O I don't know

41. Has this pupil ever received instruction in basic academic skills as part of the regular school program?

O Yes
O No (Go to Q. 44)

42. Is this pupil currently receiving instruction in basic academic skills as part of the regular school program?

O Yes
O No (Go to Q. 44)

43. Approximately how much time in this pupil's week is spent in instruction in basic ocademic skills?

_____ Hours

44. Approximately what percent of this pupil's day is spent in regular classes? (Mark one)

O None
O 1—25%
O 26—50%
O 51—75%
O Over 75% but not all
O 100% (Go to Q. 46)

45. Approximately what percent of this pupil's day is spent in a special class for the handicapped? (Mark one)

O None
O 1—25%
O 26—50%
O 51—75%
O Over 75% but not all
O 100%

46. What services designed to meet the needs of handicapped children are provided to this pupil? (Mark all that apply)

- O Diagnostic assessment
- O Guidance and counseling specifically for the handicapped
- O Emotional and social development skills
- O Tutoring
- O Language development skills
- O Speech therapy
- O Auditory training
- O Visual motor training
- O Physical therapy
- O Training in mobility skills
- O Training in self-care skills
- O General health care
- O Special transportation
- O Special resources (e.g., itinerant tutors, aides, etc.)
- O Other special services (e.g., provision for flexible scheduling)
- O Other (Specify): _____

47. What special equipment or materials are used in the services for the handicapped provided to this pupil? (Mark all that apply)

- O None
- O Programmed learning materials
- O Audiovisual materials or equipment
- O Special equipment and materials for speech therapy
- O Sensory aids
- O Physical therapy equipment ond supplies
- O Mobility aids
- O Special play equipment and materials
- O Other (Specify): _____

COMMENTS

You have completed this questionnaire. However, if you have any comments you would like to make regarding the clarity of the questions, definitions, and instructions used in this questionnaire, please use the rest of this page. THANK YOU FOR YOUR HELP.