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ABSTRACT

The purpose of this 1970-1971 evaluation was to examine the degree to which this cluster of projects has been contributing to the attainment of the community-related goals of the School District, and to test the validity of the assumptions (on which these projects are based) that information leads to participation and that information and participation have a positive effect on the opinions of school and community about each other.
(Author/DLG)

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EVALUATION OF TITLE I ESEA PROJECTS 1970-1971

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THE SCHOOL DISTRICT OF PHILADELPHIA



EVALUATION OF TITLE I
ESEA PROJECTS
1970-1971

USOE GRANT #48-0043-51-011-01

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THE SCHOOL DISTRICT OF PHILADELPHIA

August 1971

PROJECT ADMINISTRATORS

The projects reported in this volume have been funded under Title I ESEA, USOE Grant #48-0043-51-011-01, administered through the Office of Federal Programs, Thomas C. Rosica, Executive Director. Named below are the individual projects' administrators.

| PROJECT | ADMINISTRATOR |
|--|-----------------------|
| Art Specialist Teachers | Jack Bookbinder |
| Class for Mentally Retarded-Emotionally Disturbed Children | Warren B. Perry |
| Closed-Circuit Television | John W. Lyver |
| Counseling Services | Charles P. McLaughlin |
| Counselor Aides | Helen F. Faust |
| Creative Dramatics | Milton Goldberg |
| Education in World Affairs | Maria Hough |
| English as a Second Language | Eleanor L. Sandstrom |
| Germantown Area Schools Project | Patricia Russell |
| Improvement of Reading Skills: | |
| Part-Time (718) | Charles P. McLaughlin |
| Primary Reading Skills Center (719) | Charles P. McLaughlin |
| Reading Skills Centers (666) | Marjorie N. Farmer |
| Shared Time (666B) | Marjorie N. Farmer |
| Individualized Education Center | Charles P. McLaughlin |
| Instructional Materials Centers | Lillian L. Batchelor |
| Kindergarten Aides and Supervisors | Frances M. Becker |
| Learning Dimensions Program | Margaret Bingham |
| Motivation Program | Rebecca Segal |
| Music Specialist Teachers | Louis G. Wersen |
| New Staffing Patterns in EIP | |
| Elementary Schools | Milton Goldberg |
| Out-of-School Sequenced Science | |
| Experiences for Paired Schools | Samuel S. Lepow |
| Salable Vocational Skills | Milton C. Sussman |
| School-Community Coordinator Services | George Green |
| Special Mathematics Project | Alexander Tobin |
| Walnut Center | Frances M. Becker |
| Youth Serving Youth | Joseph J. Sweeney |

FOREWORD

School districts, the federal government, other funding agents, the community, and parents are becoming increasingly concerned with the impact of resource expenditures on educative outcomes. Historically, resource funds in excess of central school budgets have taken the form of special programs/projects designed to meet the needs of pupils within designated populations of a school district. Although these expenditures have produced significant educational changes for the designated population, parents and the community have requested that the level of additional funding be made available for all pupils in the entire school population. However, none of the proposed methods for securing additional funds (e.g., taxes or bond issues) has been successful in meeting these increasing demands.

Since additional monies have not been made available to central school budgets, more extensive monitoring and substantiation procedures have been introduced by federal and private funding agencies to ascertain (a) whether the recipients are using the appropriated/contributed funds in accordance with the specified guidelines, and (b) whether the school system has made in-kind contributions and subsequent programmatic/instructional changes as a result of the funding. The emphasis on the use of cost-accounting or cost-effectiveness procedures has been instituted as a means for determining whether a given program/project is producing outcomes that are better than or equivalent to practices costing more or less per unit. The intent of such analyses is to provide information that could assist school management and funding agencies in making judicious decisions concerning the feasibility of continuing and/or expanding identified successful efforts into other schools within a given school district or into other districts within the country.

Current methods of evaluation have demonstrated that the techniques employed to gather information about the attainment of specified behavioral objectives are effective. However, these methodologies have not demonstrated their capabilities to explain why certain programs/projects are not successful. (a) upon replication within a given school or (b) in those situations where the programs/projects have been expanded. Longitudinal data on projects implemented in specific schools reveal that such projects are usually successful for those who are directly involved in them. Moreover, since some of these programs/projects are specific for certain grades, students are usually successful performers in the grades in which the programs/projects are active, but tend to return to their previous pattern of underachievement in subsequent years.

This sporadic achievement pattern of children who move into and out of special programs/projects is of special concern to school districts, school administrators, parents, and the community since it is they who have the responsibility for the whole educational experience of each child. Parents and the community are particularly dismayed and do not understand why sustained improvement cannot be achieved throughout the entire educational experience of their children.

School districts like Philadelphia's have employed a cadre of highly specialized, competent educational researchers who perform active and comprehensive evaluation services for the school districts. It is to these professionals that the school management, teaching staff, community, parents, and students turn for reliable information which could be used to improve the educational programs. Although such professional evaluation staffs have provided reliable information relative to the specific programs/projects within the district, they have not been actively gathering information that could assist in answering broad comprehensive questions upon which major decisions are made. Therefore, gaps appear in information obtained through individual project evaluations and tend to raise doubts about the capability of such professionals to produce reliable information. Consequently, the full impact of the evaluation staff's capability to assist in the decision-making process of school districts has not been realized.

Although it is recognized that students directly involved in special programs/projects receive inestimable benefits from the experience, many questions have been raised concerning the worth of such expenditures to students not involved in the experience. In another form, the same concern is exhibited by the desires of some to dissolve the special programs for more global experiences--that is, situations that have direct applicability to a larger number of students and teachers.

In the face of these considerations, the initiation of major policies for systemwide changes requires at least three kinds of information about individual programs/projects and combinations thereof: (a) the extent of their total impact in the School District, (b) why they work successfully in some schools and not in others, and (c) whether their current implementation represents an optimal or unique programmatic environment which produces success for a specified student population.

The need to provide such information has caused the Department of Instructional Systems Research to change its ESEA, Title I evaluation strategy for the 1970-1971 school year. Instead of concentrating its efforts on determining whether each Title I project was reaching its individual goal, an attempt was made to ascertain the impact of the Title I projects in their particular service, programmatic, or supportive areas. It is believed that the Department of Instructional Systems Research can undertake this new emphasis because it has developed, over the past three years, a firm project performance base line--that is, the characteristic outputs of given Title I projects have been demonstrated. The consistent findings for each project suggest that the implementation procedures established for each project are producing their maximum service output. Moreover, it appears that the only ways in which the independent projects could raise their present level of output would be through (a) higher levels of resource funding or (b) improvements in the management of instructional knowledge and practices.

Of the two alternatives mentioned, the improvement of instructional management techniques (delivery of instructional services) seems more tenable. However, the Department of Instructional Systems Research

has not been gathering systematic data which could answer broad educational management questions. For example, "Can pupil achievement output be improved by a particular mix or combination of Title I projects? What are some of the school characteristics which seem to maximize the impact potential of the instructional programs sponsored by both central and federal budgets? Are the programs/projects presently budgeted and implemented helping to achieve the School District's overall objectives?"

To secure such information, a method for obtaining information about the impact of Title I projects on the broad operational goals of the School District has been undertaken. This technique has been called cluster evaluation. In the execution of this evaluation technique, the major emphasis is upon determining (a) whether the common objectives of the clustered projects are being achieved, (b) whether the clustered projects are contributing to the attainment of the School District's goals, and (c) whether there are requisite conditions which insure the success of each individual project within the cluster (be they school-specific or project-specific).

The cluster approach also permits the gathering of evaluative information to meet the specifications of Title I guidelines and affords the evaluator an opportunity to observe and investigate the project's impact from another vantage point. For example, instead of attempting to determine whether the School-Community Coordinator project is meeting its specific objectives, as was done for years 1968 through 1970, a broader investigation was conducted to ascertain (a) whether the goal of improving community participation in school-related activities was being realized, and (b) whether the assumptions and thrusts under which the project is operating lead to the successful attainment of these goals. In question form, "Are the current implementation methods and procedures used in projects having school-community goals motivating parents to become more involved in school-community activities?" Like emphases have been articulated in three other central areas: the improvement of instructional practices, the improvement of students' knowledge and competence in vocational and career selection, and the improvement of students' cultural knowledge, awareness, and social interactions.

It is the belief of the Director of the Division of Instructional Research and Development that the proposed emphasis upon the cluster-evaluation approach will provide (a) more comprehensive information for all levels of school management, the community, teachers, and students concerning the impact of the Title I project offerings on the attainment of articulated goals and concerns of the School District, and (b) more interactive information for project managers who are responsible for improving the capacity of the individual projects to deliver the services for which they were organized.

Edward K. Brown,
Director,
Division of Instructional
Research and Development

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EVALUATING TITLE I ESEA PROJECTS IN CLUSTERS

This volume culminates an intensive cooperative effort by the Department of Instructional Systems Research and other persons in the Division of Instructional Research and Development¹ to look at Philadelphia's ESEA, Title I program as a whole, greater than the sum of its separate parts.

A Broader Approach to Project Evaluation

The reorganization in 1970 of what was then called the Department of Program Assessment made it appropriate to rethink the project-by-project evaluation methodology employed during the two preceding years.

Although useful for producing base-line data, the individual project technique had certain fundamental limitations. Since students were exposed to several projects simultaneously, individual project evaluations might have provided questionable information (e.g., whether the children gained because of Project X or because of Project Y). An examination of the relationships existing between groups of projects and the attainment of School District goals seemed to be more relevant. Across-project evaluation could ascertain what changes were produced and might identify aspects of the total effort calling for revision. From such analyses, evaluation findings might identify outcomes which were contingent upon particular antecedent conditions and project processes.

Assessments of the impact of the Title I projects were envisioned as information-system networks which could provide data that met the specifications of the Elementary and Secondary Education Act's guidelines and at the same time would be consistent with the needs of the School District. Methods and procedures were designed to gather relevant information concerning selected impact areas which embraced the needs for these two levels of information. To meet the service responsibilities of the Department, a holistic approach was initiated. Under this technique, personnel were assigned in accordance with specified management-information needs rather than the accumulation of peripherally related projects. It was believed that this method of gathering specified clusters of related management information would provide a more viable system for obtaining the variety of information required by various levels of management, and facilitate an in-depth look at more comprehensive evaluation questions.

¹Dr. Robert Reiter has contributed extensively to report-format development, and his editorial assistance has helped to clarify thinking and to bridge technical communication gaps. Mrs. Deborah Kraiser and Miss Frances Byers have provided timely and extensive data-analysis support.

An examination of their goals revealed that the Title I projects in Philadelphia could be grouped into four general programmatic categories:

1. School-community relations and unique staffing patterns
2. Instructional practices and student cognitive performance
3. Auxiliary services to schools and pupils
4. Other Title I projects.

School-community relations and unique staffing patterns encompasses those projects which are designed to establish, refine, and strengthen the lines of communication between target-area schools and the communities they serve in order to facilitate the interpretation of school programs to the local area, apprise school personnel of community needs and aspirations, develop and implement joint efforts to improve the neighborhood, and obtain relevant information which will enable schools to operate more knowledgeably.

Instructional practices and student cognitive performance encompasses those projects which are designed (a) to encourage children, through diversified instructional materials, to work voluntarily with materials and situations in the learning environment, to function effectively in problem-solving situations, and to communicate their experiences orally or in a graphic or narrative display; (b) to provide specialized instruction and materials required by children with unusual learning problems, such as Spanish-speaking children, children with speech and oral-language disorders, and children who are mentally retarded and/or emotionally disturbed; and (c) to integrate appropriate hardware, software, and instructional strategies into multimodal approaches to reading, and other basic skills, that would tend to reverse the current trend toward drastic underachievement in fundamental subjects.

Auxiliary services to schools and pupils encompasses those projects which are designed (a) to provide special services for underachieving students that will facilitate emotional, intellectual, and social growth, and encourage potentially able target-area children to continue their education after the completion of high school; and (b) to provide an opportunity for target-area children to improve their vocational competency through instruction in self-chosen vocational areas and to expand their career choices through exploratory and hands-on experiences.

Other Title I projects are those projects which have as a common denominator aspects and concerns of a more general nature and, thereby, seek (a) to provide preschool and kindergarten children with additional personnel, activities, and care so that their initial exposure to learning will be enriched, thus establishing the foundation for future cognitive development by facilitating the development of a positive self-image, a sense of belonging, and feelings of security; (b) to provide target-area

children with the opportunity for cultural enrichment in the fields of art, music, and creative dramatics; and (c) to help children gain a greater understanding of themselves, their environment, and interpersonal relations.

Using the four general programmatic categories, each Title I project was classified and placed in one specific category for evaluation. If a project had multiple goals and would fit into several categories, placement was weighted toward the primary focus of the project as expressed in the ESEA, Title I funding descriptions, other evaluation reports, and comments by project personnel. The result of this classification procedure is seen in the Table of Contents of this volume.

Evaluation Procedure

The operational strategy of the 1970-1971 evaluation approach to the assessment of the Title I projects centered around the development of systematic information that would answer four basic questions related to the four programmatic categories:

1. To what degree have school-community relationships been strengthened by certain Title I projects?
2. What effect has the Title I program had upon the individualization of instructional techniques and upon students' cognitive performance?
3. In what ways have the Title I projects provided auxiliary services and enhanced vocational opportunities for target-area students?
4. To what degree have the efforts of certain Title I projects provided cultural experiences, intersocial opportunities, and supportive services for the target-area students?

Evaluation teams, consisting of Research Associates and Research Assistants, were charged with the responsibility of developing a comprehensive design which would yield information that focused directly upon the four selected impact areas.

As an integral part of the evaluation, provisions were made for the extensive monitoring of each project. Systematic observation visits provided (a) current descriptive information about the operational status of the project, and (b) concurrent programmatic information related to the focus of the cluster area. These were used to complement data obtained from other sources (e.g., tests, questionnaires, and interviews), thereby extending the information base for evaluation and creating a condition which could produce more meaningful and realistic findings.

During the 1970-1971 school year, 646 visits were made to 138 different Title I schools. Seventy-eight percent of the observations occurred in Grades K-6. The average length of each observation was

approximately 30 minutes. In only 2% of the visits were classes described as disinterested, uncooperative, or nonparticipating. Where applicable, pupils had their own instructional aids which were judged appropriate to their developmental level. Project-supportive personnel were observed in 76% of the observations. The average attendance in the 333 classrooms observed was 84.7% of the pupil enrollment. It is believed that this number of systematic observations, gathered from carefully determined samples, provides information that is representative of the School District.

Reporting the Findings

The preparation of a composite evaluation report grouping more than a score of federally funded projects could be beset with at least three dangers.

Multiple authorship could create a collection of diverse reports that force the reader to change gears mentally as he proceeds from one report to the next. To deal with this danger, the Department has cooperatively developed a uniform reporting format which contains two parts: a cluster report, and digest reports on projects within the cluster. The cluster report gives an overview of the clustered projects and their common impact, and sets the stage for the reports of noncommon aspects of the individual projects which follow it. In each report, the topical/textual sequence is the same: (a) identification and description of the project or cluster (rationale, objectives, operational characteristics, previous evaluations); (b) current evaluation procedure (scope and design, instruments, subjects, analysis of data); (c) results; and (d) conclusions.

A second danger could be the use of technical language which might leave the reader tangled in terminology. Although technical language cannot be completely avoided in a volume such as this one, an effort has been made to minimize this danger by frequent revisions in which non-technical terms and illustrations were substituted for more traditional publication techniques.

A third danger could be that, in trying to avoid oversimplification, the authors might have overcomplicated the report. Overcomplication in this context means that the reader may find, instead of a unitary answer indicating whether specific projects have attained their respective goals, a comprehensive statement that implies the impact or interactive effect of the projects on a more central question. In presenting the findings in this manner, it is recognized that the three to five years of background data on each project are indicative of its individual contribution. However, special attention is given to any significant changes in findings in the individual reports which follow the cluster presentation.

The evaluation reports which follow are aimed at providing information for a comprehensive program development/management system. Their function has been to present collected and processed information.

which both project developers and administration management can use to formulate a deeper understanding of the educational process. It is hoped that this report can help each person having project or management responsibilities to see his efforts as having an impact on, or merging into, the broad objectives and ongoing programs of the School District.

Stephen H. Davidoff,
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Division of Instructional
Research and Development

SCHOOL-COMMUNITY RELATIONS AND UNIQUE STAFFING PATTERNS

Projects in this cluster are contributing less to the achievement of the community-related goals of the School District than are non-cluster projects. Additionally, noncluster projects are having more of the desired impact regarding information, participation, and opinions (cluster objectives) than are the cluster projects. A possible explanation for the relatively lesser degree of effectiveness of the cluster projects could be that the assumptions on which these projects are based are invalid (i.e., information, per se, does not lead to participation, nor do information and participation, per se, lead to favorable opinions

Within the school-community cluster, projects differ from one another in their amount of impact. Impact, as defined in this study, appears to be dependent upon the relationship and combined effect of the operation of a project and the operation of the school to which the project has been allocated. Differences within and between schools indicate that cluster projects have the desired impact only in schools which have goals similar to those of the projects. Therefore, in order to maximize project effectiveness, school characteristics which are compatible with project goals must be identified.

It is no longer desirable to examine project effectiveness on a citywide basis alone. We must first examine the assumptions on which projects and groups of projects are based, to be sure that the stated goals are truly attainable for projects so designed. If this condition is met, the projects' operational success or failure is dependent not upon their designs but rather upon how they are deployed and utilized by key decision makers. Projects can achieve their stated goals if decision makers assign them to the appropriate schools (those which have combinations of factors that allow such projects to operate successfully. Decisions about cost-effectiveness in relation to the broad goals of the School District will be premature until deployment and utilization of the soundly designed projects have been perfected.

The evaluation of the "School-Community Relations and Unique Staffing Patterns" cluster and its component projects was designed, conducted, and reported by Barbara Carullo Goldsmith, Research Associate, and David W. Allen, Research Assistant. Mr. Allen had primary responsibility for the evaluation of the project, Out-of-School Sequenced Science Experiences for Paired Schools.

SCHOOL-COMMUNITY RELATIONS AND UNIQUE STAFFING PATTERNS

This cluster report assesses the common impact of six projects on the school and the community. Separate evaluations of the noncommon features of the individual projects follow this cluster report. Each of the individual project reports should be interpreted in the context of this cluster report.

Projects included in this cluster are School-Community Coordinator Services (SCC), New Staffing Patterns in EIP Elementary Schools (EIP), Kindergarten Aides and Supervisors (KA), Out-of-School Sequenced Science Experiences for Paired Schools (PSSP), Education in World Affairs (EWA), and Germantown Area Schools Project (GASP).

The Cluster of Projects

Although the democratic tradition of the United States presupposes that citizens will actively participate in political decision making, political and administrative momentum has often led to increased centralization of power, varying degrees of representation rather than participation, and the alienation of citizens from decisions which affect their lives. In education, the rise of large city school systems has widened the gulf between decision makers and persons affected by the decisions, and many school systems are now too large to administer sensitively to the needs of the community (Lopate, Flaxman, Bynum, & Gordon, 1970).

The natural result of this gulf is the tendency for the school system and the community it serves to be less than adequately informed about each other. This lack of information, in turn, can make participation difficult. It follows, then, that without information and participation, the school system can no longer administer sensitively to the needs of the community.

Although there are many reasons for current gulfs which separate the school and the community, a lack of appropriate methods to convey information and a limited view of teaching may be primarily at fault. Innovative and supplementary programs which provide for a reciprocal flow of information between the school and the community (so that each segment can be well informed about the other) and encourage a tripartite view of teaching involving instruction, curriculum development, and community involvement are viable solutions to the problem (Cuban, 1969).

A child's educational development depends upon a dynamic interaction between the school and the parent. Although this interaction generally has been limited in the public school situation, several studies have shown that even circumscribed participation by parents in school affairs correlates with heightened pupil development.

In a study of the effects of contacts between inner-city parents and school personnel on student achievement, Schiff (1963) reported that

parent participation and cooperation in school affairs led to pupil achievement, better school attendance and study habits, and fewer discipline problems. An analysis of the gains on a reading test which was administered to experimental and control groups of children revealed that pupils in the experimental (parent-participation) group improved significantly more than did pupils in the control group.

Brookover (1965) compared the development of three randomly-assigned low-achieving junior high school student groups: the first group received weekly counseling sessions, the second group had regular contacts with specialists in particular interest areas, and the parents of the third group had weekly meetings with school officials about their children's development. At the end of the year the first two groups showed no greater achievement as a result of their special treatment. However, the third group, whose parents had become more intimately involved in the school and in the children's development, showed heightened self-concept and made significant academic progress during the year.

Rankin (1967) investigated the relationship between parent behavior and the academic achievement of inner-city elementary school children and found substantial differences between the attitudes and behavior of mothers of high-achieving and low-achieving children. The mothers' ability to discuss school matters and their initiation of conferences with school officials were two of the general areas in which differences were most often found.

Parents' involvement in the school not only is associated with academic progress but seems also to influence children's attitudes toward school and teachers' attitudes toward children. Hess & Shipman (1966), in a study of the effects of mothers' attitudes and behavior toward their children in test situations, concluded, "Engaging parents in the activities of the school in some meaningful way may indeed assist the child in developing more adequate and useful images of the school, of the teacher, and of the role of the pupil [p. 35]." Rosenthal & Jacobson (1968) reported that inner-city children who profited from positive changes in teachers' expectations of their ability all had parents who were involved to some degree in the children's development in the school and were known by the teachers.

Compensatory educational programs, especially, benefit from parent involvement. From personal observations of compensatory programs in various parts of the country, Jablonsky (1968) reported, "Schools which have open doors to parents and community members have greater success in educating children. . . . The children seem to be direct beneficiaries of the change in perception on the part of their parents [p. 6]."

The School District of Philadelphia, recognizing the importance of parent involvement in education, has included the following in its School District goals:

1. To make our schools as freely integrated and diversified as possible and to develop greater harmony among differing ethnic groups.

2. To develop more direct and effective systems of communication and involvement with the community and with government agencies at all levels.

3. To improve adult educational opportunities.

4. To improve mental and physical health so that each student respects himself and others and so that he can cope with his environment constructively.

To contribute to the achievement of these community-related goals, the School District has allocated a certain portion of Title I ESEA money for projects designed to foster school-community involvement. Six such projects are the components of this cluster: School-Community Coordinator Services (SCC), New Staffing Patterns in Educational Improvement Program Schools (EIP), Kindergarten Aides and Supervisors (KA), Out-of-School Science Experiences for Paired Schools (PSSP), Education in World Affairs (EWA), and Germantown Area Schools Project (GASP).

In each of these projects, the staff members are residents of distressed areas of Philadelphia, and in SCC, EIP, KA, and GASP are living in the school communities which they serve. This staffing pattern should result in an increase in the two-way flow of information between school and community and an increase in community participation in school affairs. In addition, each project provides school staffs and community residents with information about its respective project practices. These information-channeling procedures should result in (a) increased school and community knowledge of school projects, (b) increased community participation in the school projects, and (c) increased harmony among differing ethnic groups.

The six projects have the following objectives in common:

Objective 1. To inform community residents about the objectives, programs, curricula, and services of the school, and to increase their participation in projects relating the school and the community.

Objective 2. To inform school personnel about the composition, needs, and concerns of their school's community, and to increase their participation in projects relating the school and the community.

Common to the modes of operation of all projects in the cluster is the implementation of various elements of the community school concept. Four of the projects (SCC, EIP, KA, and GASP) make education a joint process involving the school and the community and also upgrade the community by employing only community residents in certain school positions. Three projects (PSSP, EWA, and GASP) draw on resources in the community for improving education by utilizing existing community facilities to house educational programs. Two projects (PSSP and EWA) provide opportunities for children from different schools to increase their knowledge of the total community by bringing them together to share a common learning activity.

Previous evaluations of the individual projects in this cluster have provided information about the degree to which each project has achieved its own stated objectives. Although complete in themselves, they provided no information about where the cluster of projects stood in relation to the attainment of the community-related goals of the School District, nor did they provide information about the soundness of the assumptions on which these projects have been based.

Current Evaluation Procedure

The purpose of this 1970-1971 evaluation was to examine the degree to which this cluster of projects has been contributing to the attainment of the community-related goals of the School District, and to test the validity of the assumptions (on which these projects are based) that information leads to participation and that information and participation have a positive effect on the opinions of school and community about each other. The cluster evaluation was focused on five questions:

Question 1. Regarding parents and school personnel: How many are accurately informed about specific Title I ESEA projects?

Question 2. Regarding parents and school personnel: Do they tend to participate in the Title I ESEA projects about which they are accurately informed?

Question 3. Regarding parents and school personnel: To what extent are their opinions about school-community relations related to their accuracy of information about specific Title I ESEA projects?

Question 4. Regarding parents and school personnel: To what extent are their opinions about school-community relations related to their participation in specific Title I ESEA projects?

Question 5. Regarding parents and school personnel: Do they express a need for continuing efforts toward attaining the common objectives of the projects in this cluster?

To help in answering these questions, two forms of the locally designed School-Community Questionnaire were used. Form A for parents and Form B for principals and teachers paralleled each other in content, each eliciting factual information about certain Title I ESEA projects and the respondent's participation in them, as well as certain opinions.

Four variations of each form of the questionnaire corresponded to the four grades in the sample. Nine projects were selected for investigation: the six Title I ESEA projects in this cluster and three non-cluster Title I ESEA projects. Each variation of the questionnaire listed a different combination of five projects, each being designed to equalize the amount of exposure each project had in schools where it was implemented and in schools where it was not. (Copies of the eight instruments are on file in the Research Library of the Board of Education.)

A stratified random sample consisting of 37 schools was chosen to participate in the evaluation. Stratification criteria were (a) location in one of the seven Title I districts, and (b) school type. Each of the Title I schools in each of the seven districts was classified as one of the following school types:

1. Elementary with less than 750 pupils (E1);
2. Elementary with more than 750 pupils (E2);
3. Junior high (JH);
4. Senior high (SH).

In order to insure the representativeness of the sample, the fraction of the total Title I enrollment in each district was obtained for each of the four school types. In each district the number of schools to be chosen (which had been determined on the basis of the relative size of the district) was then multiplied by the appropriate fractions to obtain the number of E1, E2, JH, and SH schools to be selected. The schools were then chosen at random from lists of schools with the necessary characteristics.

Parents of children in Grades 1, 6, 7, and 10 were selected to be recipients of Form A of the questionnaire. It was determined that a representative sample would be obtained if the following numbers of classes in each school type were used:

1. E1 - Parents of 1 class of 1st graders and of 1 class of 6th graders;
2. E2 - Parents of 2 classes of 1st graders and of 2 classes of 6th graders;
3. JH - Parents of 3 classes of 7th graders.
4. SH - Parents of 4 classes of 10th graders.

The selection of the classes within each school was left to the principal.

Form B of the questionnaire was given to the principal and administrative assistants of the chosen schools, as well as to the teachers of the classes whose parents received Form A.

The percentages of return for Forms A and B of the questionnaire are reported in Table 1. The lowest acceptable rates of return had been set at 60% for elementary schools, 50% for junior high schools, and 40% for senior high schools. All returns were well above these minimums, with the exception of the senior high school parents in District 5. Therefore no conclusions were drawn about senior high schools in District 5.

TABLE 1
PERCENTAGE OF RETURN OF QUESTIONNAIRES

| District | School Type | Number of Schools | Parent Form A | | School Form B | |
|----------|-------------|-------------------|---------------|---------------------|---------------|---------------------|
| | | | Number Issued | Percentage Returned | Number Issued | Percentage Returned |
| 1 | Elementary | 5 | 500 | 83% | 24 | 100% |
| | Junior High | 1 | 91 | 74% | 4 | 100% |
| | Senior High | 1 | 111 | 70% | 5 | 100% |
| 2 | Elementary | 6 | 430 | 80% | 22 | 100% |
| | Junior High | 1 | 69 | 100% | 5 | 100% |
| | Senior High | 1 | 69 | 65% | 5 | 100% |
| 3 | Elementary | 6 | 316 | 89% | 20 | 100% |
| | Junior High | 1 | 79 | 62% | 5 | 100% |
| | Senior High | 0 | - | - | - | - |
| 4 | Elementary | 4 | 464 | 80% | 27 | 96% |
| | Junior High | 2 | 168 | 72% | 5 | 100% |
| | Senior High | 1 | 51 | 45% | 6 | 100% |
| 5 | Elementary | 4 | 258 | 78% | 16 | 100% |
| | Junior High | 1 | 88 | 68% | 5 | 100% |
| | Senior High | 1 | 70 | 34% | 6 | 100% |
| 6 | Elementary | 1 | 116 | 85% | 5 | 100% |
| | Junior High | 3 | 202 | 81% | 7 | 100% |
| | Senior High | 1 | 60 | 63% | 1 | 100% |
| 7 | Elementary | 3 | 231 | 74% | 10 | 90% |
| | Junior High | 0 | - | - | - | - |
| | Senior High | 0 | - | - | - | - |

To insure the authenticity and validity of the data, it was decided to eliminate from further analyses all forms with (a) multiple markings in any question, (b) more than ten omitted cells ("blanks") in the prespecified-project sections of Question 1, or (c) more than two of the following logical errors in Question 1:

1. A response of No to the item "Does your school have this project?" coupled with a response of Yes to the item "Is your child in this project?"

2. A No response to the item "Does your school have this project?" coupled with a response of The school to the item "Who gives you the most information about the project?"

3. A blank response to the item "Does your school have this project?" coupled with a response of Yes to the item "Is your child in this project?"

4. A blank response to the item "Does your school have this project?" coupled with a response of The school to the item "Who gives you the most information about the project?"

5. A response of A little or A lot to the item "How much do you know about the project?" coupled with a response of No one to the item "Who gives you the most information about the project?"

6. A response of Nothing to the item "How much do you know about the project?" coupled with a response of Help sometimes or Very active to the item "How much do you participate in the project?"

7. A response of No one to the item "Who gives you the most information about the project?" coupled with a response of Help sometimes or Very active to the item "How much do you participate in the project?"

The number of forms that were analyzed further and the number that were systematically eliminated from further analyses are presented in Table 2. The reduction in the size of the sample (resulting from the systematic elimination of forms) did not affect the representativeness of the sample. The number of forms dropped in each district was proportional to district size, and was less than the supplementary portion of the original sample that was considered expendable.

For parent Form A and school Form B, data analysis was performed on responses to the items in the questionnaires as follows:

For each project listed in the question, a respondent's answer about the existence of the project in the school (Item 1) was tabulated as either accurate or inaccurate. If that item response was accurate, his response about his child's (or pupil's) enrollment in the project (Item 2) was tabulated as either accurate or inaccurate. If both item responses were accurate and the project did, in fact, operate in that

TABLE 2

NUMBER OF QUESTIONNAIRES PROCESSED

| District | School Type | Number of Schools | Parent Form A | | | School Form B | | | | |
|----------|-------------|-------------------|---------------|-----------------|-------------------|-----------------|---------------|-----------------|-------------------|-----------------|
| | | | Number Issued | Number Returned | Number Eliminated | Number Analyzed | Number Issued | Number Returned | Number Eliminated | Number Analyzed |
| | | | Number | Number | Number | Number | Number | Number | Number | Number |
| 1 | Elementary | 5 | 500 | 415 | 21 | 394 | 24 | 24 | 0 | 24 |
| | Junior High | 1 | 91 | 67 | 3 | 64 | 4 | 4 | 0 | 4 |
| | Senior High | 1 | 111 | 78 | 5 | 73 | 5 | 5 | 0 | 5 |
| 2 | Elementary | 6 | 430 | 343 | 40 | 303 | 22 | 22 | 0 | 22 |
| | Junior High | 1 | 69 | 69 | 5 | 64 | 5 | 5 | 0 | 5 |
| | Senior High | 1 | 69 | 45 | 7 | 38 | 5 | 5 | 0 | 5 |
| 3 | Elementary | 6 | 316 | 281 | 36 | 245 | 20 | 20 | 0 | 20 |
| | Junior High | 1 | 79 | 49 | 1 | 48 | 5 | 5 | 0 | 5 |
| | Senior High | 0 | - | - | - | - | - | - | - | - |
| 4 | Elementary | 4 | 464 | 370 | 29 | 341 | 27 | 26 | 0 | 26 |
| | Junior High | 2 | 168 | 122 | 10 | 112 | 5 | 5 | 0 | 5 |
| | Senior High | 1 | 51 | 23 | 0 | 23 | 6 | 6 | 0 | 6 |
| 5 | Elementary | 4 | 258 | 200 | 45 | 155 | 16 | 16 | 0 | 16 |
| | Junior High | 1 | 88 | 60 | 8 | 52 | 5 | 5 | 0 | 5 |
| | Senior High | 1 | 70 | 24 | 2 | 22 | 6 | 6 | 0 | 6 |
| 6 | Elementary | 1 | 116 | 99 | 2 | 97 | 5 | 5 | 0 | 5 |
| | Junior High | 3 | 202 | 163 | 23 | 140 | 7 | 7 | 0 | 7 |
| | Senior High | 1 | 60 | 38 | 8 | 30 | 1 | 1 | 0 | 1 |
| 7 | Elementary | 3 | 231 | 172 | 9 | 163 | 10 | 9 | 0 | 9 |
| | Junior High | 0 | - | - | - | - | - | - | - | - |
| | Senior High | 0 | - | - | - | - | - | - | - | - |

school, the respondent's answers to the other items--about the extent of his knowledge about the project (Item 3), his chief source of information (Item 4), and the extent of his participation in the project (Item 5)--were tabulated. This procedure is shown diagrammatically in Figure 1.

The tabulations were summarized for each school and for each district as well as for all respondents. However, school and district breakdowns are not shown in this report.

Frequencies and percentages were obtained for all respondents' answers to Questions 2-7 of Forms A and B of the questionnaire.

In addition, each respondent was rated on three scales: accuracy, participation, and opinion. The accuracy rating was on a scale from zero to 10 and measured the degree to which the respondent knew whether each project listed in Question 1 was or was not operating in the school. The participation rating, also on a zero-to-10 scale, measured the degree to which a respondent who knew that a project operated in the school was participating in that project. The opinion rating was on a scale from 3 to 6, where 3 indicated that the respondent was dissatisfied with the amount of school-community interaction and 6 indicated that the respondent was satisfied with it. Means and standard deviations were computed for these three ratings for each school, for each district, and for all respondents. Correlation coefficients were computed to determine the mutual relationships, if any, among accuracy, participation, and opinion.

Results

Data relevant to Question 1. Regarding parents and school personnel: How many are accurately informed about specific Title I ESEA projects?

One facet of the impact of a Title I ESEA project, especially if it is concerned with school-community relations, is specificity of information. Parents and school personnel must be accurately informed that the School District is providing their school with specialized services and that their children are the direct beneficiaries of these services. To be informed about a Title I ESEA project, parents and school personnel must know (a) whether the project exists in their school and (b) whether their children or pupils are in the project.

The first two items in Question 1 of the questionnaire were designed to test the respondents' knowledge about the existence of the specific projects in the school (Item 1) and about the children's enrollment in these projects (Item 2).

Responses to Item 1 are summarized in Table 3 (parents) and Table 4 (principals and teachers). Responses to Item 2 are summarized in Table 5 (parents) and Table 6 (principals and teachers).

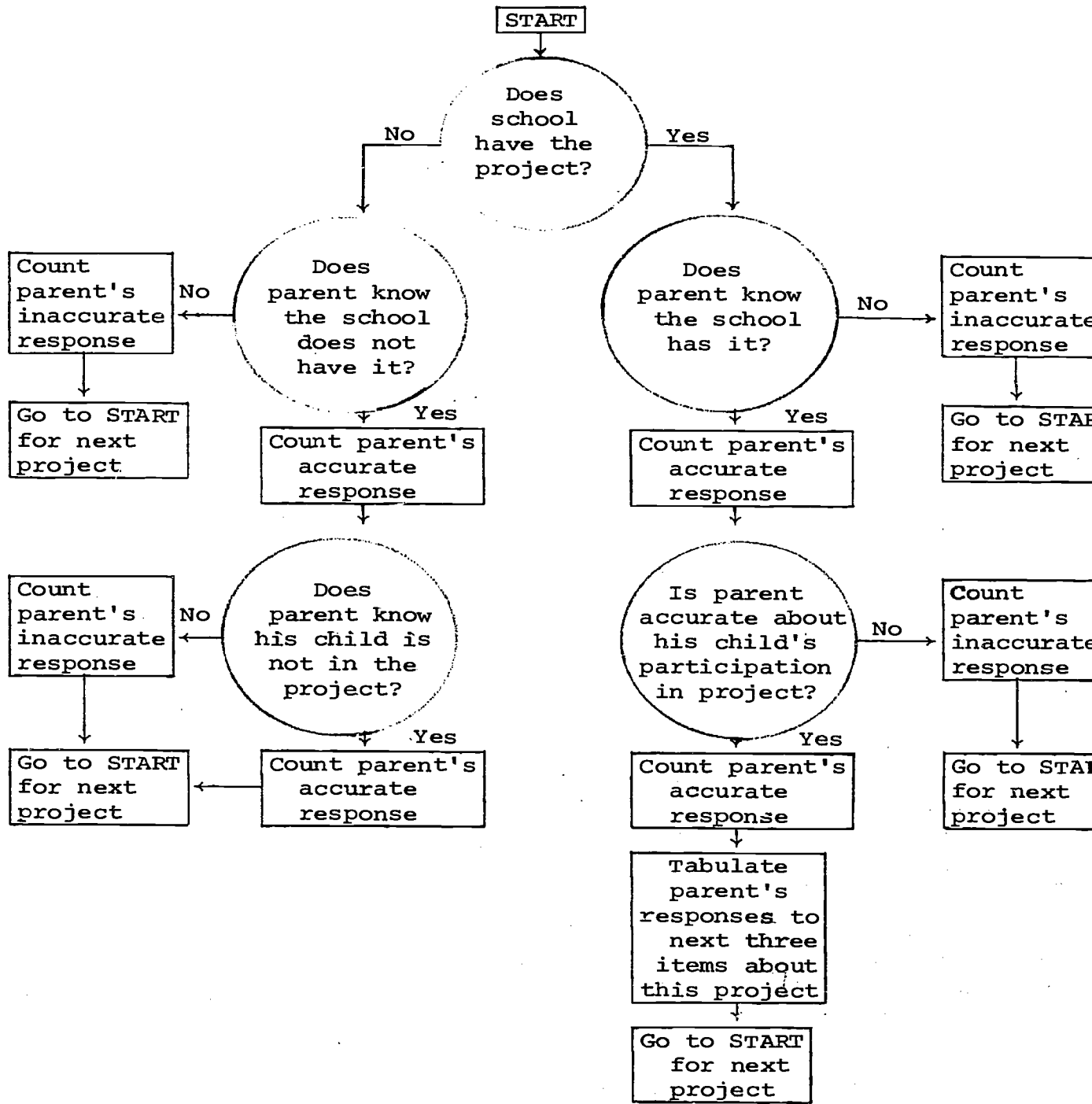


Fig. 1. Process for analyzing parents' responses about each project listed in the Form A questionnaire. A parallel procedure was used with school personnel's responses on the Form B questionnaire.

TABLE 3

SUMMARY OF PARENT RESPONSES TO ITEM 1: "DOES YOUR SCHOOL HAVE THIS PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=9446) | Other Projects Total (N=2355) |
|--------------------|-----------------------------------|--------------|--------------|---------------|--------------|--------------|-----------------------------|--------------|------------|---------------------------------|-------------------------------|
| | KA (N=868) | EIP (N=2364) | SCC (N=2364) | PSSP (N=1698) | EWA (N=1496) | GASP (N=656) | FT (N=868) | IRS (N=1310) | MP (N=177) | | |
| Accurate | 57% | 53% | 57% | 71% | 60% | 91% | 54% | 39% | 69% | 61% | 48% |
| No | 3% | 21% | 4% | 65% | 32% | 67% | 38% | 26% | 35% | 28% | 32% |
| Yes | 54% | 32% | 53% | 6% | 28% | 24% | 16% | 13% | 34% | 33% | 16% |
| Inaccurate | 38% | 42% | 39% | 25% | 35% | 7% | 41% | 57% | 27% | 35% | 47% |
| No | 20% | 28% | 3% | 20% | 13% | 6% | 1% | 9% | 18% | 19% | 6% |
| Yes | 18% | 14% | 36% | 5% | 22% | 1% | 40% | 48% | 9% | 16% | 41% |
| Blank or Illogical | 5% | 5% | 4% | 4% | 5% | 2% | 5% | 4% | 4% | 4% | 5% |

¹FT: Head Start - Follow Through.

IRS: Improvement of Reading Skills (Reading Skills Centers).

MP: Motivation Program.

TABLE 4

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO ITEM 1: "DOES YOUR SCHOOL HAVE THIS PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Other Projects Total (N=705) (N=176) | |
|--------------------|-----------------------------------|----------------|----------------|-----------------|----------------|----------------|-----------------------------|---------------|--------------|---|-----|
| | KA (N=62) | KIP (N=176) | SCC (N=177) | PSSP (N=117) | EWA (N=114) | GASP (N=59) | FT (N=62) | IRS (N=90) | MP (N=24) | | |
| Accurate | 65% | 66% | 92% | 79% | 76% | 73% | 76% | 42% | 100% | 77% | 62% |
| No | 0% | 29% | 2% | 69% | 27% | 65% | 58% | 34% | 4% | 29% | 39% |
| Yes | 65% | 37% | 90% | 10% | 49% | 8% | 18% | 8% | 96% | 48% | 23% |
| Inaccurate | 29% | 27% | 4% | 11% | 16% | 3% | 10% | 51% | 0% | 15% | 30% |
| No | 11% | 9% | 2% | 1% | 6% | 2% | 0% | 10% | 0% | 5% | 5% |
| Yes | 18% | 18% | 2% | 10% | 10% | 1% | 10% | 41% | 0% | 10% | 25% |
| Blank or Illogical | 6% | 7% | 4% | 10% | 8% | 24% | 14% | 7% | 0% | 8% | 8% |

¹Acronyms of noncluster projects are defined in Table 3 footnote.



TABLE 5

SUMMARY OF PARENT RESPONSES TO ITEM 2: "IS YOUR CHILD IN THIS PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=4428) | Other Projects Total (N=1114) |
|--------------------|-----------------------------------|--------------|-------|---------------|-------------|--------------|-----------------------------|-------------|------------|---------------------------------|-------------------------------|
| | KA (N=493) | EIP (N=1246) | SCC - | PSSP (N=1197) | EWA (N=892) | GASP (N=600) | FT (N=469) | IRS (N=514) | MP (N=131) | | |
| Accurate | 74% | 68% | - | 98% | 82% | 99% | 95% | 85% | 62% | 80% | 86% |
| No | 74% | 55% | - | 93% | 69% | 73% | 70% | 71% | 7% | 72% | 63% |
| Yes | 0% | 13% | - | 5% | 13% | 26% | 25% | 14% | 55% | 8% | 23% |
| Inaccurate | 25% | 30% | - | 2% | 18% | 0% | 4% | 15% | 37% | 19% | 13% |
| No | 0% | 9% | - | 0% | 6% | 0% | 1% | 10% | 36% | 6% | 9% |
| Yes | 25% | 21% | - | 2% | 12% | 0% | 3% | 5% | 1% | 13% | 4% |
| Blank or Illogical | 1% | 2% | - | 0% | 0% | 1% | 1% | 0% | 1% | 1% | 1% |

¹ Acronyms of noncluster projects are defined in Table 3 footnote.

TABLE 6

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO ITEM 2: "ARE ANY OF YOUR PUPILS IN THIS PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=375) | Other Projects Total (N=109) |
|--------------------|-----------------------------------|-------------|-------|-------------|------------|-------------|-----------------------------|------------|-----------|--------------------------------|------------------------------|
| | KA (N=40) | EIP (N=116) | SCC - | PSSP (N=92) | EWA (N=87) | GASP (N=40) | FT (N=47) | IRS (N=38) | MP (N=24) | | |
| Accurate | 85% | 67% | - | 88% | 70% | 75% | 87% | 68% | 75% | 76% | 84% |
| No | 55% | 39% | - | 77% | 35% | 62% | 66% | 58% | 62% | 52% | 50% |
| Yes | 30% | 28% | - | 11% | 35% | 13% | 21% | 10% | 13% | 24% | 34% |
| Inaccurate | 12% | 16% | - | 0% | 18% | 0% | 0% | 3% | 0% | 10% | 1% |
| No | 10% | 4% | - | 0% | 7% | 0% | 0% | 0% | 0% | 4% | 0% |
| Yes | 2% | 12% | - | 0% | 11% | 0% | 0% | 3% | 0% | 6% | 1% |
| Blank or Illogical | 3% | 17% | - | 12% | 12% | 25% | 13% | 29% | 25% | 14% | 15% |

¹Acronyms of noncluster projects are defined in Table 3 footnote.

Proportionately more parents and school personnel were accurately informed about the existence of the cluster projects in the schools than about noncluster projects. However, proportionately more members of both groups were accurately informed about children's enrollment in the noncluster projects than about their enrollment in the cluster projects.

Across cluster and noncluster projects, proportionately more principals and teachers than parents were accurately informed about which projects existed in their schools (with the exception of GASP), but proportionately more parents than school personnel were accurately informed about the children's enrollment in projects (with the exception of KA). The mean accuracy score (on a 10-point scale) for school personnel was 7.4; for parents it was 5.5. This meant that the average principal or teacher tended to know four of the five projects listed in the questionnaire's Question 1, whereas the average parent tended to know only $2\frac{1}{2}$ of the five projects.

The only conspicuous similarity between parents and school personnel regarding their responses about the individual projects was that proportionately more of both groups were uninformed about EIP than about any other project in relation to the existence of the project in the school and the enrollment of children in the project.

Parents and school personnel were accurately informed about different Title I ESEA projects. Proportionately more parents were accurately informed about the existence in the schools of projects in which their children were enrolled. Proportionately more principals and teachers were accurately informed about which projects existed in their schools, whether or not the teachers' own pupils were enrolled in them.

Specific project characteristics appear to have a definite effect on impact as measured by accuracy scores. Most parents and school personnel were accurately informed about smaller projects that involve transporting children from one facility to another (PSSP, EWA). Parents and school personnel tended not to be accurately informed about larger projects involving the utilization of auxiliary personnel in a supportive, instructional capacity (KA, EIP, but not SCC). Fewer parents and school personnel were accurately informed about projects that had received a great deal of publicity (e.g., FT, IRS). Most respondents who were inaccurate about these projects responded Yes to the item "Does your school have this project?" when, in fact, the project was not in their schools.

Specific factors in school communities appear to be related to project impact as measured by accuracy scores. In school-by-school examination of the data from each district (not presented in this report) it was noted that in schools where more principals and teachers were accurately informed, more parents were accurately informed. And in schools where fewer principals and teachers were accurately informed, fewer parents were accurately informed. Also, individual school communities tended to be informed about the same projects.

To the extent that accuracy of information is an indicator of impact, the projects in the cluster (designated as school-community impact projects) have had a greater impact on school and community than the other Title I ESEA projects investigated. While 59% of the parents and school personnel were accurately informed about the existence of the cluster projects in their schools (as opposed to 50% for the other Title I projects), the other 41% of the respondents were not accurate about them. And 20% of the 59% who were accurate about the existence of the cluster projects in the schools were not accurate about the participation of their children in the project (as opposed to 13% for the other Title I projects).

Data relevant to Question 2: Regarding parents and school personnel: Do they tend to participate in the Title I ESEA projects about which they are accurately informed?

Responses to Item 5, regarding the respondents' degree of participation in specific projects, are summarized in Table 7 (parents) and Table 8 (principals and teachers).

For projects about which they were accurately informed, principals and teachers indicated a higher degree of participation than did parents. Seventy-nine percent of the parents claimed no involvement in the projects about which they were accurately informed, 16% claimed that they helped sometimes, and 4% claimed that they were very active. Thirty-two percent of the school personnel claimed no involvement in the projects about which they were accurately informed, 30% claimed that they helped sometimes, and 36% claimed that they were very active.

On the scale from zero (no participation in any of the specified projects) to 10 (very active participation in all specified projects existing in the local school) the average parent indicated a degree of participation equivalent to 0.6 points, while the average school staff member indicated his participation as being equivalent to 3.9 points.

More parents and more school personnel indicated some degree of participation in noncluster projects than in cluster projects. In addition, their indicated degree of participation was greater in noncluster projects than in cluster projects. To the extent that participation is an indicator of impact, the projects in the cluster (designated as school-community impact projects) have had less impact on school and community than the other Title I ESEA projects investigated.

Parents and school personnel agreed on the three projects in which they participated most: Head Start - Follow Through (FT), GASP, and Motivation Program (MP), in that order.

Specific factors in school communities appear to be related to project impact as measured by participation scores. In school-by-school examination of the data from each district (not presented in this report) it was noted that participation scores varied significantly from school

TABLE 7

SUMMARY OF PARENT RESPONSES TO ITEM 5: "HOW MUCH DO YOU PARTICIPATE IN THE PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=2452) | Other Projects Total (N=322) |
|--------------------|-----------------------------------|-------------|--------------|-------------|-------------|--------------|-----------------------------|------------|-----------|---------------------------------|------------------------------|
| | KA (N=336) | EIP (N=373) | SCC (N=1260) | PSSP (N=72) | EWA (N=252) | GASP (N=159) | FT (N=152) | IRS (N=96) | MP (N=74) | | |
| Not Involved | 27% | 82% | 78% | 89% | 82% | 66% | 63% | 79% | 73% | 80% | 70% |
| Help Sometimes | 11% | 13% | 17% | 7% | 17% | 15% | 24% | 17% | 26% | 15% | 22% |
| Very Active | 1% | 4% | 3% | 4% | 1% | 19% | 12% | 4% | 1% | 4% | 7% |
| Blank or Illogical | 1% | 1% | 2% | 0% | 0% | 0% | 1% | 0% | 0% | 1% | 1% |

¹ Acronyms of noncluster projects are defined in Table 3 footnote.

TABLE 8

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO ITEM 5: "HOW MUCH DO YOU PARTICIPATE IN THE PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=292) | Other Projects Total (N=39) |
|--------------------|-----------------------------------|------------|-------------|-------------|------------|------------|-----------------------------|-----------|-----------|--------------------------------|-----------------------------|
| | KA (N=33) | EIP (N=45) | SCC (N=159) | PSSP (N=12) | EWA (N=38) | GASP (N=5) | FT (N=10) | IRS (N=6) | MP (N=23) | | |
| Not Involved | 61% | 29% | 30% | 33% | 32% | 20% | 0% | 50% | 22% | 34% | 20% |
| Help Sometimes | 6% | 24% | 33% | 33% | 47% | 60% | 0% | 33% | 39% | 31% | 24% |
| Very Active | 30% | 47% | 35% | 33% | 21% | 20% | 100% | 17% | 39% | 33% | 56% |
| Blank or Illogical | 3% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% |

¹Acronyms of noncluster projects are defined in Table 3 footnote.



to school and from district to district. This finding suggested that community participation was sought in some schools but not in others.

In order to test the assumption (on which the projects in this cluster are based) that information leads to participation, correlation coefficients to indicate the relationship, if any, between accurate information and participation were computed for both groups of respondents. These coefficients were +.24 for parents and +.44 for principals and teachers, which might suggest that there was some degree of direct relationship between accurate information and participation for both groups. However, the degree of relationship obtained was quantitatively similar to the degree of relationship that had been superimposed upon the analysis by the cluster's assumption that information leads to participation. Thus, because it was possible for members of both groups to have information without participation but virtually impossible for them to have participation without accurate information, these correlation coefficients were interpreted as indicating no true relationship between accurate information and participation.

Data relevant to Question 3. Regarding parents and school personnel: To what extent are their opinions about school-community relations related to their accuracy of information about specific Title I ESEA projects?

Questions 5, 6, and 7 of the questionnaire were designed to elicit respondents' opinions about the adequacy of (a) parents' participation in school affairs, (b) school personnel's knowledge about the community, and (c) their own information about the other segment of the school-community partnership. Responses to these questions are summarized in Table 9 (parents) and Table 10 (principals and teachers).

TABLE 9

SUMMARY OF PARENT RESPONSES TO QUESTIONS 5, 6, AND 7
ON THE QUESTIONNAIRE (N=2363)

| Question | Yes | No | Blank |
|--|-----|-----|-------|
| 5. Do you think parents participate enough in school affairs? | 14% | 85% | 1% |
| 6. Do you think school staff members know enough about your community? | 22% | 77% | 1% |
| 7. Do you wish you knew more about your child's school? | 93% | 6% | 1% |

TABLE 10

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO QUESTIONS 5, 6, AND 7
ON THE QUESTIONNAIRE (N=176)

| Question | Yes | No | Blank |
|---|-----|-----|-------|
| 5. Do you think parents participate enough in school affairs? | 14% | 84% | 2% |
| 6. Do you think school staff members know enough about the community? | 24% | 75% | 1% |
| 7. Do you wish you knew more about your school's community? | 87% | 12% | 1% |

Parents and school personnel both expressed the feeling that the amount of information and participation had not reached an adequate level. This was evident in the parents' responses to an even greater degree than in the principals' and teachers' responses.

In school-by-school examination of the data from each district (not presented in this report) it was noted that opinions varied significantly from school to school and from district to district. This finding suggested that in schools (and districts) where information was provided and parent participation was sought, principals and teachers responded more favorably to Questions 5, 6, and 7 of the questionnaire.

In order to test the assumption (on which these projects are based) that information has a positive effect on opinion, correlation coefficients to indicate the relationship, if any, between accurate information and opinion were computed for both groups of respondents. These coefficients were +.03 for parents and -.02 for principals and teachers, indicating that there was virtually no relationship between accurate information and favorable opinion for either group. Thus the data did not support the assumption that information leads to favorable opinion.

Data relevant to Question 4. Regarding parents and school personnel: To what extent are their opinions about school-community relations related to their participation in specific Title I ESEA projects?

In order to test the assumption (on which these projects are based) that participation has a positive effect on opinion, correlation coefficients to indicate the relationship, if any, between participation

and opinion were computed for both groups of respondents. These coefficients were +.10 for parents and +.06 for principals and teachers, indicating that there was little or no relationship between participation and favorable opinion for either group. Thus the data did not support the assumption that participation leads to favorable opinion.

Data relevant to Question 5. Regarding parents and school personnel: Do they express a need for continuing efforts toward attaining the common objectives of the projects in this cluster?

In addition to ascertaining the opinions of parents and school personnel about school-community relations, Questions 5, 6, and 7 of the questionnaire permitted assessment of the need for continuing efforts toward attaining the common objectives of the projects in this cluster. For the summary of responses to these questions the reader is again referred to Table 9 (parents) and Table 10 (principals and teachers), which indicate that an overwhelming majority of parents and school personnel expressed a need for more information and more participation. Responses from both groups paralleled one another in intensity for the three questions. Parents and school personnel expressed a need for parents to participate more in school affairs and for school personnel to be more knowledgeable about the community. In addition, each group expressed a desire to know more about the other.

In school-by-school examination of the data from each district (not presented in this report) it was noted that parents and school personnel responded to the opinion questions in the same way, on the average, regardless of their accuracy and participation scores.

Another interpretation of responses to Question 7 suggests that, by expressing a desire for more information, parents and school personnel were, in effect, indicating that the projects in the cluster had not been so successful as both groups wanted them to be in attaining the common goals of the cluster. Data presented in earlier pages of this report, indicating that projects in the cluster had been less successful than noncluster projects in supplying information and evoking participation, lend credence to this interpretation.

It was noted that a nationally distributed survey by Gallup (1969) included a question similar to Question 7 of our questionnaire. In the Gallup survey, 65% of responding parents indicated that they wished they knew more about the schools in their community. The fact that 93% of our responding parents indicated a similar desire dramatically emphasizes the need in Philadelphia, and perhaps other urban areas, for implementing projects (or systems) that will be effective in providing information about the schools to parents.

Complementary Data

Item 3 in Question 1 of the questionnaire was designed to ascertain to what extent parents and school personnel considered themselves to be informed about the cluster projects and the noncluster projects. Responses to this item are summarized in Table 11 (parents) and Table 12 (school personnel).

Of all the projects listed in this study, cluster projects were the ones about which parents and school personnel responded most often that they knew "nothing." The principals and teachers responded that they knew at least "a little" about all the projects listed except SCC, EIP, PSSP, and EWA, all of which were cluster projects. Five of the projects about which the parents said they knew the least (SCC, EIP, KA, PSSP, and EWA) were cluster projects. These findings indicated that the projects in the cluster (designated as the school-community impact cluster) had less impact on school and community with regard to the amount of information supplied about the projects than did noncluster projects. Parents and school personnel felt less informed about cluster projects than about noncluster projects.

Item 4 in Question 1 of the questionnaire was designed to ascertain the chief source of parents' and school personnel's accurate and inaccurate information about projects. Responses to this item are summarized in Table 13 (parents) and Table 14 (principals and teachers).

Both groups indicated that their primary source of accurate information about cluster and noncluster projects was the school. When the responses for Head Start - Follow Through (FT) were eliminated from the noncluster totals, the second source of parents' information about noncluster projects was the child. Thus, parents received most of their accurate information about the specified Title I ESEA projects either from the school or from the child, whereas principals and teachers received most of their accurate information from members of the school staff. (The data have not yet been analyzed to identify the respondents' primary sources of inaccurate information. They will be included in a supplementary report.)

Question 2 of the questionnaire was designed to ascertain the main channels of communication between school and community. Responses to this question are summarized in Table 15 (parents) and Table 16 (school personnel).

The responses to this question indicated that parents spoke most frequently with teachers, and that teachers and principals spoke most frequently with parents and School-Community Coordinators. The primary channel of communication is between the two parties most directly involved with the child--the parent and the teacher.

Questions 3 and 4 of the questionnaire were designed to ascertain the extent to which parents and school personnel attended Home and

TABLE 11

SUMMARY OF PARENT RESPONSES TO ITEM 3: "HOW MUCH DO YOU KNOW ABOUT THE PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=2452) | Other Projects Total (N=289) |
|--------------------|-----------------------------------|-------------|--------------|-------------|-------------|--------------|-----------------------------|------------|-----------|---------------------------------|------------------------------|
| | KA (N=336) | EIP (N=373) | SCC (N=1260) | PSSP (N=72) | EWA (N=252) | GASP (N=159) | FT (N=119) | IRS (N=96) | MP (N=74) | | |
| Nothing | 29% | 30% | 25% | 22% | 43% | 2% | 1% | 18% | 5% | 26% | 7% |
| A Little | 62% | 56% | 59% | 59% | 50% | 51% | 47% | 66% | 57% | 57% | 56% |
| A Lot | 8% | 13% | 16% | 19% | 6% | 46% | 49% | 16% | 38% | 16% | 36% |
| Blank or Illogical | 1% | 1% | 0% | 0% | 1% | 1% | 3% | 0% | 0% | 1% | 1% |

¹ Acronyms of noncluster projects are defined in Table 3 footnote.

TABLE 12

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO ITEM 3: "HOW MUCH DO YOU KNOW ABOUT THE PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=292) | Other Projects Total (N=39) |
|--------------------|-----------------------------------|------------|-------------|-------------|------------|------------|-----------------------------|-----------|-----------|--------------------------------|-----------------------------|
| | KA (N=33) | EIP (N=45) | SCC (N=159) | PSSP (N=12) | EWA (N=38) | GASP (N=5) | FT (N=10) | IRS (N=6) | MP (N=23) | | |
| Nothing | 0% | 4% | 1% | 8% | 3% | 0% | 0% | 0% | 0% | 2% | 0% |
| A Little | 33% | 31% | 36% | 42% | 42% | 20% | 10% | 33% | 22% | 36% | 20% |
| A Lot | 64% | 65% | 63% | 50% | 55% | 60% | 90% | 67% | 74% | 61% | 77% |
| Blank or Illogical | 3% | 0% | 0% | 0% | 0% | 20% | 0% | 0% | 4% | 1% | 3% |

¹Acronyms of noncluster projects are defined in Table 3 footnote.



TABLE 13

SUMMARY OF PARENT RESPONSES TO ITEM 4: "WHO GIVES YOU THE MOST INFORMATION ABOUT THE PROJECT?"

| Response | School-Community Cluster Projects | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=2450) | Other Projects Total (N=279) |
|--------------------|-----------------------------------|-------------|--------------|-------------|-------------|--------------|-----------------------------|------------|-----------|---------------------------------|------------------------------|
| | KA (N=336) | EIP (N=371) | SCC (N=1260) | PSSP (N=72) | EWA (N=252) | GASP (N=159) | FT (N=119) | IRS (N=86) | MP (N=74) | | |
| No One | 0% | 15% | 16% | 0% | 27% | 1% | 2% | 6% | 1% | 16% | 3% |
| The School | 15% | 35% | 48% | 14% | 18% | 19% | 74% | 33% | 37% | 39% | 51% |
| Your Child | 38% | 36% | 16% | 11% | 47% | 73% | 15% | 51% | 62% | 30% | 39% |
| Other People | 30% | 14% | 19% | 71% | 8% | 7% | 8% | 10% | 0% | 15% | 7% |
| Blank or Illogical | 17% | 0% | 1% | 4% | 0% | 0% | 1% | 0% | 0% | 0% | 0% |

¹ Acronyms of noncluster projects are defined in Table 3 footnote.

TABLE 14

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO ITEM 4: "WHO GIVES YOU THE MOST INFORMATION ABOUT THE PROJECT?"

| Response | School-Community Cluster Projects | | | | | | | Other Projects ¹ | | | Cluster Projects Total (N=312) | Other Projects Total (N=39) |
|--------------------|-----------------------------------|---------------|----------------|----------------|---------------|---------------|--------------|-----------------------------|--------------|-----|-----------------------------------|--------------------------------|
| | KA (N=54) | EIP (N=45) | SCC (N=159) | PSSP (N=12) | EWA (N=38) | GASP (N=4) | FT (N=10) | IRS (N=6) | MP (N=23) | | | |
| No One | 0% | 4% | 1% | 8% | 3% | 0% | 0% | 0% | 0% | 1% | 0% | |
| School Staff | 91% | 78% | 89% | 50% | 58% | 50% | 80% | 83% | 87% | 82% | 85% | |
| Your Pupils | 0% | 0% | 1% | 17% | 13% | 25% | 0% | 17% | 13% | 3% | 10% | |
| Other People | 5% | 13% | 7% | 25% | 18% | 25% | 20% | 0% | 0% | 10% | 5% | |
| Blank or Illogical | 4% | 5% | 2% | 0% | 8% | 0% | 0% | 0% | 0% | 4% | 0% | |

¹ Acronyms of noncluster projects are defined in Table 3 footnote.

TABLE 15

SUMMARY OF PARENT RESPONSES TO THE QUESTION, "IN THE LAST SIX MONTHS DID YOU TALK WITH ANY SCHOOL PEOPLE . . . ?" (N=2363)

| Response | Teacher | Principal | Guidance Counselor | School-Community Coordinator | Aide | Other Staff Member |
|-------------|---------|-----------|--------------------|------------------------------|------|--------------------|
| Yes | 52% | 21% | 14% | 11% | 8% | 10% |
| No or Blank | 48% | 79% | 86% | 89% | 92% | 90% |

TABLE 16

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO THE QUESTION, "IN THE LAST SIX MONTHS, DID YOU TALK WITH ANY OF THESE PERSONS . . . ?" (N=176)

| Response | Parent/-Guardian | School-Community Coordinator | Home-School Visitor | Other Community Person | Community Service Agency Worker | Community Leader |
|-------------|------------------|------------------------------|---------------------|------------------------|---------------------------------|------------------|
| Yes | 94% | 87% | 72% | 61% | 49% | 47% |
| No or Blank | 6% | 13% | 28% | 39% | 51% | 53% |

School Association meetings and community meetings. Responses to the questions are summarized in Table 17 (parents) and Table 18 (principals and teachers). A greater percentage of principals and teachers than parents attended school and community meetings during the six-month period.

TABLE 17

SUMMARY OF PARENT RESPONSES TO QUESTIONS 3 AND 4
ON THE QUESTIONNAIRE (N=2363)

| Question | Response | | |
|--|----------|-----|-------|
| | Yes | No | Blank |
| 3. In the last six months, did you attend the Home and School Association or any other school meeting for parents? | 44% | 56% | 0% |
| 4. In the last six months, did you attend a meeting of any community organization? | 30% | 70% | 0% |

TABLE 18

SUMMARY OF SCHOOL-PERSONNEL RESPONSES TO QUESTIONS 3 AND 4
ON THE QUESTIONNAIRE (N=176)

| Question | Response | | |
|--|----------|-----|-------|
| | Yes | No | Blank |
| 3. In the last six months, did you attend the Home and School Association or any other meeting for parents at this school? | 76% | 22% | 2% |
| 4. In the last six months, did you attend a meeting of any community group in the area served by this school? | 48% | 50% | 2% |

Conclusions

Question 1. Regarding parents and school personnel: How many are accurately informed about specific Title I ESEA projects?

Proportionately more school personnel (principals and teachers) than parents are accurately informed about the existence of specific

Title I ESEA projects in their schools, but proportionately more parents than school personnel are accurately informed about their children's or pupils' enrollment in those projects. Fifty-nine percent of the parents are accurately informed about the existence of the projects in their schools, and 84% of that number are also accurately informed about their children's enrollment in them. Seventy-four percent of the school personnel are accurately informed about the existence of the projects in their schools, and 78% of that number are also accurately informed about their pupils' enrollment in them.

Accuracy of information gives a mixed indication of the impact of projects in this cluster. With regard to accuracy of information about their existence in the schools, the projects in this cluster have greater impact on the school and the community than do noncluster projects. However, with regard to accuracy of information about the enrollment of the children in them, the cluster projects have less impact on the school and the community than do noncluster projects. Furthermore, with regard to the amount of their information about projects, parents and school personnel feel less well informed about the cluster projects than about the noncluster projects.

District, school, and grade level appear to be more important factors for accuracy of information than does project operation. Differences between projects are less conspicuous than differences between districts, between schools, and between grade levels within the respective projects.

Question 2. Regarding parents and school personnel: Do they tend to participate in the Title I ESEA projects about which they are accurately informed?

Proportionately more school personnel (principals and teachers) than parents participate in Title I ESEA projects about which they are accurately informed. Seventy-nine percent of the parents claim no involvement in the projects about which they are accurately informed, whereas only 32% of the school personnel claim such noninvolvement.

On a scale from zero (no participation in any of the specified projects) to 10 (very active participation in all specified projects existing in the local school) the average parent indicated a degree of participation equivalent to 0.6 points, while the average school staff member indicated his participation as being equivalent to 3.9 points. No relationship was found between accurate information and participation for either the parents or the school personnel. Thus it seems probable that possession of accurate information about specific Title I ESEA projects does not per se lead to participation in those projects.

To the extent that participation is a measure of a project's impact, the projects in this cluster have less impact on the school and the community than do noncluster projects. Parents and school personnel

participate less in cluster projects about which they are accurately informed than in noncluster projects about which they are accurately informed.

District, school, and grade level appear to be more important factors for participation than does project operation. Differences between projects are less conspicuous than differences between districts, between schools, and between grade levels within the respective projects.

Question 3. Regarding parents and school personnel: To what extent are their opinions about school-community relations related to their accuracy of information about specific Title I ESEA projects?

No relationship was found between opinions about school-community relations and accuracy of information, for either parents or school personnel. While both groups expressed predominantly negative opinions, the accurately informed members of each group were no less negative than their inaccurately informed counterparts. Thus it seems probable that possession of accurate information about specific Title I ESEA projects does not per se lead to favorable opinion.

Question 4. Regarding parents and school personnel: To what extent are their opinions about school-community relations related to their participation in specific Title I ESEA projects?

No relationship was found between opinions about school-community relations and participation in the projects, for either parents or school personnel. While both groups expressed predominantly negative opinions, the participating members of each group were no less negative than their nonparticipating counterparts. Thus it seems probable that participation in specific Title I ESEA projects does not per se lead to favorable opinion.

Question 5. Regarding parents and school personnel: Do they express a need for continuing efforts toward attaining the common objectives of the projects in this cluster?

Substantial majorities of parents and school personnel have expressed a need for more information and participation. Both groups acknowledge the need for parents to participate more in the school, and for school personnel to be better informed about the community. Moreover, each group has indicated a desire to learn more about the other (parents about the school, and school personnel about the community). Thus both groups have indicated their approval of the common objectives of the projects in this cluster (information and participation--which also are goals of the School District), but from their indications of a need for continuing efforts one may infer their feeling that these objectives have not yet been attained.

SCHOOL-COMMUNITY COORDINATOR SERVICES
(PBRS #111-17-505)

The School-Community Coordinator Services project (SCC) employs community residents as school-community coordinators to transmit information and to encourage mutual participation between the school and the community.

This project report should be interpreted in the context of the cluster report, "School-Community Relations and Unique Staffing Patterns, in earlier pages of this volume.

The Project

One of the problems facing urban education today is the lack of communication and participation between the school and the community. In many instances, middle-class teachers and lower-class parents are unable to establish a satisfactory rapport because of language and cultural barriers, lack of common experiences, and the frequent inability of both groups to express their feelings appropriately and constructively. As a result, each group lacks vital information about the other and mutual participation in decision making is practically nonexistent.

To bridge the gap between schools in target areas and the communities they serve and to improve lines of communication, innovative and supplementary projects have been developed by the School District of Philadelphia. SCC is one such project. It is based on the following assumptions:

1. An intermediary between middle-class teachers and lower-class community residents is necessary if communication between the two is to be established.
2. The intermediary must be able to "talk the language" of both groups and translate for each information about the other.
3. The intermediary must be an indigenous community resident (with vested interests) if he is to provide maximal service to both groups.

The key objectives of SCC are the following:

Objective 1. To increase participation of parents in school and community projects by informing the community of the objectives, programs, curricula, and services of the school.

Objective 2. To increase participation of school personnel in community-related projects by keeping the school personnel informed about the needs and concerns of the community.

To achieve these objectives, 226 school-community coordinators have been assigned to 180 elementary and secondary schools in target areas. One coordinator is assigned to each target-area elementary school and two are assigned to each junior or senior high school. In general, there are one or two school-community coordinators for every 1,000 to 3,000 students.

Coordinators have flexible work hours to permit them to work during, before, and after school as well as on weekends. Their most important function is that of liaison persons between the school and the community, keeping each group informed and up-to-date with respect to the other, developing and supporting school-community activities, and visiting individual homes to gain information which will enable the school to operate with greater awareness of the community. In addition, they work with community agencies (e.g., Mental Health Center, PAC) to provide a coordinated exchange of information.

To perform these demanding tasks, coordinators are carefully screened jointly by the School District and the community through examination procedures, and must meet the following criteria:

1. They must reside within their respective school communities.
2. They must have demonstrated leadership ability through community, civic, school, recreational, or church activities.
3. They must be in good health.
4. Their ability to work with all segments of the community must be well above average.
5. They must have a high school education or its general equivalent.
6. They must, if they represent the Puerto Rican community, be able to speak both Spanish and English.

The project is administered by one project director, three supervisors (professionally trained in guidance and social work), and 14 area coordinators (promoted from the position of coordinator). This staff is responsible for the supervision and professional development of the coordinators.

Previous SCC evaluations have indicated (a) that community residents who had been visited by the coordinators were more knowledgeable about the school and participated more in school activities than those residents who had not been visited, and (b) that the coordinators have been more successful in realizing those project objectives directed toward community residents than those directed toward school staffs.

Current Evaluation Procedure

In addition to the questions considered in the evaluation of the cluster as a whole (reported in earlier pages of this volume), this year's SCC evaluation dealt with one question about the project itself.

Question: Are the tasks performed by school-community coordinators compatible with the objectives of the SCC project?

To answer this question, 63 visits were made to 37 coordinators in 37 schools. The instrument used to record conditions observed during these visits was the Observational Checklist. (A copy of the instrument is available in the Research Library of the Board of Education.)

In addition, 72 coordinators and 20 principals were interviewed and asked about the appropriateness of the activities in which coordinators engage. Data from observations and interviews were recorded and summarized in terms of frequency.

Results

Data relevant to the Question: Are the tasks performed by school-community coordinators compatible with the objectives of the SCC project?

In 31 of the 63 visits, the coordinators were observed in their schools. During 13 of these visits they were meeting with representatives from community agencies or organizations; during the other 18 they were involved in meetings with parents and members of the school staff. The 13 meetings with community representatives had been initiated by the coordinators, usually to coordinate certain school programs with certain community programs. Although the 18 meetings with parents had been initiated by principals or teachers, usually to discuss truancy or discipline problems, interviews revealed that it was the coordinators' home visitations that had resulted in the parents' actual attendance at these meetings.

For 23 of the other 32 visits, the coordinators were observed in the community either on home visits or at community meetings. Most of their home visitations were made either to explain school programs to parents or to get parents into the school to discuss their children. Most community meetings which the coordinator attended dealt with problems relevant to the school and the community (e.g., gang control, mental health).

For the nine remaining visits, the coordinators were observed working alone at desks in their schools. The tasks usually performed at these times were record keeping, such as recording contacts made, writing

up minutes of meetings, and preparing fliers to be sent to parents about a school meeting.

Seventeen of the 72 school-community coordinators interviewed during the 1970-1971 school year indicated that at least one-fifth of their time was spent performing tasks incompatible with SCC project objectives. The others reported that in emergencies the principal periodically requested their assistance in "nonrelated" activities. However, these 55 coordinators indicated that their performing of such "nonrelated" tasks was not contradictory to their role (as long as it remained periodic) since cooperating with principals in times of emergencies tended to perpetuate good will and to reinforce the coordinator's role as an active member of the school staff. This position was supported by all 20 of the principals interviewed. They indicated that, because of the importance of her role, they requested the coordinator's assistance in "nonrelated" activities only as a last resort. The principals reported that the coordinators understood this and always responded graciously to such requests.

All the interviewed coordinators and principals reported that the coordinator's major activities varied from school to school depending on the needs of the school-community being served. They indicated that any activity which increased the two-way channels of information and participation between the school and the community was compatible with project goals and School District goals, and that at least 80% of the coordinator's activities were directed toward this.

Fifty-six coordinators and 12 principals reported that the coordinators were working more with community residents than with school staff members and were encountering greater success in the community than in the school. Their explanation for this was that school staff members were more resistant to the coordinator and to becoming "involved" than were community residents.

Complementary Data

There was a sign-out log for the school-community coordinator in 31 of the schools visited. These logs differed from school to school, and in four schools they were used not for locating the coordinator but merely to identify the task she was performing (e.g., "home visitation").

In 12 schools visited, the coordinators did not have their own desks. When working at schools, they would use any desk that was available to them, whether or not it was near a phone.

Five of the eight interviewed secondary school SCC's indicated that they had extreme difficulty in meeting with school personnel to discuss school and community needs because of the nature and size of their schools. This was not cited as a problem by the SCC's in elementary schools.

Conclusions

Question: Are the tasks performed by school-community coordinators compatible with the objectives of the SCC project?

Yes, the tasks actually being performed by the coordinators are compatible with the objectives of the SCC project. Direct observations and interviews with coordinators and principals have confirmed widespread use of the coordinators for tasks which should facilitate the two-way channels of information and participation between school and community.

NEW STAFFING PATTERNS IN EIP ELEMENTARY SCHOOLS
(PBRS #111-02-518)

The project, New Staffing Patterns in EIP (Educational Improvement Program) Elementary Schools (EIP), employs community residents to assist classroom teachers in grades one through three. Although serving different grade levels, it is similar to the Kindergarten Aides and Supervisors (KA) project in its rationale, general objectives, and mode of operation.

This project report should be interpreted in the context of the cluster report, "School-Community Relations and Unique Staffing Patterns," in earlier pages of this volume.

The Project

Widespread conditions of poverty are known to have an adverse effect on pupil academic performance. In Philadelphia, pupils in schools designated as Title I score substantially below national norms on standardized tests. In addition, 70% of these schools are overcrowded with enrollments continuing to increase. To accommodate the increasing pupil enrollments and to provide a quality education for a community whose composition is rapidly changing, innovative and supplementary projects have been developed. EIP is one of these projects. It is based on the following assumptions:

1. Disadvantaged children need more individual and small-group instruction if academic performance scores are to improve.
2. The amount of individual and small-group instruction decreases as classroom enrollment increases because of the increasing demands placed on teacher time.
3. Teachers in overcrowded classrooms need supportive assistance if they are to spend more time teaching and give more attention to individuals and small groups of pupils.

The key objectives of EIP are the following:

Objective 1. To free the teacher from duties not directly related to instruction, as well as from some instructional duties, so that she will be able to carry out more individualized and small-group instruction than would otherwise be possible.

Objective 2. To improve pupil performance in English and mathematics.

To achieve these objectives, classroom aides have been assigned

to teachers in grades one through three. During the 1970-1971 school year, 100 aides have been so assigned in 71 EIP schools. The number of aides allocated to each school varies from one to five, depending on the size and needs of the school. The manner in which the program is implemented within the school is the responsibility of the principal. Thus, assignments can vary from one aide working full-time with one teacher to one aide working part-time with each of nine teachers. In general, the role of the aide is to provide important supportive assistance by relieving teachers of most of the routine clerical and housekeeping duties that take time away from their teaching services.

Differences between schools in the project's mode of operation could account for the inconsistent findings of previous EIP evaluations. Increases in individualization of instruction in classrooms with EIP aides were found in 1967-1968 and 1969-1970 but not in the intervening school year. Improvement in reading was found in 1967-1968 but not in the next two years.

Current Evaluation Procedure

In addition to the questions considered in the evaluation of the cluster as a whole (reported in earlier pages of this volume), this year's evaluation dealt with two questions:

Question 1. Has the presence of the EIP aide reduced the number of noninstructional tasks the teacher performs?

Question 2. Has the presence of the EIP aide increased the amount of individualized or small-group instruction the pupils receive?

To answer both questions, 35 teachers who have the supportive assistance of EIP aides were interviewed and asked about their typical utilization of their aides' services.

In addition, one EIP classroom in each of ten randomly selected schools was systematically monitored on three occasions when aides were scheduled to be present. The instrument used to record classroom conditions observed during these visits was the Observational Checklist. (A copy of the instrument is available in the Research Library of the Board of Education.)

Data from teacher interviews and from classroom observations were recorded and summarized in terms of frequency.

Results

Data relevant to Question 1. Has the presence of the EIP aide reduced the number of noninstructional tasks the teacher performs?

All 35 of the interviewed teachers reported that at least a portion of the aides' time was used for noninstructional tasks. Three of them indicated that they used aides for noninstructional tasks only.

During eight of the 30 observation visits, EIP aides were observed performing noninstructional tasks. On three occasions they were physically preparing the room for an activity; on the other five occasions they were marking tests, cataloging materials, or collecting milk money and absence notes. During each of these observations, when the aide was performing noninstructional tasks, the teacher was engaging in whole-group instruction.

Data relevant to Question 2. Has the presence of the EIP aide increased the amount of individualized or small-group instruction the pupils receive?

Of the 35 interviewed teachers, the 32 who used the aides for only part-time noninstructional tasks reported an increase in the amount of individual and small-group instruction (some by the teacher and some by the aide). The three teachers who used the aides solely for noninstructional relief reported that, although they were freed for more whole-group instruction, there was no increase in the amount of individualized or small-group instruction they could perform.

During 22 of the 30 visits, EIP aides were observed working in an instructional capacity. On 15 occasions, the aides were conducting small-group instruction with the teachers present; on four occasions they were conducting individualized instruction outside the classroom with pupils designated by the teachers; in three instances they were conducting whole-group instruction in the classroom without the teachers. During each of the 19 observations when aides were conducting individualized or small-group instruction, the teacher was engaging in the same type of activities.

Complementary Data

Interviews with the 35 teachers revealed that the benefits cited in Question 1 (noninstructional-task relief) and Question 2 (individualization of instruction) tended not to occur simultaneously. Individualization occurred when EIP aides were used for instructional tasks, but not when they were used merely to relieve the teacher of noninstructional tasks.

Conclusions

Question 1. Has the presence of the EIP aide reduced the number of non-instructional tasks the teacher performs?

Yes, the presence of the EIP aide has reduced the number of noninstructional tasks the teacher performs. Teacher interviews and classroom observations confirm widespread use of EIP aides for tasks which, without the aide, would encroach upon the teacher's availability for actual teaching.

Question 2. Has the presence of the EIP aide increased the amount of individualized or small-group instruction the pupils receive?

Yes, the presence of the EIP aide has increased the amount of individualized or small-group instruction the pupils receive. Teacher interviews and classroom observations indicate that such individualization occurs when EIP aides are used for instructional tasks, but not when they are used merely to relieve the teacher of noninstructional tasks.

KINDERGARTEN AIDES AND SUPERVISORS
(PBRs #111-01-506)

The Kindergarten Aides and Supervisors (KA) project employs community residents to assist kindergarten teachers in all phases of classroom activity. Although serving a different grade level, it is similar to New Staffing Patterns in EIP Elementary Schools (EIP) in its rationale, general objectives, and mode of operation.

This project report should be interpreted in the context of the cluster report, "School-Community Relations and Unique Staffing Patterns," in earlier pages of this volume.

The Project

Widespread conditions of poverty are known to have an adverse effect on pupil academic performance. In Philadelphia, pupils in schools designated as Title I score substantially below national norms on standardized tests. In addition, 70% of these schools are overcrowded with enrollments continuing to increase. To accommodate the increasing pupil enrollments and to provide a quality education for a community whose composition is rapidly changing, innovative and supplementary projects have been developed. KA is one of these projects. It is based on the following assumptions:

1. Disadvantaged children need more individual and small-group instruction if academic performance scores are to improve.
2. The amount of individual and small-group instruction decreases as classroom enrollment increases because of the increasing demands placed on teacher time.
3. Teachers in overcrowded classrooms need supportive assistance, especially in kindergarten, if they are to spend more time teaching and give more attention to individuals and small groups of pupils.

The key objectives of KA are the following:

Objective 1. To free the teacher from duties not directly related to instruction, as well as from some instructional duties, so that she will be able to carry out more individualized and small-group instruction than would otherwise be possible.

Objective 2 To improve pupil performance on the Philadelphia Readiness Test.

To achieve these objectives, 157 kindergarten aides have been assigned to 113 schools during the 1970-1971 school year. The number of

aides allocated to each school varies from one to four, depending on the size and needs of the school. The manner in which the program is implemented within the school is the responsibility of the principal. Thus, assignments can vary from one aide working full-time with one teacher to one aide working part-time with each of four teachers. In general, the role of the aide is to provide important supportive assistance by relieving teachers of most of the routine clerical and housekeeping duties that take time away from their teaching services.

Differences between schools in the project's mode of operation could account for the inconsistent findings of previous KA evaluations regarding individualization of instruction (Objective 1). Increases in individualization in classrooms with kindergarten aides were found in 1967-1968 and 1969-1970 but not in the intervening school year. Regarding readiness test scores (Objective 2), no improvement was found in 1967-1968 or in 1968-1969. (Readiness was not examined in the 1969-1970 evaluation.)

Current Evaluation Procedure

In addition to the questions considered in the evaluation of the cluster as a whole (reported in earlier pages of this volume), this year's evaluation dealt with two questions:

Question 1. Has the presence of the kindergarten aide reduced the number of noninstructional tasks the teacher performs?

Question 2. Has the presence of the kindergarten aide increased the amount of individualized or small-group instruction the pupils receive?

To answer both questions, 38 teachers who have the supportive assistance of kindergarten aides were interviewed and asked about their typical utilization of their aides' services.

In addition, one kindergarten classroom in each of ten randomly selected schools was systematically monitored on three occasions when aides were scheduled to be present. The instrument used to record classroom conditions observed during these visits was the Observational Checklist. (A copy of the instrument is available in the Research Library of the Board of Education.)

Data from teacher interviews and from classroom observations were recorded and summarized in terms of frequency.

Results

Data relevant to Question 1. Has the presence of the kindergarten aide reduced the number of noninstructional tasks the teacher performs?

All 38 of the interviewed teachers reported that at least a portion of the aides' time was used for noninstructional tasks. Eight of them indicated that they used aides for noninstructional tasks only.

During 10 of the 30 observation visits, kindergarten aides were observed performing noninstructional tasks. On eight occasions they were participating in lavatory or snack-time activities; on the other two occasions they were physically preparing the room for an activity. During each of these observations, when the aide was performing noninstructional tasks, the teacher was engaging in whole-group instruction.

Data relevant to Question 2. Has the presence of the kindergarten aide increased the amount of individualized or small-group instruction the pupils receive?

Of the 38 interviewed teachers, the 30 who used the aides for only part-time noninstructional tasks reported an increase in the amount of individual and small-group instruction (some by the teacher and some by the aide). Of the eight teachers who used the aides solely for non-instructional relief, two reported that, although they were freed for more whole-group instruction, there was no increase in the amount of individualized or small-group instruction they could perform.

During 20 of the 30 visits, kindergarten aides were observed working in an instructional capacity. On 18 occasions, the aides were conducting small-group instruction with the teachers present, and on two occasions they were conducting individualized instruction outside the classroom with pupils designated by the teachers. During each of the 20 observations when aides were conducting individualized or small-group instruction, the teacher was engaging in the same type of activities.

Complementary Data

For 32 of the 38 interviewed teachers, the benefits cited in Question 1 (noninstructional-task relief) and Question 2 (individualization of instruction) tended not to occur simultaneously. Individualization occurred when kindergarten aides were used for instructional tasks, but not when they were used merely to relieve the teacher of noninstructional tasks.

Conclusions

Question 1. Has the presence of the kindergarten aide reduced the number of noninstructional tasks the teacher performs?

Yes, the presence of the kindergarten aide has reduced the number of noninstructional tasks the teacher performs. Teacher interviews and classroom observations confirm widespread use of kindergarten aides for tasks which, without the aide, would encroach upon the teacher's availability for actual teaching.

Question 2. Has the presence of the kindergarten aide increased the amount of individualized or small-group instruction the pupils receive?

Yes, the presence of the kindergarten aide has increased the amount of individualized or small-group instruction the pupils receive. Teacher interviews and classroom observations indicate that such individualization occurs when kindergarten aides are used for instructional tasks, but not when they are used merely to relieve the teacher of non-instructional tasks.

OUT-OF-SCHOOL SEQUENCED SCIENCE EXPERIENCES FOR PAIRED SCHOOLS
(PBRs #111-02-653)

Out-of-School Sequenced Science Experiences for Paired Schools, commonly called the Paired School Science Project (PSSP), brings sixth-grade children from pairs of schools having varied racial and socioeconomic backgrounds to the Franklin Institute for physical science lessons one day a week over a seven-week cycle.

This project report should be interpreted in the context of the cluster report, "School-Community Relations and Unique Staffing Patterns," in earlier pages of this volume.

The Project

The School District of Philadelphia is aware of the need for intercultural education. Like many urban centers, Philadelphia's neighborhoods reflect de facto segregation. As a result, many children attend culturally homogeneous schools, where their social relations tend to be restricted to interaction with persons having backgrounds similar to their own. Therefore, their opportunities for awareness of and interaction with culturally different children are limited.

As an interim solution, it was deemed possible to select a neutral site where black and white pupils might periodically meet and participate in joint educational experiences. The rationale for this approach may be found in the research of Allport (1954). In order to reach maximum effectiveness, the contact should (a) occur in the normal course of activity, (b) enjoy community sanction, and (c) be genuine and purposeful.

Scholastic benefits can accrue from the mixing of culturally different children in the same classroom. Pettigrew (1968), Henderson (1969), St. John (1969), and Coleman (1966) have found that increased heterogeneity of classes may lead to an increase in pupil achievement when provided with the appropriate learning environment.

PSSP has two major objectives:

Objective 1. To promote the knowledge and understanding of basic concepts of physical science as evidenced by the pupils' ability (a) to recall basic factual information dealing with the principles of matter and energy, (b) to define basic concepts and give relevant examples, (c) to compare and contrast different forms of energy, and (d) to solve problems involving measurement of forces and motion.

Objective 2. To facilitate an interchange of ideas and cooperative work between classmates of different races, national backgrounds, and religions.

To achieve these objectives, PSSP brings children from paired schools to the Franklin Institute for instruction in science. This community resource has facilities and equipment not available in the pupils' home schools. The children from the two schools are paired so that they work together in the laboratory investigations and developmental sessions and have lunch together. It is anticipated that the interactions in these activities may promote interracial understanding, motivate science learning, facilitate linguistic responses, and reduce social isolation.

PSSP has two seven-week cycles per school year. Each cycle involves approximately 300 sixth-grade pupils from five pairs of schools. Pupils from each pair of schools are randomly assigned to either of two identical three-hour workshops. Thus, each workshop group is composed of a 50% random sample from each of the paired classes. An alternate seating pattern is utilized in order to insure that children from different schools have an opportunity to work together.

Each workshop includes a short lesson-demonstration, related laboratory investigations, and lunch. Franklin Institute instructors demonstrate how science apparatus is to be assembled and used to illustrate the science concepts being taught; pupils then construct the apparatus. Each pair of pupils works with the self-constructed apparatus, using a work sheet for the investigations. The instructors summarize ideas developed inductively by pupils in accordance with their work-sheet investigations.

In previous evaluations (1968, 1969, 1970) it was found that pupils' scores on the Science Achievement Test were significantly higher for classes participating in PSSP than for corresponding control groups. This finding indicated that some of the cognitive objectives were being attained in PSSP which apparently were not being attained in the regular sixth-grade classrooms.

Current Evaluation Procedure

This year's evaluation focused on two questions:

1. Has PSSP provided the conditions that are considered prerequisite for the attainment of its objectives?
2. Have PSSP pupils demonstrated knowledge and understanding of basic concepts of physical science?

More attention was given to cognitive than to attitudinal objectives of the project because of the pupils' relatively short exposure to PSSP and the lack of sensitivity of direct attitude measures over short exposure times.

Although a measure of attitudes was not used to evaluate the Project's achievement of its attitudinal objective, some subjective observations were made. Attendance and interaction between paired school pupils were monitored and teachers were asked whether they felt the pairing of pupils from different schools was valuable. Findings are included in this report as "Complementary Data."

Question 1. Has PSSP provided the conditions that are considered prerequisite for the attainment of its objectives?

Various PSSP activities (e.g., laboratory investigations, demonstrations, and classroom discussion) were systematically monitored with the use of the Observational Checklist, during each cycle of the project. (A copy of the checklist is available in the Research Library of the Board of Education.) Data from the observations were recorded in terms of frequency.

Question 2. Have PSSP pupils demonstrated knowledge and understanding of basic concepts of physical science?

Since base-line data were available from the previous year's evaluation, a posttest-only design was utilized to answer this question. The instrument used was the Science Achievement Test, Form A (reliability coefficient .82, Kuder-Richardson Formula 20), which was especially developed to measure cognitive learning resulting from Franklin Institute experiences. (A copy of the test is on file in the Research Library of the Board of Education.)

The Science Achievement Test was administered to every PSSP pupil (N=588) by the participating teachers in the 14 public and six diocesan schools. The mean score of the 1970-1971 PSSP pupils was compared with (a) the mean score of the previous two years' PSSP participants and (b) the mean score of the previous two years' nonparticipant comparison groups. The difference found in the latter comparison was subjected to a t test.

Results

Data relevant to Question 1. Has PSSP provided the conditions that are considered prerequisite for the attainment of its objectives?

Data obtained through the systematic monitoring of PSSP activities are summarized in Table 1. Consistently favorable conditions were found.

TABLE 1

SUMMARY OF OBSERVATIONS MADE DURING 21 VISITS TO PSSP

| Desired Condition | Number of Observation Visits | | |
|---|------------------------------|-------------------|--|
| | Condition Present | Condition Lacking | Condition not Appropriate during Observation |
| 1. Scheduled topic was being discussed. | 20 | 0 | 1 |
| 2. Science materials were available. | 20 | 0 | 1 |
| 3. Pupils were constructing or working with science materials. | 20 | 0 | 1 |
| 4. Instructors were answering questions. | 20 | 0 | 1 |
| 5. The written and/or oral science material was presented at the pupils' level. | 18 | 0 | 3 |
| 6. There was a demonstration related to the topic of the day. | 13* | 2 | 6 |
| 7. Pupils were attentive to the demonstration. | 9* | 2 | 10 |

*Data about demonstrations were gathered in two ways: (a) by direct observation, and (b) by asking pupils about the demonstrations they had attended. Data about attentiveness were obtained only in the instances when direct observations were made.

Data relevant to Question 2. Have PSSP pupils demonstrated knowledge and understanding of basic concepts of physical science?

The mean score for the two 1970-1971 cycles was 17.3 out of a possible score of 26. This was significantly higher ($p < .01$) than

the previous two years' nonparticipant comparison groups' mean score of 13.8. The mean score of the previous two years' PSSP pupils was 15.3.

Complementary Data

Interviews with eight PSSP cooperating teachers indicated that seven of the eight perceived the pairing of pupils from different schools as having social value. The 89% average daily attendance for the project tends to confirm that the PSSP pupils enjoyed their Franklin Institute experiences.

Conclusions

Question 1. Has PSSP provided the conditions that are considered prerequisite for the attainment of its objectives?

Yes, PSSP has provided the conditions that are considered prerequisite for the attainment of its objectives. Systematic monitoring has yielded consistent results: appropriate materials have been available and used; instructors have been fulfilling their specified roles appropriately; and pupils have been attentive during the PSSP activities.

Question 2. Have PSSP pupils demonstrated knowledge and understanding of basic concepts of physical science?

Yes, PSSP pupils have demonstrated knowledge and understanding of basic concepts of physical science. Their mean score on the Science Achievement Test for the two 1970-1971 cycles was significantly higher than the mean score of the previous two years' nonparticipant comparison groups. Thus one may conclude that physical science achievement of PSSP pupils continues to exceed that of pupils in regular sixth-grade classrooms.

EDUCATION IN WORLD AFFAIRS
(PBRs #111-03-556)

Education in World Affairs (EWA) provides elementary and secondary school pupils with activities and materials on selected countries. Assemblies and field trips to the Art Museum, Civic Center, and United Nations are arranged under the major sponsorship of the World Affairs Council.

The Project

With the social segregation experienced by ghetto school children, there may be a limited understanding of other countries' geography, language, history, religion, and culture when social studies classes are conducted in a traditional manner. The usual methods of teaching social studies include group discussions, traditional textbook teaching, and lectures, all of which may be ineffective if firsthand experiences are not provided. For culturally disadvantaged pupils, a lack of relevant firsthand experiences makes achievement of an understanding of another country's language and culture difficult.

With instant news of world events and reduction in travel time, knowledge of various countries' cultures and current events has become increasingly important for understanding the world we live in. The EWA programs attempt to provide firsthand experiences with artifacts and customs, as presented by native speakers from the countries being studied.

The objectives of EWA are these:

Objective 1. To provide EWA students with materials, guest speakers, and field trips including a trip to the United Nations.

Objective 2. To increase general knowledge of world affairs and specific knowledge of the history, language, geography, and customs of four countries.

The program is sponsored by the World Affairs Council in cooperation with the School District of Philadelphia and other school systems in the Delaware Valley, including city diocesan and other private schools. Approximately 107 Title I Philadelphia public schools participated in the program during the 1970-1971 school year.

EWA programs have been implemented at three levels: elementary (for sixth grade), junior high (primarily for seventh grade), and senior high.

The elementary school program involves a staff from the World Affairs Council and elementary school faculty advisers selected by principals of participating schools. Each of four countries is studied for six weeks. (The 1970-1971 program concentrated on the study of China,

Brazil, England, and Ghana.) Before each study, an introductory tape is played to the class. Booklets on the country's basic geographic, historical, political, and cultural background are provided. A native of the country being studied (usually a student) visits classes to talk to pupils and to answer their questions.

At the end of each in-depth study, a culminating program is held at one of the schools in each district. Students from all participating elementary schools in that district perform songs, dances, plays, skits, and poetry which they have learned during their study. A trip to the United Nations is arranged for each of the sixth-grade classes from EWA participating schools. Forty-two Title I schools participate in the elementary program including the trip to the United Nations.

The junior high school program serving 37 Title I schools is similar in structure to the elementary program. The same four countries are studied both in class or club (using World Affairs Council materials) and at the Civic Center and the Art Museum. At the latter locations, native speakers give short talks supplemented by slides and artifacts of their country. After a short question-and-answer period, students tour appropriate country exhibits. A world fair, involving student presentations and displays, serves as a culminating activity to the study of the four countries.

Title I funds allocated to the senior high school World Affairs Council program support an ongoing speakers' program in nine public high schools. Each month speakers, frequently foreign graduate school students, visit the schools and address the students on a topic which corresponds to a current international issue being presented to the class at that time. More than three-fourths of the participating students receive subscriptions to Newsweek. Other materials provided are films and books (e.g., Status, Achievement and Social Values) for each student. Throughout the year "scholarships" are provided to enable students to attend the various seminars, forums, and trips of the World Affairs Council's senior high school program. Each participating class takes a trip to the United Nations which includes attendance at two briefings given by leading diplomats from various countries.

Evaluations conducted in 1967-1968 and 1968-1969 indicated a statistically significant superiority of EWA junior high students over comparison groups in knowledge of the four countries but not in "open-mindedness." Findings in the 1969-1970 school year again confirmed the EWA students' greater factual knowledge and demonstrated that the amount of knowledge was directly related to the number of district meetings attended.

Current Evaluation Procedure

In addition to the questions considered in the evaluation of the cluster as a whole (reported in earlier pages of this volume), this year's evaluation dealt with the following questions about the EWA project:

1. Have the learning activities considered essential to the EWA program in the participating schools taken place during 1970-1971?
2. Have the procedures and structural arrangements considered essential to EWA activities at the Civic Center and the Art Museum been carried out?
3. To what extent are the students' best-liked EWA activities seen by the teachers as having educational value?

Question 1. Have the learning activities considered essential to the EWA program in the participating schools taken place during 1970-1971?

Systematic monitoring of elementary district programs and junior high EWA club and classroom activities was conducted with the use of the Observational Checklist. (A copy of the checklist is on file in the Research Library of the Board of Education.)

Five elementary district programs (about Ghana, China, England and Brazil) were observed involving some 25 participating classes. Five visits to junior high club and/or class activities were made. Observed activities were listed descriptively.

Question 2. Have the procedures and structural arrangements considered essential to EWA activities at the Civic Center and the Art Museum been carried out?

Systematic monitoring of EWA activities occurring at the Art Museum and the Civic Center was conducted with the aid of another form of the Observational Checklist. (A copy of this form also is on file in the Research Library of the Board of Education.)

Eleven EWA meetings were monitored. Participating pupils represented approximately 45 schools. The data were summarized in terms of frequency of the presence or absence of specific conditions (e.g., whether the number of pupils prereported as coming actually came, and whether pupils participated in country activities).

Question 3. To what extent are the students' best-liked EWA activities seen by the teachers as having educational value?

All junior high EWA students were asked to evaluate their EWA experiences by means of the Student Evaluation Questionnaire, and participating teachers were asked to indicate their opinions of the educational value of the EWA activities by means of the Teacher Evaluation Questionnaire. (Copies of both questionnaires are on file in the Research Library of the Board of Education.) Teachers' responses to an

open-end question were categorized and compared with the rank-order list of students' best-liked activities.

Results

Data relevant to Question 1. Have the learning activities considered essential to the EWA program in the participating schools taken place during 1970-1971?

The following learning activities were observed on various occasions during ten visits to EWA classrooms, clubs, and/or assembly programs:

1. Pupils listened to an introductory tape on one of the four countries being studied.
2. Pupils listened to their teacher talking about one of the countries.
3. Committees worked on projects and did research in the library.
4. Pupils answered questions from the specially prepared country booklet.
5. Pupils and their teacher showed slides and discussed a recent trip they had taken to one of the countries they were studying.
6. Pupils gave reports on the country their EWA class was studying.
7. Pupils acted out local folk tales of the country.
8. Pupils demonstrated a dance indigenous to the country.
9. Pupils played the music of the country they were studying and sang songs including the country's national anthem.

From this list, one sees the variety of activities taking place in the schools as a result of the EWA project personnel and materials. The structural arrangement of the EWA activities in the local school varies from clubs, to classrooms, to the involvement of several schools in presenting an assembly program on a particular country.

Data relevant to Question 2. Have the procedures and structural arrangements considered essential to EWA activities at the Civic Center and the Art Museum been carried out?

The data obtained from observation visits are summarized in Table 1. The seven instances of incomplete attendance (Condition 1 in

TABLE 1

SUMMARY OF OBSERVATIONS DURING 11 VISITS TO EWA MEETINGS AT CIVIC CENTER AND ART MUSEUM

| Desired Condition | Number of Observation Visits | | |
|--|------------------------------|-------------------|--|
| | Condition Present | Condition Lacking | Condition not Appropriate during Observation |
| 1. The number of pupils pre-reported as coming came. | 4 | 7 | 0 |
| 2. The speaker was enthusiastic about his or her country. | 10 | 0 | 1 |
| 3. The pupils were quiet during the lecture. | 10 | 1 | 0 |
| 4. Audiovisuals were used to supplement the lecture. | 11 | 0 | 0 |
| 5. The pupils asked questions. | 11 | 0 | 0 |
| 6. The pupils broke up into smaller groups to tour exhibits. | 7 | 0 | 4* |
| 7. The pupils saw artifacts from the country discussed. | 10 | 0 | 1 |
| 8. Pupils participated in country activities. | 6 | 0 | 5* |

*Facilities and activities at the Art Museum differed from those at the Civic Center.

the table) reflect the fact that participating schools were disrupted by a strike and some of them were unable to provide the necessary substitutes for the absent EWA participating teachers. The programs most affected were the ones on Ghana at the Civic Center. Attendance for the other country programs was high until late spring when other school activities began to conflict with EWA meetings. However, attendance at the world fair, which took place on June 1-3, was very high.

Data relevant to Question 3. To what extent are the students' best-liked EWA activities seen by the teachers as having educational value?

Students' indications of "best-liked" EWA activities and teachers' indications of "most valuable" activities are presented in Table 2. A rank-difference correlation of zero indicated that there was neither positive nor negative relationship between specific EWA activities' educational value (as perceived by teachers) and enjoyment value (as perceived by students). A reranking based on both educational and enjoyment factors would show country programs and the United Nations trip as offering the best combination of educational value and enjoyment.

TABLE 2

STUDENTS' AND TEACHERS' EVALUATIONS OF SPECIFIC EWA ACTIVITIES

| EWA Activity | Student "Votes" ¹ | Teacher "Votes" ² |
|---------------------|------------------------------|------------------------------|
| United Nations Trip | 305 | 6 |
| Country Programs | 135 | 12 |
| World Fair | 99 | 3 |
| Speakers | 39 | 8 |

¹Number of times the activity was marked (in a list of activities) as the one they liked best.

²Number of times the activity was named (in response to an open-end question) as having the most educational value.

Complementary Data

The materials and speakers which are supplied through EWA are being used by the participating teachers and students, according to responses on the teacher and student questionnaires.

Student responses indicated that students' EWA time was spent mainly in (a) using specially prepared EWA booklets on the four countries, (b) listening to EWA-prepared tapes, and (c) listening to speakers.

Teachers reported that they used the EWA booklets primarily (a) as directed reading lessons, (b) as a basis for group discussion, (c) as a resource for research done individually by students, and (d) as a motivation device.

Teachers indicated that they prepared their classes for country programs primarily through (a) class discussions, (b) map studies, and (c) the use of films and filmstrips. The materials supplied by the World Affairs Council are used in a wide variety of ways.

Conclusions

Question 1. Have the learning activities considered essential to the EWA program at the participating schools taken place during 1970-1971?

Yes, the learning activities considered essential to the EWA program at the participating schools have taken place during 1970-1971. Systematic monitoring and teachers' responses to a questionnaire have indicated that teachers are (a) using the EWA booklets to prepare their students for the country programs at the Civic Center and the Art Museum, (b) using introductory tapes about the four countries, and (c) having the students use the library for research.

Question 2. Have the procedures and structural arrangements considered essential to EWA activities at the Civic Center and the Art Museum been carried out?

Yes, the procedures and structural arrangements considered essential to EWA activities at the Civic Center and the Art Museum have been carried out. Systematic monitoring has shown that the EWA programs have consistently included (a) a question-and-answer period, (b) use of audiovisuals, and (c) small-group tours or country activities.

Question 3. To what extent are the students' best-liked EWA activities seen by the teachers as having educational value?

Teachers' choices of "most valuable" EWA activities do not correspond to students' choices of "best-liked" activities. This lack of agreement is dramatized by a correlation coefficient of zero between the two ranked lists of the same activities. However, if the two ranked lists are reconciled, two activities emerge as having high combined value: (a) the country programs at the Civic Center and the Art Museum, and (b) the trip to the United Nations.

GERMANTOWN AREA SCHOOLS PROJECT
(PBRS #111-02-595)

The Germantown Area Schools Project (GASP), sponsored by the Germantown Community Council and based on the concept of the community school, provides seventh- and eighth-grade students with a social studies curriculum based on the community in which they live, and offers 50 Germantown High School seniors an alternative curriculum at Vernon House.

This project report should be interpreted in the context of the cluster report, "School-Community Relations and Unique Staffing Patterns" in earlier pages of this volume.

The Project

One of the problems confronting urban educators today is the lack of community involvement in the educational process. To increase community participation in education and to increase pupils' awareness of their community, innovative and supplementary projects have been developed. GASP is one of these projects.

In its various settings, GASP operates as if it were two projects--a junior high project (GASP-J) and a senior high project (GASP-S).

Junior High School (GASP-J)

The key objective of GASP-J is the following:

Objective: To provide a community-based social studies curriculum for pupils at Henry, Houston, Jenks, and Holy Cross schools.

To achieve the GASP-J objective, a community-based social studies curriculum was designed for more than 500 seventh- and eighth-grade pupils in Henry, Houston, Jenks, and Holy Cross Schools. The thrust of the eighth-grade curriculum is to explore American civilization in terms of the relationship between the traditions and ideals of history, Germantown and the social developments, issues, and tensions of our time. The seventh-grade curriculum deals with cultural, political, economic, and ecological geography as an interrelated whole that can be observed in the student's own community. Both curricula attempt to develop an awareness of urban planning in the students.

GASP-J takes place within the framework of the regular school program of the students. There are 32 groups meeting for a 90-minute period each week. The groups include members from the four participating schools and involve the interchange of students among these schools. Teaching in GASP-J is a partnership involving a community resource person as group leader, the regular classroom teacher, and interns from Antioch-Putney and the Great Lakes College Association.

Senior High School (GASP-S)

The key objectives of GASP-S are the following:

Objective 1. To complete state curriculum requirements for each student.

Objective 2. To enhance positive development of individual and group identity in relationship to the community.

Objective 3. To provide an alternative school environment for students that is not now possible within the regular high school framework.

To achieve the GASP-S objectives, more than 50 volunteer students from Germantown High School were permitted to spend the 1970-1971 school year at Vernon House, and other community facilities, in an educational venture undertaken with a teaching staff hired by and responsible to the community through the Germantown Area Council.

The organization of GASP-S is based upon the "small group" concept, with groups averaging about 10 students. Students are expected to develop group projects in addition to doing regular individual assignments for course credit.

The curriculum emphasizes urban studies, including courses in urban sociology, community organization and change, and community institutions. Classes in Afro-American studies, creative expression, contemporary literature, Swahili, black music, mathematics, and other areas are also offered. Students are also involved in many community activities, especially those stemming from the Germantown Community Council, whose building is used for GASP-S classes.

GASP-S courses are taught by highly skilled community residents, most of whom do not have college degrees or teaching certificates. This recognition of personal ability regardless of credentials is viewed as an important aspect of the project.

Current Evaluation Procedure

Previous evaluations' findings are not relevant to the current GASP evaluation. Although GASP is in its fourth year of funding, this year's project is in many ways a distinct departure from the project implemented in three previous years. As a result, the 1970-1971 evaluation of GASP was formative in nature and consisted primarily of an examination of the project as it has developed throughout the year.

In addition to the questions considered in the evaluation of the cluster as a whole (reported in earlier pages of this volume), this year's evaluation dealt with two questions regarding GASP-J and GASP-S, respectively:

1. Are the opinions of junior high GASP students about the project compatible with the project's objective of a community-based social studies curriculum?

2. Have the procedures and structural arrangements considered essential to the senior high GASP project been carried out?

Question 1. Are the opinions of junior high GASP students about the project compatible with the project's objective of a community-based social studies curriculum?

To answer this question, two seventh-grade and two eighth-grade GASP-J classes were administered the GASP Student Questionnaire at the termination of the project. (A copy of the questionnaire is available in the Research Library of the Board of Education.)

Responses to the questionnaire were recorded and summarized in terms of percentage.

Question 2. Have the procedures and structural arrangements considered essential to the senior high GASP project been carried out?

To answer this question, GASP-S classes were systematically monitored on 34 occasions during the year. The instrument used to record project-specific conditions observed during these visits was the Observational Checklist. (A copy of the instrument is available in the Research Library of the Board of Education.)

Data from the observations were recorded and summarized in terms of frequency.

Results

Data relevant to Question 1. Are the opinions of junior high GASP students about the project compatible with the project's objective of a community-based social studies curriculum?

Table 1 summarizes the 155 students' responses to each item on the GASP Student Questionnaire. The majority of GASP-J students who responded to the questionnaire described the project as a chance to learn more about themselves and their community. They indicated that they spent most of their time while in GASP-J talking about their school or community. These responses were considered indicative that GASP-J was implementing the community-based social studies curriculum cited as its objective.

TABLE 1

PERCENTAGE OF GASP-J STUDENTS (N=155) CHOOSING EACH RESPONSE TO QUESTIONNAIRE ITEMS

| Item | Response | Percentage of Responses ¹ |
|--|---|--|
| 1. If someone asks you what GASP is, which one of these would be your answer? | <p>It is a chance to learn more about myself and my community.</p> <p>It is a chance to meet new people.</p> <p>It is a chance to get out of my regular classes.</p> <p>It is a chance to talk about things that concern me.</p> <p>It is a waste of time.</p> <p>It is a chance to work out solutions to problems.</p> <p>I don't know what it is.</p> | <p>36%</p> <p>25%</p> <p>14%</p> <p>8%</p> <p>8%</p> <p>7%</p> <p>2%</p> |
| 2. How much do you like GASP? | <p>I like it a lot.</p> <p>I like it a little.</p> <p>It makes no difference to me.</p> <p>I don't like it very much.</p> <p>I wish we did not have it.</p> | <p>48%</p> <p>23%</p> <p>15%</p> <p>6%</p> <p>6%</p> |
| 3. How do you think your teacher and principal feel about GASP? | <p>They seem to like it a lot.</p> <p>They seem to like it a little.</p> <p>They seem not to like it very much.</p> <p>They wish we did not have it.</p> <p>It makes no difference to them.</p> | <p>36%</p> <p>23%</p> <p>13%</p> <p>12%</p> <p>10%</p> |
| 4. What is the most important thing you did to make GASP a good program this year? | <p>Participated in discussions.</p> <p>Helped to plan GASP activities.</p> <p>Just attended the GASP activities.</p> <p>Made suggestions to the group or the leader.</p> <p>Nothing.</p> <p>Helped in some other way.</p> | <p>33%</p> <p>17%</p> <p>14%</p> <p>13%</p> <p>13%</p> <p>10%</p> |

TABLE 1 (Continued)
 PERCENTAGE OF GASP-J STUDENTS (N=155) CHOOSING EACH RESPONSE TO QUESTIONNAIRE ITEMS

| Item | Response | Percentage of Responses ¹ |
|--|---|--|
| 5. How did <u>your group</u> spend most of its time while in GASP this year? | Talking about our school or community. Making plans. Doing nothing. Talking about ourselves. Going places. Talking about places we went. Playing games. | 31% 24% 16% 13% 10% 5% 1% |
| 6. Which <u>one</u> of these did you like <u>best</u> about GASP? | Going on trips. Going to another school. Doing things for our school or community. Having students visit our school. Talking about our school and community. Making plans and decisions. Talking about ourselves. | 36% 24% 10% 8% 7% 6% 3% |
| 7. Which <u>one</u> of these did you like <u>least</u> about GASP? | Talking about ourselves. Making plans and decisions. Going to another school. Talking about our school and community. Having students visit our school. Doing things for our school or community. Going on trips. Doing nothing. | 33% 19% 16% 11% 9% 3% 2% 1% |

¹Where percentages total less than 100, some respondents omitted the item.

Data relevant to Question 2. Have the procedures and structural arrangements considered essential to the senior high GASP project been carried out?

Table 2 shows the number of times the desired conditions were found to exist in the 34 observations of GASP-S.

Conditions 1, 5, and 6 in Table 2 were not observable in most cases because planning-meetings usually occurred in the evening rather than during the school day, and usually it was not stated during the classroom observation whether students not seen were fulfilling service requirements, working in the library, or engaged in other activities.

TABLE 2

SUMMARY OF 34 OBSERVATIONS OF GASP-S

| Desired Condition or Activity | Condition Present | Condition Lacking | Condition not Observable |
|---|-------------------|-------------------|--------------------------|
| 1. Planning-meetings involving students and community. | 8 | 0 | 26 |
| 2. Small-group discussions. | 19 | 15 | 0 |
| 3. Nondifferentiated staff. | 29 | 5 | 0 |
| 4. Classes being held in various community agencies (e.g., YMCA). | 34 | 0 | 0 |
| 5. Students fulfilling service requirements. | 14 | 0 | 20 |
| 6. Students doing library research. | 10 | 0 | 24 |
| 7. Community people being used to teach students. | 31 | 3 | 0 |
| 8. One topic being discussed relating to community problems. | 26 | 5 | 3 |

Conclusions

Question 1. Are the opinions of junior high GASP students about the project compatible with the project's objective of a community-based social studies curriculum?

Yes, the opinions of junior high GASP students about the project are compatible with that objective. The majority of students who responded to a questionnaire described the junior high project as a chance to learn more about themselves and their community and stated that most of their time in GASP was spent talking about their school and community.

Question 2. Have the procedures and structural arrangements considered essential to the senior high GASP project been carried out?

Yes, the procedures and structural arrangements considered essential to the senior high GASP project have been carried out. Systematic monitoring has consistently revealed small-group discussions, non-differentiated staff usage, classes being held in community agencies, community residents conducting classes, and discussions that center around community problems.

REFERENCES

- Allport, G. W. The Nature of Prejudice. Cambridge, Mass.: Addison-Wesley, 1954.
- Brookover, W. B. Self-Concept of Ability and School Achievement (II). East Lansing: Michigan State University, Bureau of Educational Research Services, 1965.
- Coleman, J. S. Equality of Educational Opportunity. Washington, D. C.: United States Department of Health, Education, and Welfare, 1966.
- Cuban, L. Teacher and Community. Harvard Educational Review, 1969, 39, 2.
- Gallup, G. How the Nation Views the Public Schools: A Study of the Public Schools of the United States. Princeton, N. J.: Gallup International, 1969. P. 39.
- Henderson, R. W. Positive Effects of a Bicultural Preschool Program on the Intellectual Performance of Mexican-American Children. Paper presented at annual meeting of American Educational Research Association, Los Angeles, February 1969.
- Hess, R. D., & Shipman, V. C. Maternal Attitude toward the School and the Role of Pupil: Some Social Class Comparisons. Paper prepared for the Fifth Work Conference on Curriculum and Teaching in Depressed Urban Areas. New York: Columbia University, 1966.
- Jablonsky, A. Some Trends in Education of the Disadvantaged. IRCD Bulletin, 1968, 4, 1-11.
- Lopate, C., Flaxman, E., Bynum, E. M., & Gordon, E. W. Decentralization and Community Participation in Public Education. Review of Educational Research, 1970, 40, 1, 135-150.
- Pettigrew, T. The Case for School Integration. Address presented at Special Training Institute on Problems of School Desegregation, Columbia University, July 1968.
- Rankin, P. T., Jr. The Relationship between Parent Behavior and Achievement of Inner-City Elementary School Children. Paper presented at meeting of American Educational Research Association, New York, February 1967.
- Rosenthal, R., & Jacobson, L. Pygmalion in the Classroom. New York: Holt, Rinehart & Winston, 1968.

Schiff, H. J. The Effect of Personal Contactual Relationships on Parents' Attitudes toward Participation in Local School Affairs. Doctoral dissertation, Northwestern University, 1963.

School District of Philadelphia, Office of Research and Evaluation. Digest of ESEA, Title I Projects for Title I Allocation Meetings. Philadelphia: The School District of Philadelphia, 1971. (A digest of evaluations prior to 1970-1971)

School District of Philadelphia, Office of Research and Evaluation. Interim Reports, 1971, Department of Instructional Systems Research. Philadelphia: The School District of Philadelphia, February 1971.

St. John, N. H. Minority Group Performance and Economic Integration: A Review of Research. ERIC Clearinghouse for Urban Disadvantaged, 1969.

INSTRUCTIONAL PRACTICES AND STUDENT COGNITIVE PERFORMANCE

Flexibility and diversification of instructional practices are prominent among the goals of the School District of Philadelphia, and are reflected in several of the ESEA, Title I projects. The diversity of instructional practices in these projects demonstrates that there are more ways than one to "individualize" instruction.

Those projects which provide for multiple grouping of pupils within the classroom seem to have the most widely applicable combination of flexibility, variety, and individualization. The quality of the individualized instruction depends upon the teacher's ability to diagnose each pupil's deficiencies and to prescribe or establish appropriate learning situations to improve the pupil's cognitive performance. Intensive and practical staff development is crucial in enabling the teacher to diagnose and prescribe for individuals in the complexity of the classroom setting.

The evaluation of the "Instructional Practices and Student Cognitive Performance" cluster and its component projects was designed, conducted, and reported by Kenneth W. Prusso, Research Associate, and Walter A. McDaniel, Research Assistant. Mr. McDaniel had primary responsibility for the evaluation of the Individualized Education Center project.

INSTRUCTIONAL PRACTICES AND STUDENT COGNITIVE PERFORMANCE

This cluster report focuses upon the instructional practices utilized in eight projects and assesses their implications for implementing individualized instruction in other settings. Separate evaluations of the individual projects' noncommon features and their pupils' cognitive performance follow this cluster report. Each of the individual project reports should be interpreted in the context of this cluster report.

Projects included in this cluster are the Class for Mentally Retarded-Emotionally Disturbed Children (RE-ED), English as a Second Language (ESL), Individualized Education Center (IEC), Improvement of Reading Skills (IRS, a subcluster of four projects: Reading Skills Centers, Shared Time, Part-Time, and Primary Reading Skills Center), and Learning Dimensions Program (LDP).

The Cluster of Projects

The projects are examined in this cluster to learn of ways to individualize instruction effectively. Widespread conditions of poverty are known to have an adverse effect on pupils' academic performance. Each child seems to need individual attention which has been difficult to provide under existing conditions.

Difficulties in instituting and implementing individualized instruction have been related to lack of knowledge about (a) how best to arrange and guide instructional programs, and (b) how best to prepare teachers and provide support for their transition to new instructional practices.

In order to individualize instruction, teachers must develop the skills for managing the pupils in a setting in which the teacher establishes indirect controls with the class. Teachers must also be able to apply the techniques of diagnosis and prescription. Diagnosis of each pupil's underlying weaknesses, deficient development, or poor motivation is dependent upon a teacher's theoretical understanding of the specific knowledge, skills, and interests which are precursors to cognitive achievement. Prescription of appropriate learning tasks in appropriate settings is also dependent upon the teacher's theoretical understanding of the potential effect of given instructional settings, curriculum, and instructional practices upon each pupil. The task is monumental but realistic, as evidenced by special projects.

Not all efforts to individualize instruction are successful. In an evaluation of an individualized reading program, for example, it was reported that some teachers were unable to individualize instruction (Safford, 1960). Robinson (1960) pointed out that teachers who adopt individualized programs should have exceptional knowledge of the skills involved, should be excellent diagnosticians, and should be thoroughly familiar with materials. However, Cohen (1967) reported that teachers

have not been properly prepared to deal with the rigorous demands made by severe underachievement of urban pupils, especially at the secondary level. Barbe (1957) also lists (a) inadequate instruction (e.g., lack of instruction for skills) and (b) improper instruction (e.g., untrained teachers, no systematic program, single method of instruction, and inadequate understanding of the child) as causes of reading problems.

In brief, the successful implementation of individualized instruction appears to be dependent upon the teacher's (a) skills in managing pupils in indirect ways, (b) skills and knowledge of subject-matter areas, (c) knowledge of appropriate curriculum materials, and (d) capability of diagnosing and prescribing to each child.

In its concern for providing quality instruction, the School District of Philadelphia has set the following objectives:

1. To develop in each student, by relevant, interesting, and diversified instruction, a command of the basic skills and the ability to think clearly, communicate effectively, and learn easily.
2. To develop an efficient, responsive, and flexible organization with the motivation, ability, and resources to meet the needs of each student, each teacher and administrator, and each school.
3. To engage in every effort to attract, train, and retain the most competent personnel.

To meet these objectives, the School District has designed certain projects under ESEA Title I funds which have a focus on the improvement of pupil cognitive functioning through improved instructional practices. Some common objectives of the projects in this cluster are the following:

Objective 1. To provide instructional practices specialized to meet pupils' unique learning deficiencies.

Objective 2. To encourage pupils to work voluntarily with materials or in problem-solving situations within the learning environment, and to communicate verbally about their experiences.

Objective 3. To reverse the current trend toward severe underachievement in basic cognitive skills.

Although each project has attributes in common with the others, each is distinctive in the finer details of rationale, implementation, and aspirations for changes in schools, teachers, and pupils. In this cluster report, a balance is sought between specificity and generality to provide evaluative information regarding the projects and general knowledge gained regarding instructional practices.

A brief survey of the rationales of three projects (IEC, IRS, and LDP) reveals some of the concerns for individuality which the proj-

ects' personnel consider crucial to the attainment of viable instructional practices.

IEC perceives value in pupils' self-regulation for developing self-esteem and its consequential effect on learning. Pupils have different abilities for learning different information at different rates, and this factor is given prime consideration in instruction so that each pupil perceives himself as achieving rather than failing (St. Mary's Interparochial School, 1971).

The IRS Reading Skills Centers model stresses the desirability for the learner to be motivated. Motivation is seen to be related to the pupil's own interest in and recognition of achievement. The model recognizes that individuals need practice in setting goals for themselves which are neither too unrealistic nor too easily attainable. Further, personal responsibility through self-teaching and self-correcting is an implicit goal. Finally, value is seen in learning how to have increased control over one's own destiny.

LDP has acknowledged that pupils' assimilative and accommodative processes of equilibration must function for them to acquire knowledge. By encouraging pupils to make use of opportunities to engage in tasks of their own interest, it is assumed that there is an increased probability that pupils will function to satisfy their learning needs through equilibration.

Although there have been previous evaluation reports for most of the individual projects, the reports have not collectively provided the kinds of strategic information needed by major decision makers in the School District. Brown (1970) has suggested that evaluations which focus upon the development and understanding of instructional practices and learning environments could provide more insightful management information. The information reported here is intended to follow this suggestion by describing instructional practices and stating generalizations about the relationships which appear to exist among project parameters, instructional practices, and pupil cognitive growth.

Current Evaluation Procedure

The current cluster evaluation was focused upon the individualization of instruction and the implications of this broad objective to related issues. On the basis of available overviews of projects, it was expected that instructional practices would vary from project to project. Different criteria for pupil selection were indicated, and these had some effect on instructional practices, curricular materials, and the level of expected pupil achievement. The types of objectives ranged from very broad social objectives to very specific factual or skill objectives. The range is exemplified by one objective for pupils to acquire better learning habits and another for pupils to hear the differences between the sounds ch- and sh-. These differing objectives in turn were expected to make different demands upon teachers' skills. The specific

types of curricular materials used also were expected to make different staff development demands, for in one instance teachers might need to learn how best to facilitate pupils' use of a package of materials, and in another they might need to learn how to develop their own materials.

Because the projects operate in special settings for special purposes, it was assumed that each project has developed a model of specialized instruction. The investigation sought to discover the characteristics of the models in the context of their objectives and the characteristics of their participating pupils. The resulting descriptions of the instructional practices could then be further refined to show relationships among the arrangements of pupils, the methods of instructing, the types of educational materials, and the modes of learning.

Questions concerning cognitive achievement are not answered directly in this report, but they are answered in the individual projects' reports in relation to the specific objectives and the characteristics of the pupils served.

Thus the current year's evaluation of this cluster was focused on the following question:

Question: What are the operational characteristics of the projects designed to remediate learning deficiencies?

In order to describe objectively the variety of instructional practices, it was necessary to construct an observational instrument which would facilitate the collection of data across projects. The "Additional Observational Items" form was developed to be used in conjunction with the standard Observational Checklist. (Copies of both instruments are on file in the Research Library of the Board of Education.)

The Additional Observational Items dealt with four instructional elements: class structure, teaching form, mode of learning, and content area.

Class structure. There were four types of pupil organization: whole class, two groups, multigroup, and individual pupil arrangements.

Teaching form. Four varieties of teaching form were observed. The first (teacher instructing) is characterized by the teacher's telling or demonstrating while the pupils watch or listen. The second (teacher-pupil interaction) is characterized by verbal interactions between the teacher and the pupils. The teacher controls the instruction while the pupils respond to the teacher's questions. The third variation (pupils interacting with educational materials) is characterized by the pupils' interaction with a problem or with educational material. The teacher provides the structure through a somewhat indirect procedure. In some cases the teacher might permit pupils to choose between two alternative tasks. The fourth variation (pupils doing independent work) is characterized by the pupils' wide choice of problems or activities, or by the pupils' freedom to determine independently what they wish to do with

relatively unstructured materials, or with the pupils' freedom in deciding how to solve problems or respond to tasks posed in a general way. The teacher's role here is like that of a consultant.

Mode of learning. The mode by which a pupil learns or involves himself in a task is accounted for by six variables: listening, talking, reading, writing, visual perception, and manual manipulations. The first four terms are indicative of the mode of intake or expression of ideas, while the last two terms represent involvement through motor, sensory, or perceptual modes.

Content area. The content areas were categorized as reading/-language arts, mathematics, general cognitive, affective, and procedural.

The Additional Observational Items form provided information regarding instructional practices, pupil arrangements, use of aides, and types of materials. The evaluators' personal interviews with teachers and directors and reading of pertinent material provided information regarding the project goals, settings, and teachers' required skills.

The two observational instruments were used to make systematic observations of the teachers (and at times the aides) in projects during the year. For IRS, all fully operational Reading Skills Centers' teachers were visited. For ESL, the six teachers involved in the project evaluation design were observed most often, with four observations of other teachers included. For IEC, almost all regularly assigned teachers were observed twice. For LDP, almost all regularly assigned teachers were observed twice during each half of the year.

Each visit to a project lasted approximately one half-hour. During that time, three five-minute observations were conducted on the variables composing the Additional Observational Items, and one overall summary was made on the Observational Checklist.

The data gathered through the two instruments were summarized together to describe prevalent practices observed for each variable within each project. For IEC and LDP, only the second half-year observations on the Additional Observational Items were reported. These latter observations best represent those projects, since changes in instructional practices were noted during the year as a result of staff development activities.

Results

Data relevant to the question: What are the operational characteristics of the projects designed to remediate learning deficiencies?

Table 1 summarizes the range of observations made for each project using the Observational Checklist and the Additional Observational Items. There were sufficient observations of each project at the

various grade levels to justify speaking of the observed practices as characteristic of the project.

TABLE 1
OBSERVATION VISITS TO PROJECTS

| Item | RE-ED | ESL | IEC | IRS | LDP |
|---|------------------|-----|-----|-----|-----|
| Number of visits using Additional Observational Items | 22 | 18 | 16 | 20 | 46 |
| Number of reported observations (3 per visit) | 66 | 54 | 48 | 60 | 138 |
| Number of visits using Observational Checklist | 19 | 21 | 22 | 27 | 42 |
| Number of visits to indicated grade: ¹ | | | | | |
| K | - | - | - | - | 1 |
| 1 | - | - | 3 | 1 | 13 |
| 2 | (2) ² | 4 | 2 | 1 | 7 |
| 3 | (5) | 5 | 2 | 1 | 8 |
| 4 | (2) | 0 | 4 | 8 | 6 |
| 5 | - | 2 | 1 | 3 | 2 |
| 6 | - | 1 | 3 | 8 | 5 |
| 7 | - | 3 | 2 | - | - |
| 8 | - | 1 | 4 | - | - |
| 9 | - | 0 | - | - | - |
| 10 | - | 1 | - | - | - |

¹On some visits to some projects, grade was not specified.

²Pupils are not assigned to grades while in the RE-ED project.

After the systematic monitoring of each project and the intensive field visits to project sites, it was possible to develop a set of descriptive characteristics which briefly summarized the relationships among the project's objectives, the primary characteristics of the participating pupils, the instructional setting, and the general characteris-

tics of the instruction. Table 2 permits a comparison of the general features among the projects. More detailed descriptions of the various projects' modes of operation are in the individual project reports.

A brief summary of the instructional practices for each project is presented in Table 3. The data were collected through monitoring activities and presented as summaries of features of class structure, teaching form, instructional materials, and mode of learning. The intention of the summary is to provide a description of the features which occurred together. The reader can note, for example, that in RE-ED the most prevalently observed class structure was for pupils to be arranged individually. During that arrangement the teacher dealt with each pupil separately while the pupils worked at assigned tasks, using printed materials or other materials. Pupils learned through talking, listening, reading, manual activity, visual activity, and writing.

The whole class organization was used with small classes in RE-ED and ESL, and with more traditional class sizes in LDP. Concurrently, the teaching form used with this arrangement was usually teacher-pupil interaction (e.g., verbal drill, teacher question followed by pupil response). Materials were usually a chalkboard which all members could observe, printed materials, or visual materials. The learning modes for pupils were talking, listening, reading, and visual activity. For example, in ESL, a picture card would be held and the teacher would ask, "What is this?" and pupils would respond, "That is a _____." In other projects there might be sentences on the chalkboard, and pupils would be asked to find the noun or the right word to fill a blank.

Multigroup class organizations were most prevalent in IEC, IRS, and LDP. (Subdivision of RE-ED and ESL classes would have resulted in each pupil working on his own materials.) There were three teaching forms used in combination with multigroup arrangements exclusive of the one in which the teacher presented or lectured. Thus, one group of pupils could be engaged in verbal interaction with the teacher or an aide. Another group might be doing individual work with programmed materials provided by the teacher, with the further possibility that pupils within the group might not be working on identical tasks. Another group might be reading self-chosen literature or working independently with programmed materials, task cards, writing, arts and crafts, games, or building blocks. There might be one group in which the teacher would work with one pupil at a time reviewing vocabulary, spelling, pronunciation, or other drill work, or simply discussing the pupil's work. Although all learning modes were utilized during multigroup instruction, LDP placed more emphasis than IEC or IRS on visual and manual activities.

Individual class organizations were observed in RE-ED, IEC, and LDP. Under this arrangement, RE-ED used individual assignments for each pupil to work in workbooks or with other related materials. The teacher answered questions as they arose. In IEC, pupils were directed to work on their own chosen materials such as texts, programmed materials, and worksheets, especially in the area of mathematics. In LDP, pupils were often asked to do individual work with worksheets of various types. Not

TABLE 2

CHARACTERISTICS OF PROJECTS IN THE "INSTRUCTIONAL PRACTICES AND STUDENT COGNITIVE PERFORMANCE" CLUSTER

| Project | Objectives | Pupil Characteristics | Typical Setting | Instruction |
|---------|--|--|--|---|
| RE-ED | To develop basic skills and promote emotional adjustment. | Retarded educable with emotional disturbance related to retardation. | Standard classroom; limited number of pupils. | Individual work for each child; constant adult guidance. |
| ESL | To develop English audiolingual skills. | Do not speak or understand English. | "Part-time" attendance; bilingual teacher; limited number of pupils. | Group and individual practice in speaking patterns and comprehending. |
| IEC | To develop general comprehension, and skills in language arts and mathematics. | Title I requirements for school and area; parochial education. | Standard classroom; special equipment for multimedia materials; aides available. | Programmed skill-development materials and other printed materials. |
| IRS | To develop reading skills and comprehension. | Title I requirements for school and area; pupils have severe reading problems. | "Part-time" attendance in proportion to severity of reading disability; specially equipped classroom "center" for multimedia materials; aides available. | Programmed skill-development materials; workbooks; literature. |
| LDP | To develop general cognitive comprehension and skills, and self-expression. | Title I requirements for school and area. | Self-contained classrooms with "activity centers" for sensory-related materials; aides available. | "Open classroom"; task cards; printed materials. |

TABLE 3
OBSERVED CHARACTERISTICS OF INSTRUCTIONAL PRACTICES¹

| Project | Class Structure | Teaching Form | Instructional Materials | Mode of Learning |
|---------|--------------------------------|---|--|---|
| RE-ED | Individual | Pupils involved with materials with teacher's direction. | Printed materials and other. | Talking, listening; (reading, manual activity, writing, visual activity, writing). |
| | (Whole class) | (Teacher-pupil interaction.) | (Chalkboard.) | (Talking, listening, reading, visual activity.) |
| ESL | Whole class | Teacher-pupil interaction. (Pupils involved with materials with teacher's direction.) | Visual materials. | Talking, listening, visual activity. |
| IEC | Individual | Pupils doing independent work. | Tapes, workbooks, programmed materials. | Listening, reading, talking, writing. |
| | Multigroup | a. Teacher-pupil interaction. b. Pupils involved with materials with teacher's direction. c. Pupils doing independent work. | a. Chalkboard. b. Workbooks, programmed materials. c. Tapes, texts, programmed materials. | a. Talking, writing, reading. b. Reading, listening, writing. c. Listening, writing, reading. |
| IRS | Multigroup | a. Teacher-pupil interaction. b. Pupils involved with materials with teacher's direction. c. Pupils doing independent work. | a. Workbooks, chalkboard. b. Workbooks, programmed materials, tapes. c. Literature, programmed materials, tapes. | a. Talking, reading. b. Reading, listening, writing. c. Reading, listening, writing. |
| | (Whole class) | (Teacher-pupil interaction.) | (Workbooks, literature.) | (Reading, listening, talking, writing.) |
| LDP | Whole class | a. Teacher-pupil interaction. b. Pupils involved with materials with teacher's direction. | a, b. Chalkboard, printed materials, other. | a, b. Listening, talking, reading, writing, manual activity. |
| | Individual or Multigroup | a. Teacher-pupil interaction. b. Pupils involved with materials with teacher's direction. c. Pupils doing independent work. | a. Printed materials. b. Other, printed materials, chalkboard, tapes. c. Other, printed materials, texts. | a. Listening, talking. b. Manual activity, reading, writing, visual activity. c. Manual activity, reading, writing. |

¹Secondary or less prevalent features are enclosed in parentheses.

all pupils were engaged in the same assignment. Alternately, the individual arrangements were used for art work and writing assignments, with the teacher answering questions as they arose.

Table 4 displays (a) the observed average pupil attendance, (b) the observed number of instructional personnel including teachers, aides, and others, and (c) the ratios of instructional personnel to pupils with and without the presence of part-time staff members. Under ideal conditions, the ratios ranged between 1:6 and 1:11. The projects (RE-ED and ESL) which had no aides used other arrangements which tended to produce similar ratios of instructional personnel to pupils. When aides were available, teachers tended to use multigroup arrangements which facilitated the individualization of instructional practices.

TABLE 4

AVERAGE NUMBER OF PUPILS AND STAFF
AND RATIOS OF STAFF TO PUPILS

| Project | Average No. of Pupils Present | No. of Teachers &/or Aides ¹ | | Ratio of Staff to Pupils | |
|---------|-------------------------------|---|-----------------------------|--------------------------|-----------------------------|
| | | When All Staff Present | When Part-Time Staff Absent | When All Staff Present | When Part-Time Staff Absent |
| RE-ED | 6 | 1 | 1 | 1:6 | 1:6 |
| ESL | 10 | 1 | 1 | 1:10 | 1:10 |
| IEC | 22 | 2 | 1 | 1:11 | 1:22 |
| IRS | 18 | 3 | 2 | 1:6 | 1:9 |
| LDP | 21 | 3 | 1 | 1:7 | 1:21 |

¹LDP master teachers are included.

Conclusions

Question: What are the operational characteristics of the projects designed to remediate learning deficiencies?

Two types of project implementation have been identified in this cluster of projects. One type (e.g., RE-ED, ESL, and IRS) is

characterized by specialized classes existing along with the traditional curriculum and instructional practices of participating schools. In the specialized classes, objectives are distinctive and specialized and the pupils are selected according to unique criteria.

The other type (e.g., IEC and LDP) provides alternative structures across all curricula and instructional practices. For these projects, which are part of the entire school, pupil selection is broader, the objectives are more general, and the projects tend to apply to more academic areas. Thus, there is a wider range of applicability of the practices of these projects.

Three major models for specialized instructional practices have emerged from the cluster of projects. One model (e.g., ESL) suggests that pupils with common deficiencies can receive group instruction using a curriculum that is specialized for that group but not individualized for each pupil.

The second model suggests that with a small class, as in RE-ED, the teacher can plan individual lessons in academic areas for each pupil or work with the pupils as a group. Because the group is small, the individuality of each pupil can be given ample attention.

The third model is common to IEC, IRS, and LDP. According to this model, pupils in a class, regardless of the criteria used for their selection, can be handled in multigroup arrangements. To facilitate the multiple groups, several centers can be located within a room, and pupils can choose or can be assigned to work in the centers. Pupils may be allowed to change centers. Individualized instruction is facilitated by the small groups. Pupils with whom the teacher is not directly involved can be instructed through either programmed materials or other structured materials. They may work independently on problems of their own choice or practice and review at their own pace. Pupils have been observed to help one another under these circumstances.

Regardless of the model, individualized or specialized instruction for the target population appears to be consonant with a low ratio of pupils to instructional personnel.

Issues and Implications

If the School District wishes to make broad changes in instructional practices, consideration should be given to (a) the type of individualized instruction that is desired, (b) the content and procedures of staff development, and (c) the intensity of pupils' exposure to instruction in specific skills.

Because individualization of instruction can be variously defined, any goal for individualized instruction is inadequate unless it also describes the type of instructional practice desired. "Individualization" can mean that the teacher prescribes a set of learning encounters

or activities for each pupil involved, as in RE-ED. Or it can mean that one or more sets of programmed materials are provided for each pupil's use, with the pupil (or the teacher and the pupil together) choosing among the programs, or with the pupil working at his own chosen pace in one program. Further, "individualization" can mean that general problems or learning tasks are posed to the pupils, who choose which problems they wish to work on and, in consultation with the teacher, determine how to go about approaching and resolving the problems.

The projects which deal with learning across all subjects tend to require intensive staff development. The observed multiple grouping of pupils provides a class structure which requires both a variety in teaching forms and the simultaneous use of different instructional materials. If broader implementation of the instructional practices based upon these projects is desirable, then staff development becomes a mandatory component. The comprehensive staff development program described in the project report of LDP provides viable guidelines which could be generally applicable.

Staff development programs should provide for (a) development of the teacher's organizational skills (e.g., maintaining many groups of pupils concurrently), (b) development of the teacher's skill in serving as consultant as well as serving in traditional roles, and (c) development of the teacher's understanding of the relationships between diagnosis and prescription in terms of a uniform theoretical framework. If "homemade" curricular materials are to be used, teachers need to learn the different skills for developing worksheets, devising task cards, and providing other needed materials for problem solving. If purchased curriculum materials are to be used, teachers need to learn what they will provide, in what ways they are limited, and how to provide instruction consistent with the materials and objectives.

Staff development appears to require administrative and supervisory support for "in-the-class" practice in addition to the typical workshops and meetings. When teachers are learning new skills, a professional teacher who is experienced with individualized instruction could provide important help. Also, teaching aides could be helpful in diminishing the developing teachers' management burden. With their assistance the teachers might be more likely to continue to practice new techniques for the length of time needed to learn them and to become comfortable with their use.

Finally, a relationship appears to exist among the intensity with which pupils are exposed to skill development, the rate at which pupils learn, and the overall level of achievement. The relationship is evidenced in this year's ESL project report, and in a previous finding for pupils in reading and computational skills centers (Brown, 1968).

It seems that pupils exposed to a concentrated teaching of specific skills achieve mastery of these skills in approximately one half-year to the same degree to which pupils achieve mastery of those skills over a whole year with less intensive exposure. When pupils are

exposed to the concentrated instruction over a whole year, their achievement hardly increases during the second half of the year.

This generalization has been found to apply to ESL audiolingual skills, and may also be found among other projects which have specific skill development as part of their goals. It may be applicable, for example, to word-attack skills, and perhaps to some comprehension skills. Decision makers might be reassured that at least two exposure patterns are equally viable, and a decision as to which of the patterns to use can be made in consideration of other needs, such as the immediacy of the pupils' deficiencies or the availability of classroom space.

CLASS FOR MENTALLY RETARDED-EMOTIONALLY DISTURBED CHILDREN
(PBRS #111-05-652)

The Class for Mentally Retarded-Emotionally Disturbed Children (RE-ED) is a special class for children who are both retarded educable (RE) and emotionally disturbed (ED).

This project report should be interpreted in the context of the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The School District of Philadelphia has special classes for retarded educable (RE) children, and for emotionally disturbed (ED) children. When a pupil diagnosed as ED also displays a highly erratic intelligence profile (i.e., high scores in some aspects of intelligence and low scores in others) and has an overall intelligence quotient between approximately 60 and approximately 85, there is reason to suspect that the pupil's emotional disturbance lies at the base of his problems in the educational setting.

The RE-ED project attempts to improve the emotional adjustment of selected RE children. It is hoped that, as a result of that improved adjustment, the children will find greater success in that educational setting, and eventually will be able to function with moderate success in more typical educational settings.

The primary objectives of the RE-ED project are the following:

Objective 1. To reduce the degree of emotional disturbance exhibited by the RE-ED children in the classroom environment.

Objective 2. To facilitate the RE-ED children's readiness for learning.

Objective 3. To increase parental understanding of the problems of RE-ED children so that family members can better cope with the child's limitations.

The project is implemented in a regular-size classroom with a maximum of eight children. Pupils are screened before being admitted to the project. The screening committee is composed of specialists such as a physician, a psychiatrist, a psychologist, a school counselor, and the project teacher. The parents' attitudes toward (a) the goals of the project, (b) providing regular transportation for the pupil where necessary, and (c) getting the pupil to school regularly are taken into consideration. The pupil's attributes also are considered so that pupils who are extremely disruptive, for example, are not admitted.

The RE-ED teacher is a considerable portion of the treatment. She provides the understanding of pupils' difficulties and feelings, and helps pupils find rational ways to cope with these. The teacher's respect for the pupils and her adult response to their problems provide them a consistent, immediate interaction upon which they may perceive their self-development in perspective. The teacher also considers each child's academic development and provides individual as well as some group lessons. The lessons are designed so that they do not overwhelm the child but support his academic progress. The school counselor and the RE-ED teacher have occasional conferences with the child's parents.

Pupils are allowed to attend either all day or less, depending upon their ability to cope with the school setting. As they display social, emotional, and academic progress (usually after a year or more of attendance), they are placed in regular classroom settings or another special class (either RE or ED) on a trial basis. Pupils who display adequate adjustment to the more regular setting are transferred to it the following year.

Previous evaluations of RE-ED indicated that the pupils made overall improvement both academically and socially, and showed an improved attitude toward school. Although the scores of the group on the Illinois Test of Psycholinguistic Abilities (ITPA) did not show statistically significant gains during the school year, certain pupils did progress in language skills at a rate equal to or greater than that of children with average measured intelligence. Parental counseling was found difficult to carry out, and thus only minimally effective.

Current Evaluation Procedure

This year's evaluation was focused on two questions related to the project's objectives:

1. Has the RE-ED pupils' classroom behavior become more relevant to the task at hand?
2. Has the RE-ED pupils' achievement in reading and mathematics improved?

Question 1. Has the RE-ED pupils' classroom behavior become more relevant to the task at hand?

To answer this question, the behavior of pupils was observed over the academic year. The proportions of relevant and nonrelevant behaviors for the first and second halves of the year were compared. An increase in the proportion of relevant behavior was considered indicative of positive effect and consistent with the objectives of the project.

A modified version of an observational scale developed by

Thomas, Becker, and Armstrong (1968) was used. Relevant behaviors were defined as behaviors which were appropriate to the task at hand in the educational setting. Nonrelevant behaviors were categorized as Gross Motor (kicking, twisting, walking), Noise Making (making vocal or other noises), Orienting (looking at another pupil or out the window for extended periods of time), Verbalizing (talking, calling the teacher while the teacher is talking), Aggression (any aggressive act, regardless of purpose), and Other.

The observed behaviors of pupils were tallied, and the percentage of relevant behaviors was determined by dividing the number of relevant behaviors by the number of all behaviors observed.

The five pupils who were in attendance for the school year were subjects for this part of the evaluation. In this report they are identified as Pupils 1, 3, 5, 6, and 7.

Question 2. Has the RE-ED pupils' achievement in reading and mathematics improved?

The teacher's comments on the pupils' work in reading and mathematics were used as assessments of that achievement and provided the basis for noting gains during the school year. The teacher's assessment of academic achievement was used because (a) conventional measures of achievement are not generally applicable to RE pupils, and (b) the services of the previous year's skilled ITPA tester were not available this year.

The achievement levels of pupils were reported by the teacher in December (allowing the autumn months for the teacher to become well acquainted with the pupils) and in June, and were compared to note individual gains.

The same subjects were used in the investigation for this question as for Question 1.

Results

Data relevant to Question 1. Has the RE-ED pupils' classroom behavior become more relevant to the task at hand?

The relevance of the full-year RE-ED pupils' behaviors, as observed in two parts of the school year, is summarized in Table 1. The table shows, for example, that from September through December, 68% of Pupil 1's observed behaviors were categorized as "relevant."

TABLE 1

PERCENTAGE OF FORMALLY OBSERVED CLASSROOM BEHAVIORS
CATEGORIZED AS "RELEVANT"

| Pupil Identification* | September-December | January-May | Change Expressed in Percentage Points |
|-----------------------|--------------------|-------------|---------------------------------------|
| Pupil 1 | 68% | 59% | - 9 |
| Pupil 3 | 36% | 66% | + 30 |
| Pupil 5 | 74% | 81% | + 7 |
| Pupil 6 | 27% | 88% | + 61 |
| Pupil 7 | 39% | 84% | + 45 |

*Pupil 2 stopped attending the class after a severe reversal in adjustment. Pupils 4 and 8 entered the class in January.

In the latter half of the year, Pupil 1 showed a decrease in relevant behavior while the other pupils showed an increase. The smallness of Pupil 5's gain was consistent with his relatively high percentage of relevant behavior during the first part of the year.

Table 2 lists the most frequently noted nonrelevant behaviors of the pupils and also provides a summary of the teacher's comments about the pupils' adjustment. For the pupils reported, some problems persist (e.g., poor attendance). The teacher's and the evaluator's independent observations were supportive of each other.

Data relevant to Question 2. Has the RE-ED pupils' achievement in reading and mathematics improved?

Table 3 summarizes pupils' achievements in reading and mathematics for December and June. The five pupils showed mixed results in that some of them made gains and some did not. Those pupils who improved in the academic areas were also noted as making good adjustment.

In reading, three pupils improved by at least one book level. In mathematics, although none progressed to the next year level, the teacher stated that Pupils 3 and 5 had made noticeable improvements within their respective levels.

TABLE 2

RE-ED PUPILS' MOST FREQUENTLY OBSERVED NONRELEVANT BEHAVIORS
AND TEACHER'S COMMENTS ON PUPILS' ADJUSTMENT

| Pupil* | Pupil's Most Common Nonrelevant Behavior | Teacher's Comments on Pupil's Adjustment |
|--------|---|--|
| 1 | Disrupting by talking and calling out. | Good progress over previous year, but some regression during the second half-year of 1970-1971; continued high absence rate. |
| 3 | Moving around, making noises, looking around. | Diminished gross motor behavior; making good social adjustment. |
| 5 | Looking around. | Making good social adjustment; still anxious but more assertive. |
| 6 | Daydreaming. | Has made good adjustment; currently attending a regular class on trial basis; continued tardiness and high absence rate. |
| 7 | Looking around, pouting. | Chronic instigation of problems and bad feelings; poor motivation. |

*Pupil 4, who attended on a half-day basis, was described as "overactive" and "unable to cope with a full day of school." Pupil 8 has had a "very poor attendance record."

TABLE 3

READING AND MATHEMATICS ACHIEVEMENT OF RE-ED PUPILS
AS ASSESSED BY TEACHER IN DECEMBER AND JUNE

| Pupil* | Reading Book Level | | Mathematics Year Level | |
|--------|---------------------|---------------------|------------------------|--------|
| | December | June | December | June |
| 1 | Pre-Primer | Pre-Primer | Year 1 | Year 1 |
| 3 | Book 1 | Book 2 | Year 1 | Year 1 |
| 5 | Pre-Primer | Book 1 | Year 2 | Year 2 |
| 6 | Book 2 ¹ | Book 3 ¹ | Year 3 | Year 3 |
| 7 | Pre-Primer | Pre-Primer | Year 1 | Year 1 |

*Pupil 4 in June: Reading, "readiness"; mathematics, "Year 1."

Pupil 8 in June: Reading and mathematics, "readiness."

Conclusions

Question 1. Has the RE-ED pupils' classroom behavior become more relevant to the task at hand?

In general, yes. Of the five pupils who were in RE-ED for the full year, all but one have shown greater relevance in their behavior during the second half-year than during the first. This improved behavior is an indication that the special setting is a factor in remediating poor psychological and social adjustment.

Question 2. Has the RE-ED pupils' achievement in reading and mathematics improved?

Although improvement in some cases has been less than one book level or less than one year level, there have been indications of generally increased achievement. This achievement has been more noticeable in reading than in mathematics.

TABLE 2

RE-ED PUPILS' MOST FREQUENTLY OBSERVED NONRELEVANT BEHAVIORS
AND TEACHER'S COMMENTS ON PUPILS' ADJUSTMENT

| Pupil* | Pupil's Most Common Nonrelevant Behavior | Teacher's Comments on Pupil's Adjustment |
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| 5 | Pre-Primer | Book 1 | Year 2 | Year 2 |
| 6 | Book 2 ¹ | Book 3 ¹ | Year 3 | Year 3 |
| 7 | Pre-Primer | Pre-Primer | Year 1 | Year 1 |

*Pupil 4 in June: Reading, "readiness"; mathematics, "Year 1."
Pupil 8 in June: Reading and mathematics, "readiness."

Conclusions

Question 1. Has the RE-ED pupils' classroom behavior become more relevant to the task at hand?

In general, yes. Of the five pupils who were in RE-ED for the full year, all but one have shown greater relevance in their behavior during the second half-year than during the first. This improved behavior is an indication that the special setting is a factor in remediating poor psychological and social adjustment.

Question 2. Has the RE-ED pupils' achievement in reading and mathematics improved?

Although improvement in some cases has been less than one book level or less than one year level, there have been indications of generally increased achievement. This achievement has been more noticeable in reading than in mathematics.

ENGLISH AS A SECOND LANGUAGE
(FBRS #111-02-551)

English as a Second Language (ESL) uses bilingual teachers to develop audiolingual English skills in Spanish-speaking pupils who have recently immigrated to Philadelphia. In contrast to the Title VII Bilingual Education project, ESL concentrates on audiolingual English skills but does not typically involve teaching Spanish (as a second language) to English-speaking pupils.

This project report should be interpreted in the context of the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The Philadelphia schools have considerable numbers of pupils whose first spoken language was Spanish. Of the eight districts, District 5 has reported the highest percentage of Spanish-speaking pupils--more than 18% of its elementary school population (Division of Administrative and Survey Research, 1970). Among this population are those who moved to the continental United States from Puerto Rico and Central and South American countries. The pupils who come to Philadelphia under these conditions usually have few or no functional English skills. They have the need to develop audiolingual skills for both educational and social purposes.

The ESL project is designed primarily to teach audiolingual English skills to the Spanish-speaking pupils. It is reasonable to emphasize the audiolingual skills before trying to teach reading and writing skills when many of the pupils do not even read or write in their native language.

An important component of ESL is that the bilingual teachers can provide warmth and understanding in their role as someone at school with whom the pupil can communicate. This role is less critical for foreign-language instruction when the pupil's minimal second-language skills are not essential for him to function in the dominant culture. English as an essential second language, rather than as a mere foreign language, gives consideration to the immediacy of these social needs.

Other Philadelphia projects designed for the Spanish-speaking school population have one component in common with ESL. Although they differ in classroom organization, curricular details, and participation by pupils who are not Spanish-speaking, the projects and their instructional practices are similar insofar as audiolingual skills are involved. In further contrast with these projects, there are schools in which pupils are not assigned to a special setting but must acquire English skills without any defined program.

ESL has the following objectives:

Objective 1. To increase the level of English audiolingual proficiency of native Spanish-speaking pupils.

Objective 2. To involve the Puerto Rican community in the school work of the pupils and in the operation of the project.

The ESL project is established in 15 schools--three of which are parochial--primarily in District 5 (where there is a considerable percentage of Spanish-speaking families). Some classes are also found in Districts 2 and 3. ESL instruction is provided for Grades 1 through 12. ESL ostensibly serves two kinds of pupils: (a) those who have recently moved from Puerto Rico or countries whose basic language is Spanish, and (b) first-grade pupils who have been in Philadelphia for more than a year but have had little or no exposure to English.

Pupils typically attend ESL classes for 30 to 50 minutes, three, four, or five days a week (hereafter referred to as "part-time attendance"). Pupils usually attend regular classes when not in ESL classes. In some schools, pupils are assigned to the ESL teacher all day (hereafter called "self-contained classes"). ESL teachers, who are bilingual, use Spanish when necessary to communicate and give directions.

The relatively flexible curriculum emphasizes English sentence patterns, vocabulary development, and grammatical patterns, all in the audiolingual mode. Reading and writing usually are not taught. Teachers use visual materials frequently, to supplement the following published materials: Introductory English (a set of picture cards) by Louise Lancaster, Welcome to English by Finocchiaro, Modern American English and English Step by Step by Dixson, the Miami Linguistic Readers, Classic Fairy Tales, and other reading-readiness materials.

In previous evaluations of ESL (beginning in 1966-1967), responses to questionnaires indicated that the exposure of Spanish-speaking pupils to the ESL project (a) produced improvement in English pronunciation, speech patterns, and fluency, and (b) provided for an orderly adjustment to school. Data from parents, principals, and teachers indicated that the program had high value and was successful in meeting its objectives. Testing with the Linguistic Capacity Index (LCI) over the past several years consistently indicated that the pupils had made significant improvements in vocabulary, contrastive grammar, and contrastive phonology. In 1969, when ESL pupils' progress was compared with that of a sample of non-ESL pupils, the average gain score of the ESL sample exceeded the average gain score of the non-ESL sample. However, the results were not conclusive.

Current Evaluation Procedure

The focus of this year's evaluation was on the relationships among the length of time pupils spend in the ESL project, the nature of

the instructional organization, and the development of audiolingual skills as measured by the LCI. Two questions were asked:

1. Have ESL pupils in different schools shown different amounts of gain in English audiolingual skills?

2. What differences in audiolingual skill gains, if any, exist among students who have been in ESL (a) for the entire school year, (b) for the first half-year only, and (c) for the second half-year only?

Question 1. Have ESL pupils in different schools shown different amounts of gain in English audiolingual skills?

Audiolingual English skills were measured in October, February, and May by means of the Linguistic Capacity Index (LCI). (A copy of the test is on file in the Research Library of the Board of Education.)

Six schools in which ESL was in operation were selected for study. The schools included K-4 and 7-9 grade-level organizations. All ESL pupils in the selected schools were potentially included in the testing process. Some pupils were excluded because of various uncontrolled factors such as their absence from school on a scheduled test date. The LCI was administered by each teacher to his own pupils.

The LCI scores of those students who were tested in October, February, and May were analyzed in a one-way analysis of variance with a repeated measure.

Question 2. What differences in audiolingual skill gains, if any, exist among students who have been in ESL (a) for the entire school year, (b) for the first half-year only, and (c) for the second half-year only?

The same six schools were used for answering this question as for Question 1. On the basis of LCI scores submitted by the schools, the ESL pupils were divided into three groups: (a) those for whom there were October, February, and May test scores; (b) those who had only October and February scores; and (c) those who had only February and May scores. The first group was designated as having been in ESL for the full year. The second group was presumed to have been in ESL during the first half-year "only." The third group was presumed to have been in the project during the second half-year "only."

Average scores of the three groups were computed, and a t test was applied to the groups' gain scores.

Results

Data relevant to Question 1. Have ESL pupils in different schools shown different amounts of gain in English audiolingual skills?

The mean score for each test administration at each school is shown in Table 1. The same data are presented graphically in Figure 1.

TABLE 1
MEAN SCORES OF ESL PUPILS AT SIX SAMPLE SCHOOLS
IN THREE ADMINISTRATIONS OF LCI

| School | October | February | May |
|---------|---------|----------|------|
| 1 | 50.8 | 60.2 | 65.2 |
| 2 | 48.3 | 57.4 | 69.4 |
| 3 | 38.5 | 64.1 | 63.5 |
| 4 | 43.6 | 47.5 | 57.2 |
| 5 | 40.3 | 45.4 | 50.6 |
| 6 | 35.8 | 47.8 | 50.9 |
| Overall | 44.8 | 53.1 | 59.5 |

Schools 2 and 3 made October-to-May gains of more than 20 points, while gains in the other schools were in the range of 10 to 15 points. School 2 was the only secondary (junior high) school in the sample; the ESL class in School 3 was self-contained and highly task-oriented.

The one-way analysis of variance with a repeated measure revealed three effects that were statistically highly significant (the probability of their occurring by chance was less than one in 10,000): (a) differences between schools, (b) an overall upward trend of average scores with the passage of time, and (c) an interaction between a and b.

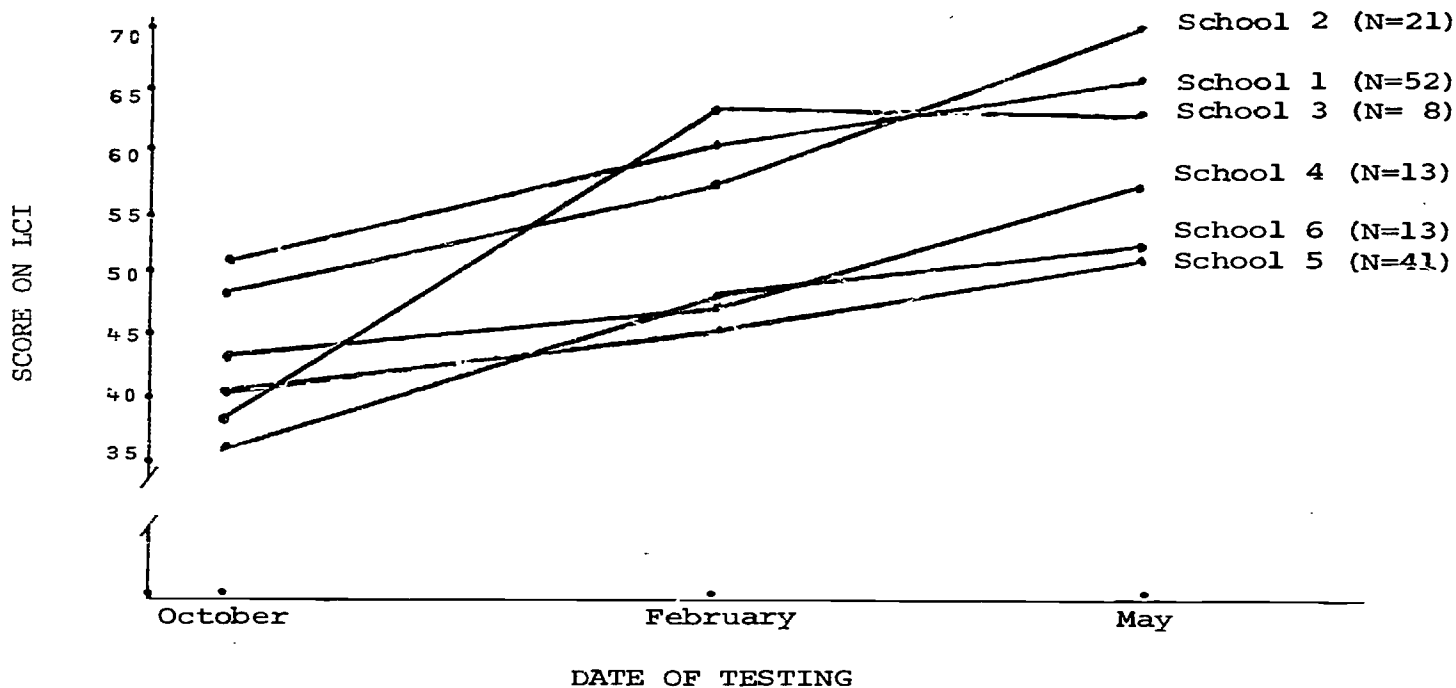


Fig. 1. Average scores on the Linguistic Capacity Index (LCI) obtained by ESL pupils in six schools. Schools 3 and 6 had self-contained ESL classrooms.

(The interaction is demonstrated also by the fact that the trend lines in Figure 1 are not all parallel to one another.)

Although further statistical treatment was not conducted to test the interaction, it appears from the graphs that part of the interaction occurred because of the difference in learning patterns between classes which utilize "part-time attendance" and those which utilize "self-contained classrooms." A separate plotting of the average scores for Schools 3 and 6 combined and the average scores for the other four schools combined is shown in Figure 2. The two schools (3 and 6) had self-contained classes, while the others (1, 2, 4, and 5) had pupils in "part-time attendance." Pupils in the self-contained classes made an average gain of 17.2 points between October and February, and an average gain of 1.7 points between February and May, indicating that their greatest acquisition of skills occurred during the early part of the school year. The pupils in "part-time attendance" made an average gain of 7.0 points during each interval or a constant gain over the entire year. However, it was noted that both groups tended to gain the same absolute quantity of skills during the period of their most active learning. (In this respect, a similar relationship between intensity of instruction and rate of learning specific skills, reported by Brown, is mentioned in the cluster report.)

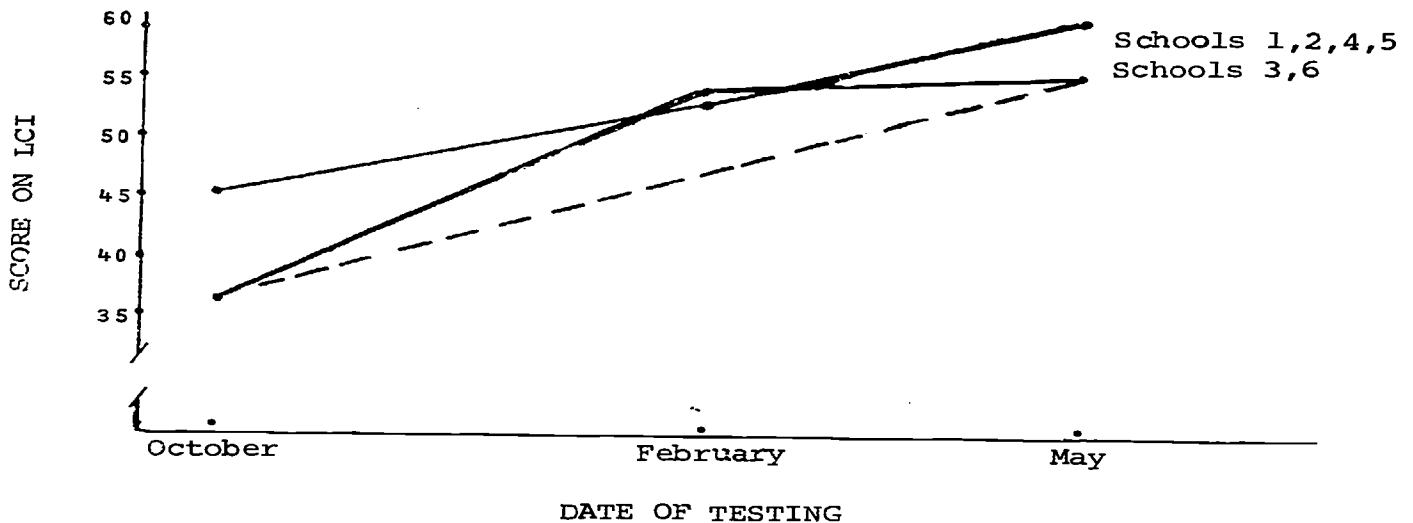


Fig. 2. Average LCI scores obtained by self-contained ESL classes (Schools 3 and 6) and ESL classes at other schools in the sample.

Data relevant to Question 2. What differences in audiolingual skill gains, if any, exist among students who have been in ESL (a) for the entire school year, (b) for the first half-year only, and (c) for the second half-year only?

The average scores and gains for the three groups of pupils are reported in Table 2. The same data are presented graphically in Figure 3.

The gain made by each group of pupils was significant for the respective period of participation. The gain of the full-year group during its first half-year was not significantly different from the gain of either half-year group. But the gain of the second half-year group exceeded that of the first half-year group by a statistically significant amount. Because of uncontrolled factors (such as disruptions in instruction during the first half-year) it was difficult to draw definite conclusions based upon the difference found.

Complementary Data

During each observation visit to an ESL class, the number of English statements or questions and the number of Spanish statements or questions were tabulated over three five-minute intervals. The ratio of English to Spanish usage was then calculated. This ratio was approximately 10 to 1; i.e., English was spoken about ten times as often as Spanish.

TABLE 2

OCTOBER, FEBRUARY, AND MAY AVERAGE SCORES
AND GAINS FOR THREE GROUPS OF ESL PUPILS

| Group's Exposure to ESL | Pupils in Group | Average Scores | | | Gain Scores | | |
|-------------------------|-----------------|----------------|------|------|-------------|----------|----------|
| | | Oct. | Feb. | May | Oct.-Feb. | Feb.-May | Oct.-May |
| Full school year | 164 | 44.8 | 53.1 | 59.5 | 8.3 | 6.4 | 14.7* |
| First half-year only | 31 | 43.3 | 51.0 | - | 7.7* | - | - |
| Second half-year only | 58 | - | 44.3 | 54.8 | - | 10.5* | - |

*The trend for the full-year group and the gains for both half-year groups were statistically significant ($p < .01$).

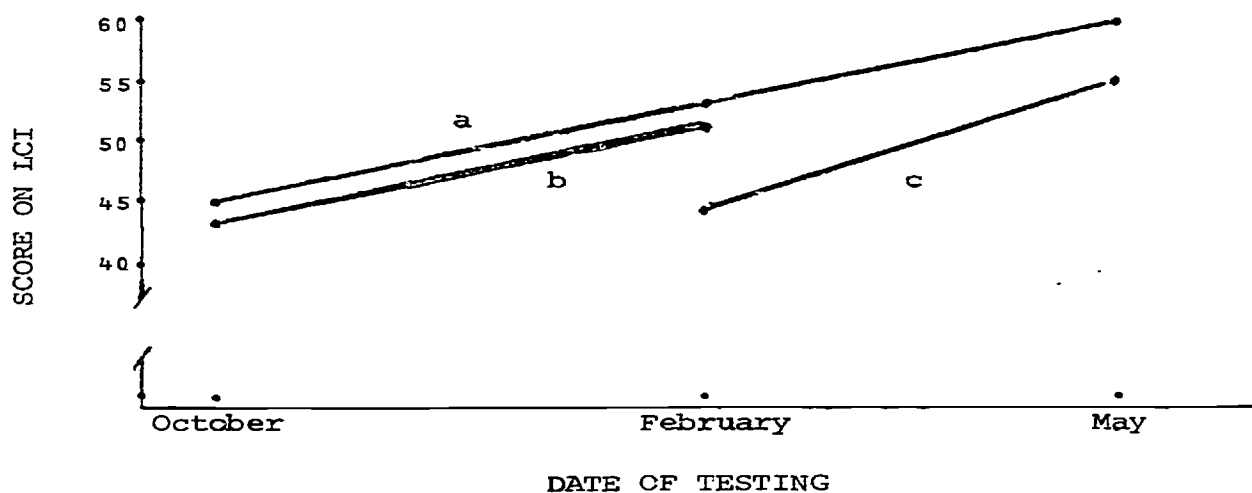


Fig. 3. Average LCI scores obtained by pupils in ESL (a) for the full year, (b) for the first half-year only, and (c) for the second half-year only.

In self-contained classes and in upper elementary, junior high, and senior high school classes, teachers were observed to use the chalk-

board, hand out written papers, and use texts printed in English as part of their teaching. (Although this practice was not recommended as a standard part of the project, the evaluation team thought it worthy of consideration. For example, if pupils could already read and write in Spanish, they might have some decoding skills which could help them pronounce written words. Pupils who have acquired sufficient audiolingual skills might find this type of activity a reasonable next set of skills to begin to develop.)

Conclusions

Question 1. Have ESL pupils in different schools shown different amount of gain in English audiolingual skills?

Yes, pupils in different schools have shown statistically significant differences in their amounts of gain. The differences in gain among schools are probably attributable to (a) differences in grades served, and (b) differences in instructional setting (e.g., the self-contained classroom versus part-time attendance in ESL classes).

Although the end-of-year scores for self-contained classes averaged about the same as end-of-year scores for "part-time" classes, pupils in self-contained classes made most of their gains during the first half-year, while pupils in "part-time" classes made their gains more evenly throughout the school year.

Question 2. What differences in audiolingual skill gains, if any, exist among students who have been in ESL (a) for the entire school year, (b) for the first half-year only, and (c) for the second half-year only?

Pupils in ESL only during the second half-year outgained those in the project only during the first half-year. The greater gains by the second-half pupils might be related to the fact that other pupils who had been in the classes since September had a greater facility with English and were able to help the newer pupils during the second half-year.

No significant difference is apparent between the gain by the full-year group during their first half-year of participation and the gain made by either of the groups limited to a half-year of participation.

All groups made statistically significant gains on the LCI during their exposure to ESL. Thus it may be concluded that ESL is meeting its objective of increasing the pupils' English audiolingual skills.

INDIVIDUALIZED EDUCATION CENTER
(PBRS #111-06-733)

The Individualized Education Center (IEC) project serves pupils from different socioeconomic neighborhoods who attend an interparochial school located in Society Hill. Instruction is individualized through multimedia and programmed materials.

This project report should be interpreted in the context of the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The rationale of the project has a sociological basis. Research by Bledsoe (1964) and by Engel & Raine (1963) has suggested that a negative self-concept adversely affects academic progress. Clark & Clarke (1947) have implied that the self-concepts of black and white pupils are negatively influenced by de facto segregated schools.

A major thrust of IEC is to enhance the individual dignity of pupils who come from diverse backgrounds and to nurture their sense of common humanity. The intention of IEC is to establish a desirable educational setting and program to develop self-esteem, motivation, and the appreciation of the worth of others for pupils from contrasting demographic backgrounds. Consistent with this concern for pupils' self-esteem is an emphasis on individualization of both instruction and the measurement of pupil progress. Instruction can be individualized through diagnosis of each pupil's educational disabilities and prescription of specific remedial activities using multimedia and multilevel materials. Measurement of progress can be individualized through the setting of attainable goals for each pupil and the avoidance of peer comparisons.

Objectives of the project include the following:

Objective 1. To individualize instructional practices.

Objective 2. To improve pupil performance in the basic skills

The IEC is located at Fifth and Locust Streets. The physical plant is one year old and has eight classrooms, a cafeteria-gymnasium combination, a library, a principal's office, and other smaller rooms of varied purposes.

Pupils from six adjacent parishes attend the IEC so that integration is on a voluntary basis. A myriad of demographic features characterize the respective parishes. For example, St. Mary's parish is historic and opulent. Affluent whites and a number of socially similar blacks reside there. Our Lady of the Blessed Sacrament parish is in a poverty-stricken area. Low-income blacks and people of Spanish-speak-

ing ancestry predominate in that area.

Of the 188 pupils attending the center, approximately half are boys. The average class has 24 pupils. The racial composition is 45% black, 32% white, and 23% Spanish-speaking. Sixty percent of the families list their annual income as less than \$7,000. Thirty-three percent of the male heads of households have completed ninth grade.

Diagnostic and basic skill tests are administered to all pupils in October and February. The October results are used as guides for the selection of specific instructional materials, programs, and experiences which will remediate educational disabilities. The February results assess the effectiveness of the first half-year's instructional program and, more importantly, indicate which changes in instructional practices must be initiated and implemented to meet the pupils' educational needs during the remainder of the year.

The IEC staff includes one principal, two instructional aides, one parent school aide, eight classroom teachers, and a teacher for reading adjustment and English as a second language (RA/ESL).

The classroom teachers diagnose individual educational needs, select the necessary vehicles for remediation, and teach toward alleviation of the needs. The RA/ESL teacher develops individualized learning activities for pupils with special reading problems and/or for Spanish-speaking pupils who need to improve their audiolingual English skills. ESL instruction is bilingual. Materials used in the instructional program include the McGraw Programmed Reading Series, Open Court Reading Series, Creative Reading Series, Reader's Digest Skill Builders, SRA Listening Skills Program, SRA Reading Progress Laboratory, Scott Foresman Talking Alphabet, Distar Program, Imperial Reading Program, Creative Learning Program, and a wide assortment of textbooks at various grade levels.

Current Evaluation Procedure

The evaluation for 1970-1971 (the first full school year of the project's operation) was focused on two questions related to the project's objectives:

1. Has IEC increased the individualization of instructional practices?
2. Has pupil performance improved in the basic skills?

Question 1. Has IEC increased the individualization of instructional practices?

Instructional practices of the project were observed both for-

mally and informally by the evaluator to answer this question. The formal observations were made using the Additional Observational Items Checklist, which facilitated the observation of class structure and teaching form.

All classroom groups at the center were observed. Findings (expressed in percentages) during the second half-year were compared with those of the first half-year to reveal any changes in the degree of individualization of instruction.

Question 2. Has pupil performance improved in the basic skills?

Pupil performance in two administrations of the Iowa Tests of Basic Skills (ITBS) was examined to answer this question. Four subtests were used: Vocabulary, Reading, Arithmetic Concepts, and Arithmetic Problems. All pupils in grades three through eight were tested in October and retested with an equivalent form of ITBS in February. A correlated t test was used to determine the statistical significance of the difference between pretest and posttest average grade-equivalent scores for each grade.

No comparison group was used because the ITBS is not typically used in parochial schools.

Results

Data relevant to Question 1. Has IEC increased the individualization of instructional practices?

Observed class structures that typified the project's grouping models between October and January were whole class and multigroup; between February and May, they were multigroup and individual. Observed typical teaching forms from October until January were teacher instructing and teacher-pupil interaction; from February until May, they were teacher-pupil interaction and pupils doing independent work. Sixty formal observations are summarized in Table 1.

Data relevant to Question 2. Has pupil performance improved in the basic skills?

Average grade-equivalent scores and national percentile ranks of the IEC pupils on the ITBS in October and February are shown in Table 2. The difference between pretest and posttest average grade-equivalent scores was statistically significant at the .05 chance level in 17 of the 24 ITBS score comparisons. One may be 95% confident that these gains did not happen by chance.

TABLE 1
SUMMARY OF IEC FORMAL OBSERVATIONS

| Items and Categories | Percentage of Observations | |
|--|--|---|
| | Oct.-Jan. (18 Formal Observations) | Feb.-May (42 Formal Observations) |
| Class Structure | | |
| Whole class | 33% | 0% |
| Two groups | 0% | 0% |
| Multigroup | 67% | 37% |
| Individual | 0% | 63% |
| Teaching Form | | |
| Teacher instructing (teaching) | 25% | 0% |
| Teacher-pupil interaction | 31% | 26% |
| Pupils interacting with educational materials | 22% | 19% |
| Pupils doing independent work | 22% | 55% |

TABLE 2

AVERAGE GRADE-EQUIVALENT SCORES AND PERCENTILE RANKS ON ITBS SUBTESTS
IN OCTOBER 1970 AND FEBRUARY 1971

| Grade | Item | Vocabulary | | Reading Comprehension | | Arithmetic Concepts | | Arithmetic Problems | |
|-------|-----------|------------|------|-----------------------|------|---------------------|------|---------------------|------|
| | | Oct. | Feb. | Oct. | Feb. | Oct. | Feb. | Oct. | Feb. |
| 3 | Mean GE | 2.7 | 3.3* | 2.5 | 3.3* | 2.7 | 3.3* | 2.7 | 3.4* |
| | %ile Rank | 37 | 45 | 31 | 46 | 33 | 44 | 35 | 48 |
| 4 | Mean GE | 3.2 | 3.5 | 2.3 | 3.4* | 3.4 | 4.1* | 3.7 | 4.2* |
| | %ile Rank | 27 | 26 | 8 | 34 | 25 | 38 | 37 | 42 |
| 5 | Mean GE | 3.7 | 4.1 | 3.8 | 4.0 | 3.8 | 4.5* | 3.8 | 3.8 |
| | %ile Rank | 19 | 22 | 20 | 17 | 15 | 25 | 17 | 12 |
| 6 | Mean GE | 4.6 | 5.7* | 4.0 | 5.9* | 4.2 | 5.2* | 3.8 | 5.2* |
| | %ile Rank | 20 | 34 | 8 | 37 | 8 | 20 | 7 | 22 |
| 7 | Mean GE | 6.4 | 6.4 | 5.9 | 6.5* | 5.6 | 6.5* | 5.2 | 6.4* |
| | %ile Rank | 35 | 30 | 27 | 33 | 17 | 29 | 15 | 29 |
| 8 | Mean GE | 7.8 | 8.1 | 6.9 | 7.9* | 6.2 | 6.6 | 6.6 | 7.4* |
| | %ile Rank | 43 | 44 | 30 | 41 | 14 | 18 | 26 | 33 |

*Gain statistically significant at .05 level.

Conclusions

Question 1. Has IEC increased the individualization of instructional practices?

Yes, increasing individualization of instructional practices has been evidenced by changes in class structure and teaching form in IEC classrooms. These shifts have been observed both formally and informally during the 1970-1971 school year. The individualization of instructional practices was observed in both half-year periods but to different degrees and through different teaching forms. The increased individualization of instruction during the second half-year was facilitated by midyear test results which identified individual pupils who had been least responsive to the first half-year's instructional practices.

Question 2. Has pupil performance improved in the basic skills?

Yes, improved pupil performance in the basic skills has been evidenced by statistically significant gains on the Iowa Tests of Basic Skills during the October-to-February period. The gains made by the pupils may be attributed to their heterogeneous socioeconomic background, regression effects, the Hawthorne effect, and/or the operational characteristics of the project.

Standardized tests such as the ITBS tend to be more sensitive between the 16th and 83rd percentiles than outside that range. Although Title I pupils do not typically score within that range, 17 of the IEC pupils' 24 subtest mean scores were within it. The average IEC pupil initially scored lower on the ITBS than was desired, but higher than the typical Title I pupil. The higher-than-expected gains found in IEC might be related to the initial difference between pupils in IEC and those in other Title I projects.

This formative evaluation was designed not to identify cause and effect relationships, but to collect base-line data and to describe the enabling and process characteristics of the project. Summative evaluation of pupil performance will be more appropriate in 1971-1972.

Evaluator's Comment

When IEC teachers received midyear ITBS results, they analyzed the effectiveness of their teaching procedures and made modifications in them. This benefit would not have been possible if testing had been delayed until the end of the school year.

To the evaluator, IEC calls attention to certain implications and issues. Evidently integration is possible when persons of diverse backgrounds share a common concern for quality education in which the individual worth of each child is given top priority. Similar schools offering attractive academic advantages could be strategically located between differing racial and socioeconomic neighborhoods. Such strategic location of schools probably would draw pupils from both neighborhoods and thus provide the additional benefits of integration. Perhaps to insure the quality of education, the size of the physical plant and pupil population should be kept small and manageable, as in IEC, to keep the relationships among teachers, pupils, and parents more intimate.

IMPROVEMENT OF READING SKILLS

Four related projects are treated as a subcluster in this report: Improvement of Reading Skills: Reading Skills Centers (PBRS #111-02-666), Improvement of Reading Skills: Shared Time (PBRS #111-02-666B), Improvement of Reading Skills: Part-Time (PBRS #111-02-718), and Improvement of Reading Skills: Primary Reading Skills Center (PBRS #111-02-719). The last three are covered in separate appendices which follow the report on Reading Skills Centers. The entire report, including the appendices, should be interpreted in the context of the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

IMPROVEMENT OF READING SKILLS: READING SKILLS CENTERS (PBRS #111-02-666)

Improvement of Reading Skills: Reading Skills Centers (IRS) is located in ten Reading Skills Centers in seven districts. It primarily serves underachieving readers who attend a Reading Skills Center either two, three, or four times each week, depending upon the extent of the need. At the centers the pupils receive intensive individualized instruction in basic reading skills and comprehension through multilevel, multisensory, multimedia materials. The centers are also used as demonstration units for district staff development in reading.

The Project

The original inspiration for the Reading Skills Center approach is credited to Dr. Alan Cohen and his work in New York City. Ida Kravitz and Natica Moose, Philadelphia Reading Supervisors, developed their design utilizing some of Dr. Cohen's basic concepts (Cohen, 1967). The IRS project was intended to counteract the drastic underachievement in reading in Title I schools. The seven original centers focused on four key concepts: word recognition, comprehension, study skills, and literature.

Multimodal and multilevel materials are used to accommodate individual needs and interests. Pupils are rostered in the Skills Centers according to their reading deficiencies. Those with the greatest deficiencies attend at least four periods a week. Pupils whose original achievement was higher attend one or two times a week. As pupils' deficiencies diminish their attendance rate is reduced.

The attendance in special settings with highly skilled teachers who are able to provide diagnostic and prescriptive skills, with aides and appropriate materials, should have a positive effect on pupils who have severe reading deficiencies.

The primary learning objectives of the Reading Skills Centers are the following:

Objective 1. To improve independent word-attack skills.

Objective 2. To improve reading comprehension.

Objective 3. To increase reading vocabulary.

The IRS project is established in ten schools: Belmont and Washington in District 1, Smith (District 2), Kirkbride (District 3), Kenderton (District 4), Moffet (District 5), Emlen and Wister in District 6, and Bethune and Smedley in District 7. Centers at the Washington, Emlen, and Smedley Schools were opened midway through the 1970-1971 school year.

Each center has a special reading teacher and two aides to instruct classes composed of fourth-, fifth-, and/or sixth-grade pupils who are identified as very poor readers. The pupils attend the center from two to four times a week, depending upon the severity of their reading problems. Other pupils in the school may use the center during one class period a week. Pupils are provided the opportunity to use skills already learned and to apply those skills to new learning situations. The Skills Center personnel provide material and services to classroom teachers and are supportive of the school's ongoing reading program, and the centers serve as demonstration and staff development centers for reading teachers.

The typical experiences of the original fourth-grade pupils over the three-year period are shown in Figure 1.

Evaluation of the project began in 1968-1969. Statistically significant gains in reading comprehension, word-attack skills, and phonics performance were reported for pupils in the project that year. In 1969-1970, pupils participating in the project scored significantly higher and showed greater gains than nonparticipants on the IRI and the Botel Phonics Inventory. Although no differences were found between the two groups on the Vocabulary and Reading Comprehension subtests of the ITBS in that school year, a two-year trend analysis showed that the IRS pupils had made significantly greater gains in both areas than a group of non-IRS pupils for the same two-year period.

Current Evaluation Procedure

The 1970-1971 evaluation of IRS focused upon the longitudinal study of pupils who had the most severe reading problems. It asked three questions related to the project's objectives:

1. To what degree have IRS pupils demonstrated phonics mastery during a three-year period?

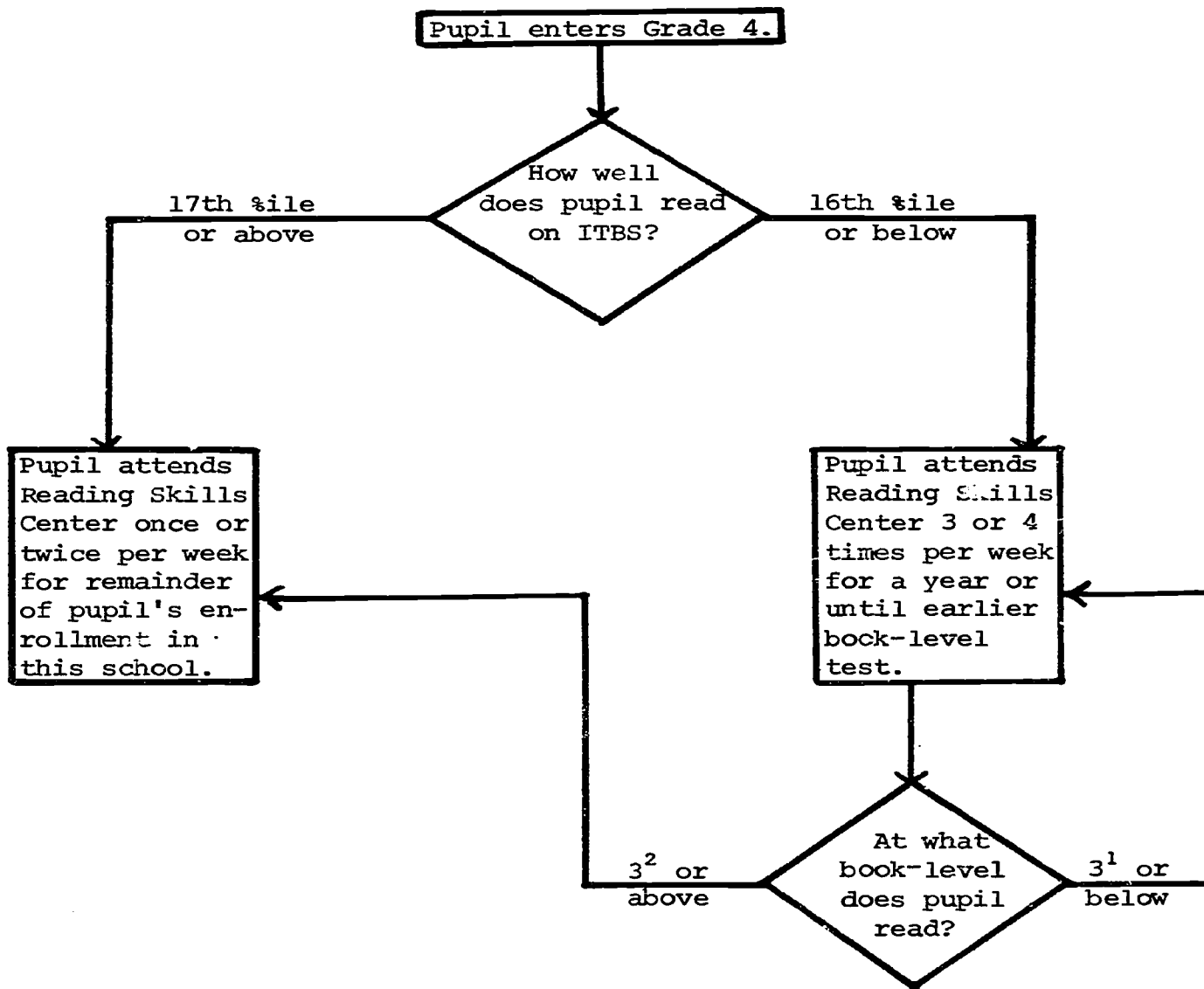


Fig. 1. Flow chart showing typical experiences of original fourth-grade pupils during three years in IRS project.

2. To what degree have IRS pupils improved in reading comprehension during a three-year period?

3. To what degree have IRS pupils improved in national percentile rank on the Vocabulary and Reading Comprehension subtests of the Iowa Tests of Basic Skills?

Question 1. To what degree have IRS pupils demonstrated phonics mastery during a three-year period?

Pupils attending the Skills Centers were tested with the Botel Phonics Inventory three times each year. The highest possible score on the test is 64. A score of 50, or about 80%, is considered to be practical mastery of phonics for the target population. The percentage of pupils scoring at or above this criterion was computed for each testing period.

Sixth-grade pupils who had participated in the project for three years were potential subjects for the investigation. Scores obtained by pupils at the Moffet and Smith centers were selected to represent the established centers. It is important to note that the sample did not include all pupils affected by the program, even at the two schools, because some pupils transferred from the school and some others achieved well enough to stop attending the center three or four times a week. The pupils in the sample were reading at or below the primer level in the fourth grade. The pupils from both centers were treated as a single group.

Question 2. To what degree have IRS pupils improved in reading comprehension during a three-year period?

Pupils attending the centers were tested with the Informal Reading Inventory (IRI) three times each year, with results expressed as book-levels for instruction. Most pupils are expected to progress at the rate of at least two book-levels per year. Book-level scores for pupils from the Moffet and Smith centers were selected to represent the established centers. The median book-level of the sample was computed for each testing period.

Question 3. To what degree have IRS pupils improved in national percentile rank on the Vocabulary and Reading Comprehension subtests of the Iowa Tests of Basic Skills?

Grade-equivalent scores of current sixth-grade pupils at the Moffet and Smith centers were obtained for their third-, fourth-, fifth-, and sixth-grade tests. These were averaged for each subtest, translated into national pupil percentile scores, and compared with corresponding percentile scores of pupils at five schools without Skills Centers. A biased sample of pupils chosen for comparison had 1967-1968 grade-

equivalent scores at or below the national 16th percentile in both Vocabulary and Reading Comprehension subtests of the ITBS. Only pupils who had three years of scores were selected for comparison in Grades 3 through 5. Of that group, those who continued through the sixth grade at the same school were used for the comparison with sixth-grade national norms. Because few of the pupils remained at the same school for sixth grade, the number of available non-IRS pupils' scores was diminished from 46 for the third-, fourth-, and fifth-grade averages to 22 for Grade 6, while 33 IRS pupils' scores were used for each of the four testing periods.

Because the pupils selected for study were achieving at very low levels, their ITBS scores fell below the "guessing level." Further, pupils who score in this range are receiving ITBS "out of level" tests. For this reason, no statistical tests were applied to the data; instead, a simple graphical comparison was provided.

Results

Data relevant to Question 1. To what degree have IRS pupils demonstrated phonics mastery during a three-year period?

Table 1 shows the percentages of pupils who attained phonics mastery of at least 78% over the three-year period, which was the minimal expectation set for the project. At the end of the third year, 82% of the pupils had achieved a satisfactory 78% level of mastery. The largest

TABLE 1

PERCENTAGE OF IRS PUPILS SCORING AT LEAST 50 POINTS (78% MASTERY)
ON BOTEL PHONICS INVENTORY (N=33)

| 1968-1969 Grade 4 | | | 1969-1970 Grade 5 | | | 1970-1971 Grade 6 | | |
|----------------------|-----|------|----------------------|-----|------|----------------------|-----|------|
| Pre | Mid | Post | Pre | Mid | Post | Pre | Mid | Post |
| 3% | 3% | 11% | 17% | 24% | 47% | 55% | 72% | 82% |

gains occurred during the second and third years (midtest to posttest, 1969-1970, and pretest to midtest, 1970-1971). A full three-year participation in the program appears to have produced satisfactory phonics achievement for the participants with the greatest need.

Data relevant to Question 2. To what degree have IPS pupils improved in reading comprehension during a three-year period?

The median book-level score on the IRI for each testing period is presented in Table 2. Because each instructional reading level covers a rather wide range of skills, the percentage of pupils who scored at or above each median book-level is also provided. At the beginning of the pupils' participation in the IRS, the median book-level was Primer and no pupil was reading at the 2¹ book-level. By the end of the sixth grade, only about one-fifth of the pupils were below the Book 4 level, and of those only one pupil was below Book 3¹. Pupils who initially were reading on the primer level were able to read at the fourth book-level by the end of their three-year experience. Thus the pupils with the greatest needs gained two book-levels per year.

TABLE 2

ACHIEVEMENT OF 33 PUPILS IN SELECTED LONGITUDINAL SAMPLE ON INFORMAL READING INVENTORY

| Item | 1968-1969 Grade 4 | | | 1969-1970 Grade 5 | | | 1970-1971 Grade 6 | | |
|---|----------------------|-----|----------------|----------------------|----------------|----------------|----------------------|----------------|------|
| | Pre | Mid | Post | Pre | Mid | Post | Pre | Mid | Post |
| Median book-level score | Primer | 1 | 2 ¹ | 2 ¹ | 2 ² | 3 ¹ | 3 ¹ | 3 ² | 4 |
| Percentage of pupils scoring at or above the median | 66% | 73% | 63% | 64% | 53% | 65% | 68% | 70% | 79% |

Data relevant to Question 3. To what degree have IRS pupils improved in national percentile rank on the Vocabulary and Reading Comprehension subtests of the Iowa Tests of Basic Skills?

Figure 2 shows the average national pupil percentile rank on the ITBS vocabulary subtest for each year for the samples of IRS and IRS pupils.

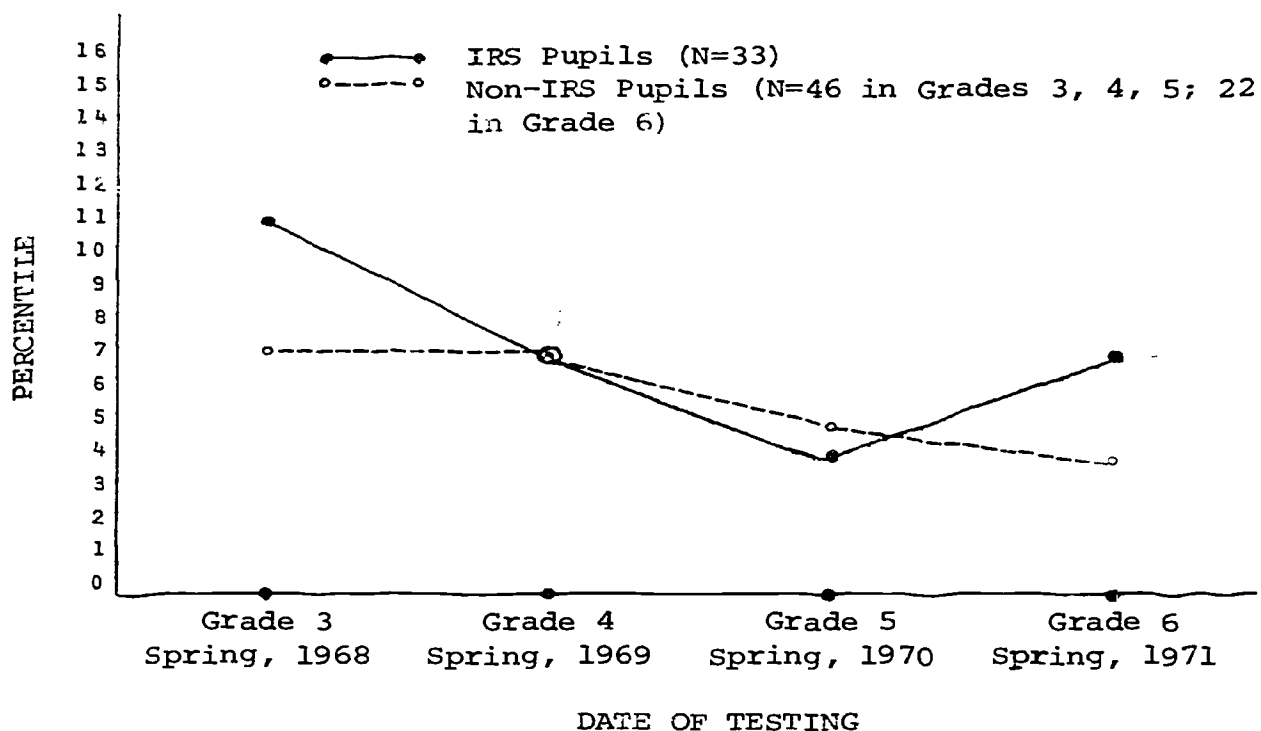


Fig. 2. Comparison of Vocabulary scores on ITBS obtained by samples of IRS and non-IRS pupils. Each group's average grade-equivalent score was converted to national individual-pupil percentile rank.

The ITBS measured the pupils' achievement in the spring of each year. The project's effect on the pupils' vocabulary was not noticeable until the sixth grade, when IRS pupils' average percentile rank reversed its downward trend. The fact that the pupils still scored below the national 16th percentile after that improvement served to emphasize the magnitude of their initial reading deficiency.

Figure 3 shows that the trend on the ITBS Reading Comprehension subtest, which had been downward, was reversed for IRS pupils after their first year in the project and continued upward, while pupils not in Skill Centers continued to show a decline in percentile rank. Again the magnitude of the pupils' reading deficiency was evidenced by their low percentile rank, even after the improvement.

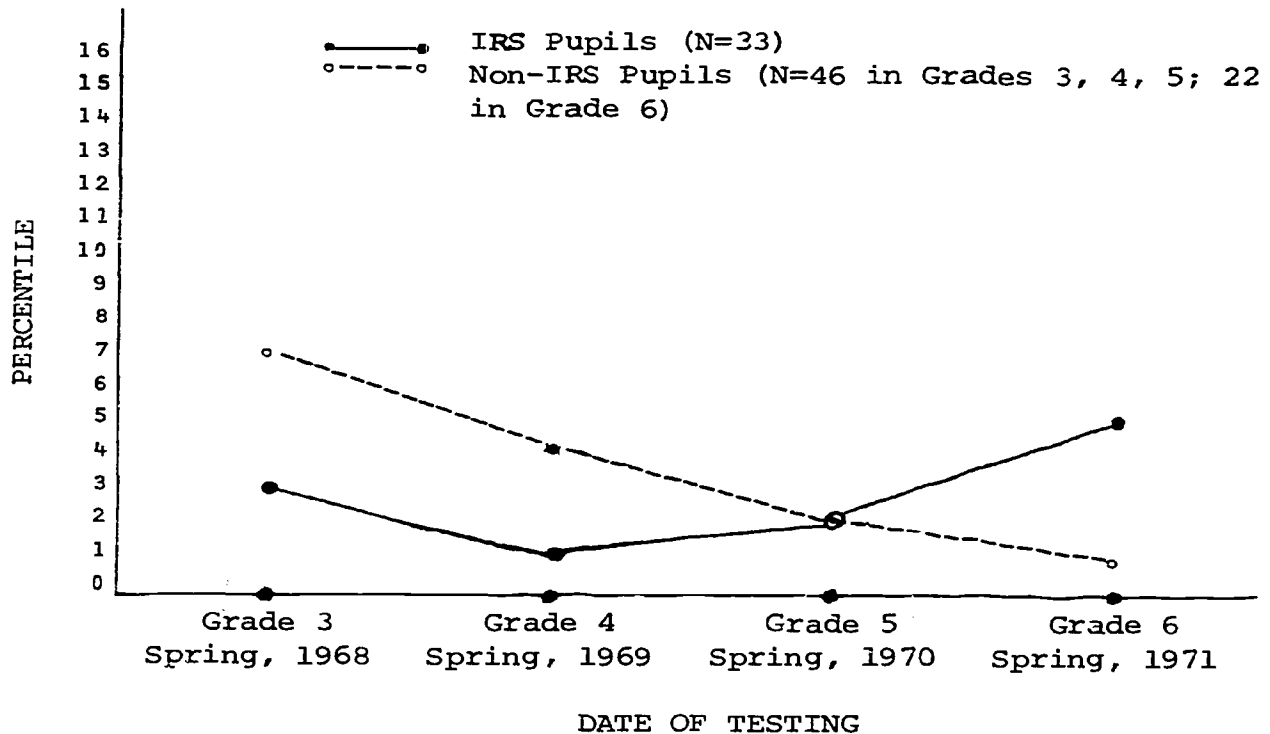


Fig. 3. Comparison of Reading Comprehension scores on ITBS obtained by samples of IRS and non-IRS pupils. Each group's average grade-equivalent score was converted to national individual-pupil percentile rank.

Conclusions

Question 1. To what degree have IRS pupils demonstrated phonics mastery during a three-year period?

Pupils with severe deficiencies have acquired a satisfactory (78%) mastery of phonics as a result of their three-year participation in the IRS (Reading Skills Centers) project. The majority of these pupils require three years of participation for the maximum benefit of the program when their rate of learning requires that they attend the centers three or four times a week.

Question 2. To what degree have IRS pupils improved in reading comprehension during a three-year period?

Pupils with severe deficiencies have gained in reading comprehension at an average rate of two book-levels per year as a result of their participation in the IRS (Reading Skills Centers) project. Most of the pupils have reached a Book 4 instructional reading level by the end of their third year in the program.

Question 3. To what degree have IRS pupils improved in national percentile rank on the Vocabulary and Reading Comprehension subtests of the Iowa Tests of Basic Skills?

The downward trend of Vocabulary scores (of pupils with the greatest need in relation to the national pupil norms) was reversed after two years in the project, and the downward trend of their Reading Comprehension scores was reversed after one year in the project.

Evaluator's Comment

The evaluator wishes to share some concerns for the implementation of projects based upon the Reading Skills Centers model. First, although the project has provided for pupils to participate for a three-year period, the instructional program might provide its greatest benefit for most pupils during their first year of participation. Second, the optimum benefits might be best provided by increasing the intensity of instruction (say to two hours or more per day). Third, the project might best be made available to a limited number of pupils in any one school to be consistent with such increased intensity of instruction. Fourth, successful implementation of the project is dependent upon the skills of the teachers, and thus staff development is apparently a crucial element of the model.

IMPROVEMENT OF READING SKILLS: SHARED TIME
(PBR #111-02-666B)

The "Shared Time" project serves eight pairs of public and parochial schools. The reading teacher is "shared" by a public school and the paired parochial school.

This project report is related to the preceding report and should be interpreted in the context of both the subcluster comment, "Improvement of Reading Skills," and the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The rationale of the "Shared Time" project is similar to that of the Reading Skills Centers project. Objectives of the project include the following:

Objective 1. To improve reading comprehension.

Objective 2. To improve word-attack skills.

Public and parochial school pupils in Grades 4, 5, and 6 share the instructional services of a reading teacher. Four of the paired schools are in their first year of operation. Instruction is individualized through the use of multimedia and programmed materials.

Previous evaluations indicated that progress was made in reading comprehension and in word-attack skills.

Current Evaluation Procedure

The evaluation for 1970-1971 was focused on two questions related to the project's objectives:

1. Has reading comprehension improved?
2. Have word-attack skills improved?

Question 1. Has reading comprehension improved?

Pupils' scores on three administrations of the Informal Reading Inventory (IRI) were examined to answer this question. Pupils representing Grades 4, 5, and 6 in each participating school were tested in September, January, and May. Percentages of pupils scoring at or above each book-level in September, January, and May were compared.

The same sample of pupils was used for answering this question as for Question 1. Pupils' scores on three administrations of the Botel Phonics Inventory were compared to answer this question. Pupils were tested in September, January, and May. The results were compared using percentages of pupils scoring at or above 45 points on the test.

Results

Data relevant to Question 1. Has reading comprehension improved?

The percentage of pupils reading at or above a given book-level increased between September and January and again between January and May. Figure 1 shows, for example, that 29% of the pupils were reading at or above the Book 2² level in September. In January, this percentage showed an increase to 51%, and in May the percentage reached 73%.

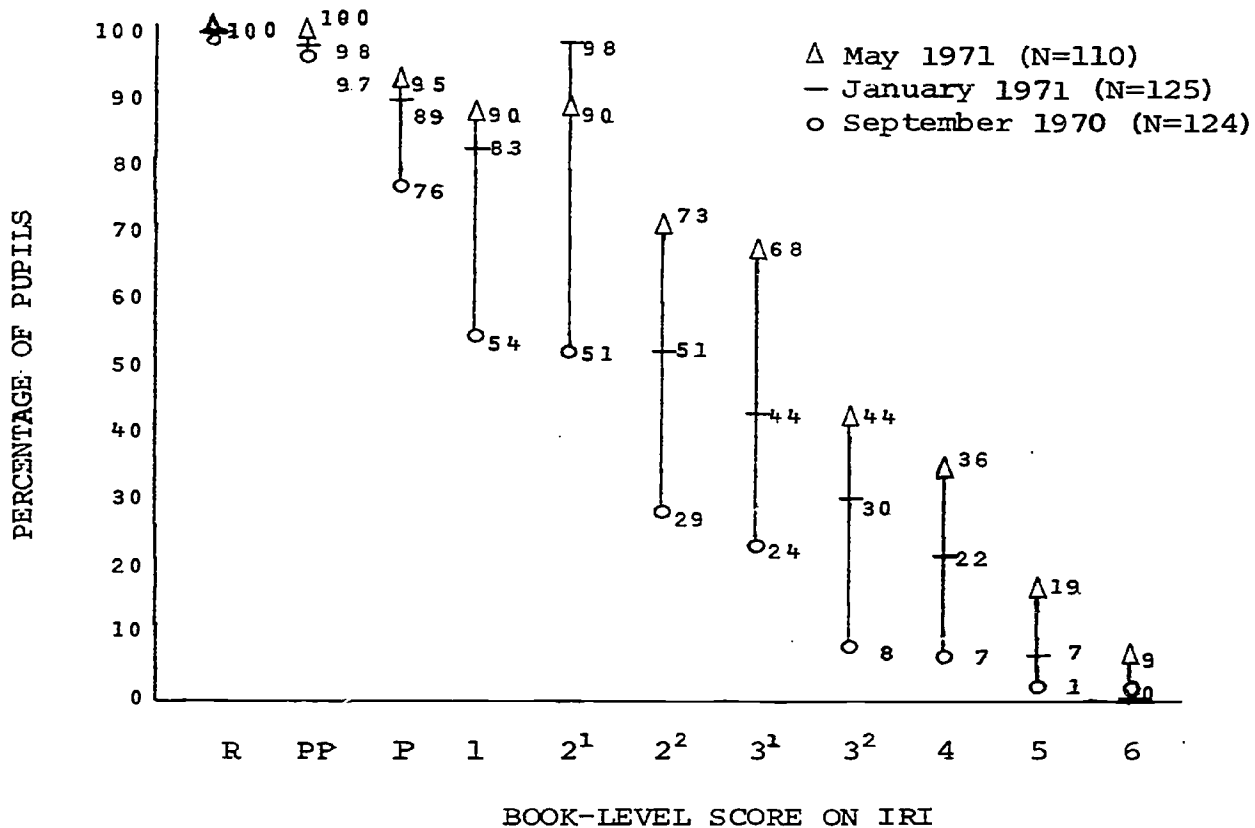


Fig. 1. Percentage of pupils (Grades 4-6) scoring at or above each IRI book-level in September 1970, January 1971, and May 1971.

Data relevant to Question 2. Have word-attack skills improved?

Fifteen percent of the pupils in Grades 4, 5, and 6 had scores of at least 45 on the Botel test in September. In January the corresponding percentage was 32%, and in May, 56%.

Conclusions

Question 1. Has reading comprehension improved?

Yes, improved reading comprehension has been indicated by the increasing percentage of "Shared Time" pupils scoring at or above each book-level on the IRI.

Question 2. Have word-attack skills improved?

Yes, improved word-attack skills have been indicated by the increasing percentage of "Shared Time" pupils scoring at or above 45 on the Botel Phonics Inventory.

IMPROVEMENT OF READING SKILLS: PART-TIME
(PBRS #111-02-718)

The "Part-Time" project uses part-time reading teachers to serve pupils from low socioeconomic neighborhoods who attend parochial schools.

This project report is related to the two preceding reports and should be interpreted in the context of both the subcluster comment, "Improvement of Reading Skills," and the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The rationale of the "Part-Time" project is similar to that of the Reading Skills Centers project. Objectives of the project include the following:

Objective 1. To improve reading comprehension.

Objective 2. To improve word-attack skills.

Instruction is individualized through the use of multimedia and programmed materials. Pupils served are reading at least one year below grade level. Individualized reading instruction for 12½ hours is provided for more than 1,000 pupils in 30 schools by 31 part-time reading teachers.

Previous evaluations indicated that progress was made in reading comprehension and in word-attack skills.

Current Evaluation Procedure

The evaluation for 1970-1971 was focused on two questions related to the project's objectives:

1. Has reading comprehension improved?
2. Have word-attack skills improved?

Question 1. Has reading comprehension improved?

Pupil performance on two administrations of the SRA Placement Test was examined to answer this question. All pupils in Grades 3 through 8 were pretested in September and posttested in May. Scores were transformed to IRI book-level equivalents. Percentages of pupils scoring at or above each level in September and May were compared.

Question 2. Have word-attack skills improved?

Pupils' scores on two administrations of the Botel Phonics Inventory were compared. All pupils in Grades 3 through 8 were tested in September and retested in May. For each grade, September and May results were compared using percentages of pupils answering at least 45 items correctly on the Botel test.

Results

Data relevant to Question 1. Has reading comprehension improved?

The percentage of pupils reading at or above each IRI book-level equivalent increased between September and May as shown in Figure 1. For example, the percentage of pupils reading at or above the Book 2² level was 59% in September and 82% in May. Pupils progressed on the average approximately two book-levels during the year.

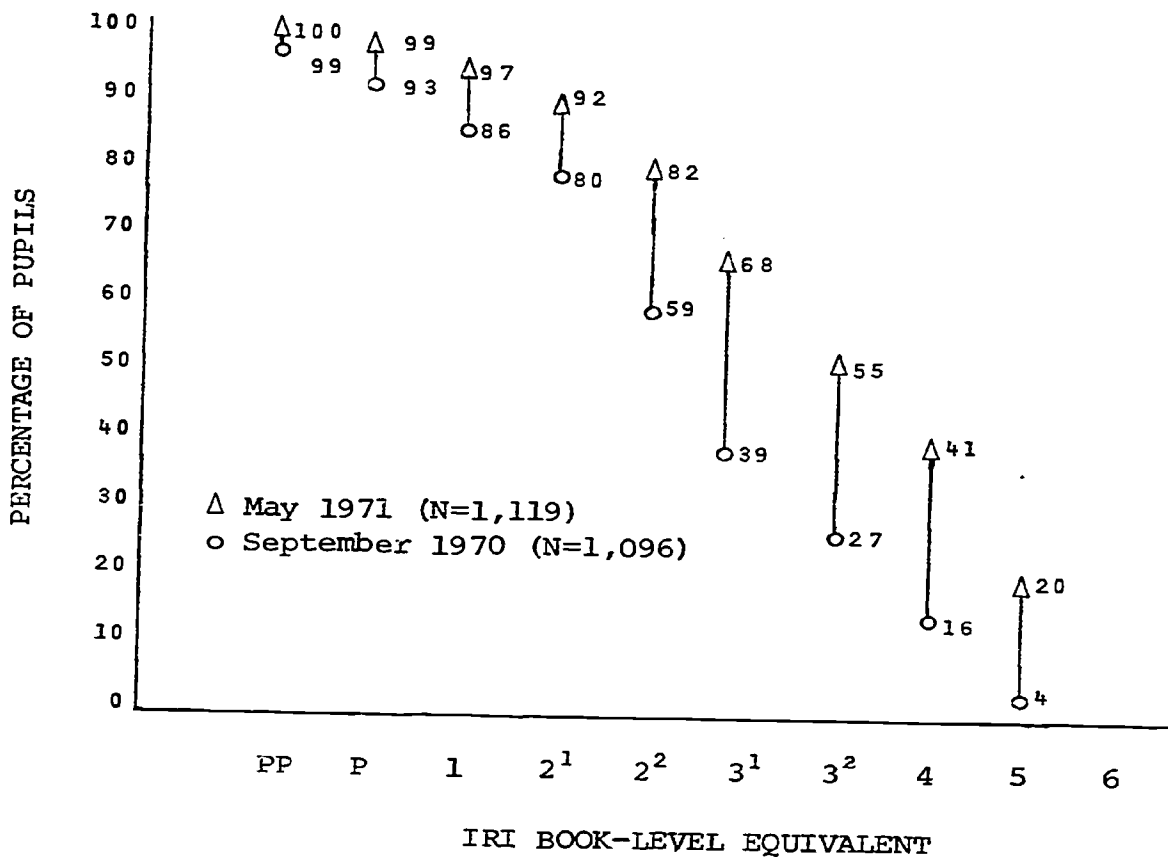


Fig. 1. Percentage of pupils (Grades 3-8) scoring at or above each IRI book-level equivalent on SRA Placement Test in September 1970 and May 1971.

Data relevant to Question 2. Have word-attack skills improved?

In each grade, the percentage of pupils scoring at or above 45 on the Botel test increased between September and May, as shown in Figure 2.

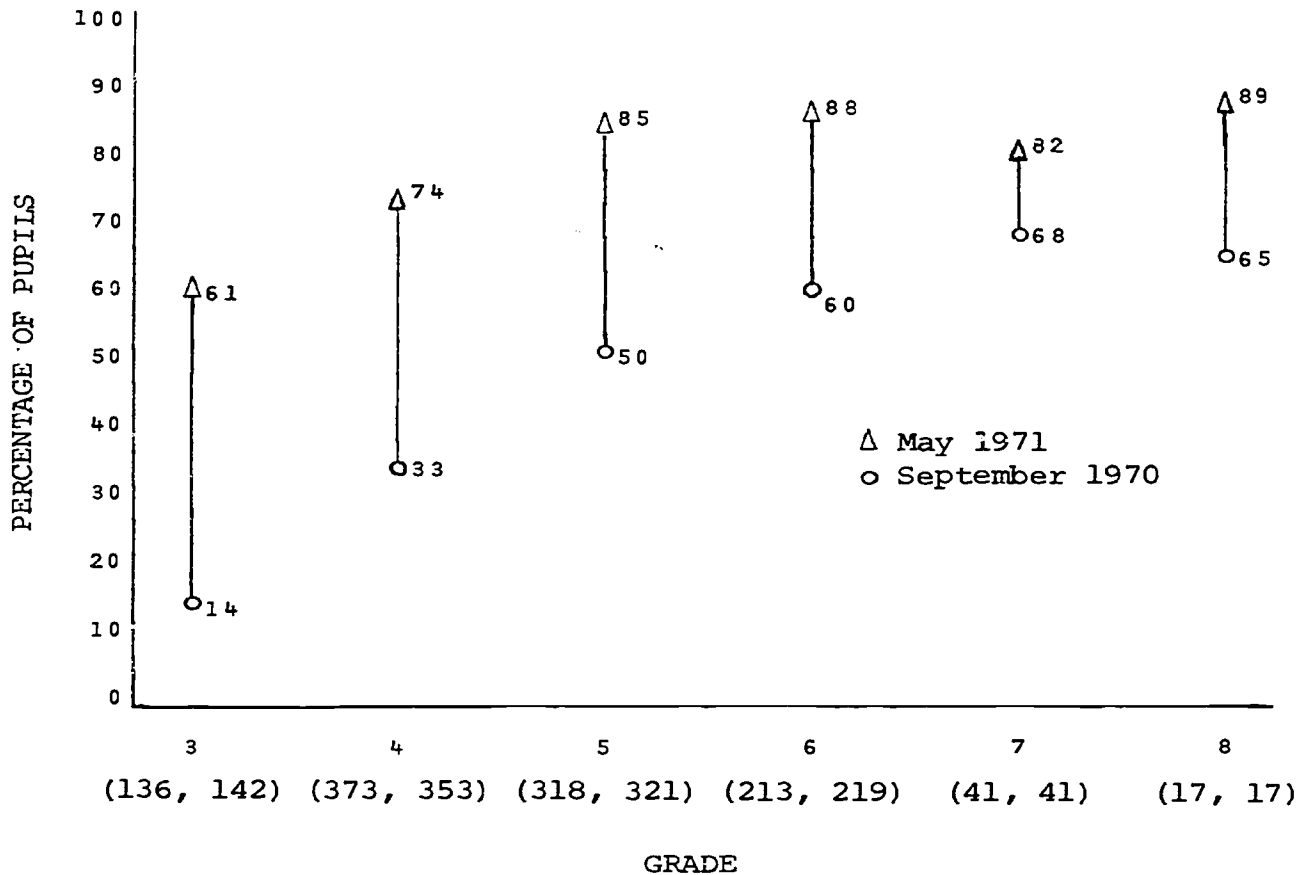


Fig. 2. Percentage of pupils in each grade scoring at or above 45 on the Botel Phonics Inventory in September 1970 and May 1971. (Numbers of pupils tested in September and May, respectively, are shown in parentheses.)

Conclusions

Question 1. Has reading comprehension improved?

Yes, improved reading comprehension has been indicated by the increasing percentage of "Part-Time" pupils scoring at or above each IR book-level equivalent on the SRA Placement Test.

Question 2. Have word-attack skills improved?

Yes, improved word-attack skills have been indicated by the increasing percentage of "Part-Time" pupils in each grade who have scored at or above a raw score of 45 on the Botel Phonics Inventory.

IMPROVEMENT OF READING SKILLS: PRIMARY READING SKILLS CENTER
(PBRS #111-02-719)

The Primary Reading Skills Center project serves primary-grade pupils from low socioeconomic neighborhoods who attend the St. Columba parochial school.

This project report is related to the three preceding reports and should be interpreted in the context of both the subcluster comment "Improvement of Reading Skills," and the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The rationale and operation of the "Primary" project are similar to those of the Reading Skills Centers project. Objectives of the project include the following:

Objective 1. To improve reading comprehension.

Objective 2. To improve word-attack skills.

A reading teacher and a classroom aide provide individualized reading instruction for pupils reading at least one year below grade level. Although first-, second-, and third-grade pupils receive major attention, a special group of disabled readers in the fourth grade continues to receive remedial instruction.

Previous evaluations indicated that progress was made in reading comprehension and in word-attack skills.

Current Evaluation Procedure

The evaluation for 1970-1971 was focused on two questions related to the project's objectives:

1. Have reading comprehension and vocabulary improved?
2. Have word-attack skills improved?

Question 1. Have reading comprehension and vocabulary improved?

Pupil performance on two administrations of the California Achievement Test (CAT-70) was examined to answer this question. Pupils currently in Grades 2, 3, and 4 who had been tested the preceding year were retested in 1971. Grade-equivalent score gains in the areas of comprehension and vocabulary were compared by means of a correlated t test.

Question 2. Have word-attack skills improved?

Pupils' scores on three administrations of the Botel Phonics Inventory were compared to answer this question. Pupils in Grades 2, 3, and 4 were tested in September, January, and May.

Percentages of pupils answering at least 45 items correctly on the Botel test each test period were computed for comparison.

Results

Data relevant to Question 1. Have reading comprehension and vocabulary improved?

Average grade-equivalent scores and gains in comprehension and vocabulary are reported in Table 1. The gains were statistically significant and therefore are not likely to have occurred by chance. Pupils showed approximately one year's "growth" for a year's time in the project, with third graders showing greater gains and the other groups showing smaller ones.

TABLE 1

AVERAGE GRADE-EQUIVALENT SCORES AND GAINS ON CAT-70 SUBTESTS

| Grade | Comprehension | | | Vocabulary | | |
|-------|---------------|------|------|------------|------|------|
| | 1970 | 1971 | Gain | 1970 | 1971 | Gain |
| 2 | 1.3 | 1.9 | 0.6* | 1.4 | 1.9 | 0.5* |
| 3 | 1.8 | 3.4 | 1.6* | 2.6 | 3.5 | 0.9* |
| 4 | 2.9 | 3.8 | 0.9* | 3.2 | 3.9 | 0.7* |

*Change was statistically significant at the .05 level.

Data relevant to Question 2. Have word-attack skills improved?

Ten percent of all pupils in Grades 2, 3, and 4 attained raw scores of at least 45 on the Botel test in September 1970. The percentage increased to 31% in January and to 40% in May 1971.

Conclusions

Question 1. Have reading comprehension and vocabulary improved?

Yes, "Primary" pupils have shown statistically significant gains in both comprehension and vocabulary as measured by the California Achievement Test.

Question 2. Have word-attack skills improved?

Yes, improved word-attack skills have been indicated by the increasing percentage of "Primary" pupils attaining raw scores of at least 45 on the Botel Phonics Inventory.

LEARNING DIMENSIONS PROGRAM
(PBRS #111-01-791)

The Learning Dimensions Program (LDP) at W. F. Miller and John Moffet Schools is a staff development project to develop "open classrooms" and "activity centers" and to use Piaget's theory of mental development to guide the teachers in curriculum development and instruction.

This project report should be interpreted in the context of the cluster report, "Instructional Practices and Student Cognitive Performance," in earlier pages of this volume.

The Project

The analysis of educational problems of disadvantaged youth suggests that a number of factors are related to slow learning rates. Pupils in compensatory educational programs tend to have overall learning rates which are less than the rate of learning for national norm populations (General Electric Company-TEMPO, 1971).

In an open classroom, pupils are encouraged to be active participants with the teacher in determining what they study, how they investigate problems, and what goals they set for themselves. The first step in facilitating pupils' participation is the establishment of activity centers in the classroom. This provides places for pupils to focus on problems and to work by themselves. It allows the teacher to be free from a "whole-group" interaction role so that she may work with one pupil or one small group of pupils at a time. All pupils have opportunities to be engaged in learning while the teacher may act as a resource person or consultant dealing with the problems of individuals. Although the teacher may choose to deal with the class as a whole, if she has learned the techniques of managing activity centers in the classroom she has an alternative teaching role available to her.

Piaget has enunciated a theory of learning which permits one to take into consideration the self-regulatory learning function of the individual. Through a process of equilibration, a pupil is envisioned as assimilating and accommodating between his own mental systems and his real experiences.

One of the factors which control the pupil's particular equilibration processes is his particular development and facility with basic logical operations. Disadvantaged children tend to have a poorer command of logical operations than their more advantaged counterparts (See, for example, Raph, Lieberman, & Pascale, 1971). It is suspected that disadvantaged children have had fewer opportunities to express, clarify, and use logical operations as identified by Piaget. There is evidence that the use of logical operations can be clarified by posing

the kinds of questions and tasks which permit pupils to use only a few operations at a given time (Raven, 1970).

Teaching strategies and curricula can be designed which (a) are related to various levels of logical operations, (b) utilize a child's processes of accommodation and assimilation, and (c) are applicable to individualized instruction (Raven & Salzer, 1971). Teaching modes which help children focus upon certain types of problems seem to allow them the opportunity to use specifiable types of logical operations and to practice forming logical relationships. The result could be a positive effect on overall learning rates of the target population.

Through staff development activities, LDP seeks to help teachers develop organizational strategies, curricula, and instructional practices which relate to a Piagetian developmental framework. The staff development program is organized around a hierarchy of educational issues about which teachers are concerned. When teachers have satisfied their concerns at one level in the hierarchy, they can focus upon the issues at the next level (Fuller, 1969). These levels of concern are considered in the following way:

Level 1. Organizational concerns. These concerns are related to the teacher's efforts to develop viable ways to deal with pupil behavior, organize pupils for instruction, and handle the many logistical details involved in running a classroom.

Level 2. Curricular materials concerns. These concerns are related to each teacher's strategies for implementing a curriculum. At this level, the teacher perceives the curriculum and instructional practices as suggested by the instructional materials, teacher guides, and other teacher materials. These define what the curriculum is supposed to be for pupils of a given grade, age, or ability. The focus upon curricular materials requires the teacher to learn how to translate the pre-packaged suggestions into viable lessons. The concept of "curriculum" changes at subsequent levels of concern so that many experiences of the child can be used profitably for learning.

Level 3. Interpretive concerns. These concerns are seen in the teacher's search for explanatory frameworks to help her in interpreting pupil behavior, pupil learning, curriculum content, and instructional practices, and the relationships among these factors. This is an important transitional stage, because skill in diagnosing and explaining must be achieved before concerns can shift to the next higher level.

Level 4. Creative concerns. This is a stage at which teachers focus upon each child's cognitive and social development and problems. Diagnosis and planning for each child become realities when the teacher is able to utilize experiences and explanatory frameworks to devise lessons, activities, and resources for creatively individualizing instruction. To reach this level, the teacher must accomplish the assimilation and integration of the skills consistent with the resolution of issues on the three preceding levels.

Given the four levels of concern, and the desirability of teachers' being able to focus on the fourth level, LDP offers methods for resolving issues at each level which are consistent with one another and are viewed as likely to be most effective toward this end. It is hoped that LDP's efforts will increase the probability that teachers will have such competence at the first three levels that they can give maximal attention to the individual development and progress of each child (Level 4).

The primary objectives of LDP for 1970-1971 have been the following:

Objective 1. To increase the teacher's use of concepts, problem solving, and form-field relationships within the framework of the arts.

Objective 2. To improve the teacher's understanding of how to use concepts, problem solving, and form-field relationships within a regular classroom and/or one with activity centers. Specifically, the teacher is to be taught (a) how to present problem-solving situations that encourage solutions through search and discovery, and (b) how to relate these experiences to other areas of learning.

Objective 3. To improve pupils' abilities to use their assimilative and accommodative processes.

Objective 4. To increase pupils' symbolic skills and verbal communication skills.

Objective 5. To increase pupils' affective skills (ability to use art forms to express feelings), and to foster trust among pupils and adults.

Objective 6. To increase pupils' cognitive skills and to widen their application of logical processes (Piagetian logical operations).

In its current mode of operation, LDP involves all the regular teachers and pupils in the William F. Miller and John Moffet Elementary Schools. Originally scheduled for several schools but not fully implemented, it has been consolidated into the two schools in recognition that previous staff development time was spread too thin for a high degree of implementation, and that the resulting implementation might not have been sufficiently different from more typical practices.

LDP encompasses two types of activities. In staff development activities, the director and LDP staff work with teachers, presenting lessons, preparing materials, providing help in development of diagnostic skills, organizing workshops, and acting as resource personnel and consultants. In instructional activities, teachers develop centers for highly sensory-related learning activities within the framework of content and process curriculum objectives.

Piaget's developmental theory and the British Infant School model provide general guides for staff development and for the development of curriculum and instruction for the project. Workshops and weekly meetings with teachers provide curriculum ideas. There is a focus on logical operations and, more generally, on changes in instructional strategies and classroom organization.

LDP has attempted to supply curriculum materials which lend themselves to instruction in which both teacher and pupil can be active participants in the decision-making processes of learning encounters. The Sylvia Ashton-Warner approach to reading (experience approach) is recommended for teachers' use. Wooden blocks, Attribute Blocks, Lego Blocks, and many other types of blocks and games are used. The AAAS and SCIS science curricula are available. Nuffield Mathematics is encouraged, as well as Bank Street Readers. Teachers are encouraged to visit the School District's Teacher Centers to build other materials they wish to use. Cages for pet animals and water or sand tables have been made by the teachers. Teachers and pupils are asked to maintain logs of their work.

The earliest evaluations of LDP were formative in their emphasis on identification of problems in implementation and measurement. The development of a test of mental operations during the 1969-1970 school year permitted a summative evaluation of pupils' development in relation to the degree of their teacher's commitment to establishing classroom activity centers emphasizing sensory awareness and logical operations. No difference in mental-operations gain was found between pupils whose teachers showed, respectively, low and high degrees of commitment. Questionnaires and observations of teaching indicated that some of the teachers had gained in understanding and use of techniques of the program.

Current Evaluation Procedure

This year the evaluation was focused primarily upon staff development goals. Answers to the following questions were sought:

1. Have staff development activities been provided throughout the school year to help teachers resolve issues on various levels of concern?
2. To what extent have teachers received help in resolving their organizational concerns (Level 1)?
3. To what extent have teachers received help in the development and use of curricular materials (Level 2)?
4. To what extent have teachers received help in understanding Piaget's developmental theory (Level 3)?

seemed premature to attempt to cope with issues related to the creative individualization of instruction (Level 4).

Question 1. Have staff development activities been provided throughout the school year to help teachers resolve issues on various levels of concern?

An LDP log was kept as a record of staff development activities during the school year. The activities were briefly described as to the mode in which they occurred and the subject with which they dealt. They were then categorized by the evaluator according to the level of concern at which they could help teachers. The list of categorized activities was then examined to determine the sustained efforts and the variety of issues treated at the various levels of concern.

Question 2. To what extent have teachers received help in resolving their organizational concerns (Level 1)?

To answer this question, the project was monitored during the first and second halves of the school year. The Observational Checklist and additional items were used to note classroom parameters of Class Structure and Teaching Form. (The reader is invited to refer to the cluster report for further descriptions of these items.) Comparisons of observations during the first and second halves of the year were made to see whether the class structures were increasingly consistent with the goals of the program. On the LDP Questionnaire, teachers were asked to express the extent to which they felt the efforts of LDP had helped to resolve their concerns on Level 1. (The checklist, the additional items, and the questionnaire are on file in the Research Library of the Board of Education.)

Of the four types of class structure considered during LDP observations, a multigroup structure is most consistent with the objectives of LDP. A high percentage (25% or more) of observations in this class structure would be evidence of teachers' resolving their organizational concerns in a manner consistent with LDP.

Question 3. To what extent have teachers received help in the development and use of curricular materials (Level 2)?

As with Question 2, relevant observations of the project during both halves of the school year were compared to determine the extent to which teachers were using sensory-related materials, activity cards, and instructional techniques consistent with the goals of the program.

Of the four teaching forms considered in LDP observations, "Pupils interacting with educational materials under teacher's direction" and "Pupils doing independent work, teacher acting as a resource person" are most consistent with the objectives of LDP. A high percentage (25% or more) in each of these categories would be indicative of teachers' resolving issues on the second level of concern.

On the LDP Questionnaire, teachers were asked to respond to three questions regarding their feeling about the extent of their own development with concerns on Level 2.

Question 4. To what extent have teachers received help in understanding Piaget's developmental theory (Level 3)?

One question on the questionnaire asked teachers to indicate the extent to which they felt they understood piaget's theory. Unstructured discussions with teachers also provided some indications of their feelings on this matter.

Results

Data relevant to Question 1. Have staff development activities been provided throughout the school year to help teachers resolve issues on various levels of concern?

Representative staff development activities during September and April are listed in Tables 1 and 2. Similar tables (not shown in this report) were developed for the intervening months.

The numbers of activities dealing with concerns on each level are summarized in Table 3, to give a general indication of the levels of concern that received significant attention during each month. (May and June were not included because the project director used these months to interview teachers and pupils.)

There was, in general, more emphasis on Level 1 concerns during the first half-year than during the second half-year. Level 2 concerns received emphasis throughout the school year. Level 3 concerns received more or less emphasis periodically.

TABLE 1
 REPRESENTATIVE LDP STAFF DEVELOPMENT ACTIVITIES
 DURING SEPTEMBER, 1970

| Levels of Concern | Activities |
|-------------------------|---|
| | <u>Faculty Meetings</u> |
| 1 2 | Introduced curriculum flow chart for topic with suggestions on how to plan integrated day based upon such charts. |
| 2 | Introduced Sylvia Ashton-Warner's Organic Reading approach. |
| 3 | Introduced Piaget's logical operations. |
| 2 | Distribution of Nuffield Mathematics and Science Guides, and Whitman Art Series. |
| 1 | Slide presentation on English schools. |
| | <u>Lunch Meetings</u> |
| 1 2 | Work on flow chart (the Community) to develop curriculum ideas. |
| 1 | Slide presentation to show how integrated day is used in England. |
| | <u>LDP Staff Work in Classrooms</u> |
| 1 | Helped teachers organize rooms into activity centers. |
| 2 | Helped teachers start an integrated-day curriculum. |
| 2 | Worked with pupils on logical operations. |

| Levels of Concern | Activities |
|-------------------|--|
| 3 | <p><u>Faculty Meeting</u></p> <p>Discussed staff's feelings about progress; considered roles of teachers and LDP staff.</p> |
| 2 | <p><u>Lunch Meetings</u></p> <p>Planned lessons, shared ideas.</p> |
| 2 | <p>Wrote task cards.</p> |
| 2 3 | <p>Teachers provided list of activities for reading as suggestions for curriculum activities for teaching reading.</p> |
| 2 | <p><u>LDP Staff Work in Classrooms</u></p> <p>Worked with pupils on logical operations.</p> |
| 2 | <p>Stressed mathematics and art work.</p> |
| 2 3 | <p><u>Workshops</u></p> <p>Alexis Kopperman (Mathematics Instructional Services) led "mini-workshops": teachers wrote task cards, taught a task-oriented lesson.</p> |
| 2 3 | <p>Dr. Kruickshank (Temple University) conducted workshop, introduced Diene's materials for mathematics.</p> |
| 2 3 | <p>Allen Barton (Mathematics Instructional Services) conducted mathematics mini-workshops.</p> |

TABLE 3

NUMBER OF LDP STAFF DEVELOPMENT ACTIVITIES DEVOTING SIGNIFICANT
ATTENTION TO EACH LEVEL OF CONCERN,
SEPTEMBER 1970 - APRIL 1971

| Month | Levels of Concern | | |
|-----------|-------------------|---------|---------|
| | Level 1 | Level 2 | Level 3 |
| September | 5 | 6 | 1 |
| October | 4 | 10 | 2 |
| November | 4 | 5 | 2 |
| December | 2 | 5 | 5 |
| January | 4 | 7 | 1 |
| February | 1 | 6 | 1 |
| March | 2 | 8 | 1 |
| April | 0 | 8 | 5 |

Data relevant to Question 2. To what extent have teachers received help in resolving their organizational concerns (Level 1)?

Of the four types of class structure considered during LDP observations, a multigroup structure is most consistent with the objectives of LDP. The teachers at the Miller School maintained a multigroup class structure above 25%, although there was some decline during the second half-year. The Moffet School's teachers did not maintain this class structure above the 25% level. (See Item 1 in Table 4.)

TABLE 4

SUMMARY OF LDP CLASSROOM OBSERVATIONS

| Items and Categories | Percentage of Observation Visits* | | | |
|---|-----------------------------------|--------------------------|--------------------------|--------------------------|
| | Miller School | | Moffet School | |
| | Sept.-Dec. (10 Visits) | Jan.-Apr. (13 Visits) | Sept.-Dec. (9 Visits) | Jan.-Apr. (14 Visits) |
| <u>1. Class Structure</u> | | | | |
| Whole class | 0% | 38% | 41% | 35% |
| Two groups | 22% | 3% | 0% | 6% |
| Multigroup | 56% | 46% | 37% | 13% |
| Individual | 22% | 13% | 22% | 46% |
| <u>2. Teaching Form</u> | | | | |
| Teacher instructing | 6% | 10% | 10% | 13% |
| Teacher-pupil interaction, teacher directing lesson | 25% | 26% | 42% | 24% |
| Pupils interacting with educational materials under teacher's direction | 38% | 24% | 23% | 38% |
| Pupils doing inde- pendent work, teacher acting as resource person | 31% | 40% | 25% | 25% |
| <u>3. Mode of Learning</u> | | | | |
| Listening | 25% | 22% | 26% | 20% |
| Talking | 30% | 19% | 22% | 15% |
| Writing | 10% | 11% | 15% | 17% |
| Reading | 15% | 16% | 11% | 22% |
| Manual activity | 15% | 14% | 11% | 11% |
| Visual activity | 5% | 18% | 15% | 15% |

*Three observations of five minutes each were recorded during each visit.

The following interpretation by the evaluator may help to explain the changes noted. The teachers at the Miller School instituted activity centers at the beginning of the year. Most learned how to organize them and have pupils work in them, and found a level at which they could continue to maintain them during the year. Other teachers could not maintain their activity centers to the same degree, and relied more heavily upon whole-class instruction during the second half-year.

The teachers at the Moffet School instituted activity centers in the afternoons during the first half-year. They did not use activity centers during the morning hours when, because of a procedure (cycling) in which pupils are grouped according to ability in reading and then in arithmetic, they relied on more whole-class instruction. Early in the second half-year, when cycling was voted to be discontinued, some teachers instituted activity centers for their classes. However, more teachers seemed to rely upon individualizing instruction through workbooks as a method to satisfy the new demands made by having a wide range of pupils' abilities to deal with during the day. (At this time, it could have been most propitious for the LDP staff to provide extensive support for the teachers at Moffet in organizational concerns.)

The first item in Table 5 summarizes teachers' questionnaire responses indicating the extent to which they felt they were receiving help and resolving concerns on Level 1 in a manner consistent with LDP. The reader will note that teachers of the lower grades in both schools responded somewhat more positively (a higher number on the scale) than teachers of the upper grades, and teachers at the Miller School responded more positively than those at the Moffet School.

In interpreting these results, it is important to note that the Miller teachers have been involved with LDP more intensively and for a longer period of time than the Moffet teachers.

Data relevant to Question 3. To what extent have teachers received help in the development and use of curricular materials (Level 2)?

Of the four teaching forms considered in LDP observations, "Pupils interacting with educational materials under teacher's direction" and "Pupils doing independent work, teacher acting as a resource person" are most consistent with the objectives of LDP.

In both the Miller and Moffet Schools, teachers evidenced a percentage near or above the 25% level in the two categories mentioned. (See Item 2 in Table 4.)

Miller teachers relied more on pupils' independent work than did Moffet teachers. This is of interest in light of the type of class structure (Item 1) reported most often at each school. Certainly, the

TABLE 5

SUMMARY OF TEACHERS' RESPONSES TO
LDP QUESTIONNAIRE ITEMS

| Item | Average Scaled Response* | | | |
|--|--------------------------|------------------------|------------------------|------------------------|
| | Miller Teachers | | Moffet Teachers | |
| | Grades K-3 (N=8) | Grades 4-6 (N=6) | Grades K-3 (N=7) | Grades 4-6 (N=6) |
| 1. To what extent have the activities and efforts of LDP helped you to develop <u>open classroom</u> management techniques? | 3.0 | 2.8 | 2.4 | 2.3 |
| 2. To what extent have the activities and efforts of LDP helped you to develop <u>individualized instructional</u> techniques? | 3.3 | 2.7 | 2.6 | 1.7 |
| 3. To what extent have you been able to use the Sylvia Ashton-Warner approach to reading this year? | 4.0 | 2.8 | 2.6 | 1.5 |
| 4. To what extent have you increased your use of manipulative and sensory learning activities this year? | 3.6 | 3.3 | 2.9 | 2.8 |
| 5. To what extent do you feel you understand Piaget's developmental theory? | 1.9 | 2.0 | 2.4 | 2.3 |

*On a 4-point scale: 1="Not at all"; 2="Slightly"; 3="Moderately"; 4="Extensively."

greater percentage of observations of pupils doing independent work is preferred for LDP, and thus a relative judgment of progress for Level 2 concerns can be considered for the teachers of the two schools. Here it is perhaps most important to consider the relative experience of the two groups of teachers with LDP.

Of the six modes of learning (Item 3 in Table 4) that were considered during observations, the manual and visual activities are most indicative of sensory-related learning activities. The percentages reported for the second half-year in these modes of learning as compared with the percentages reported for other modes indicated a reasonable distribution of attention paid to all learning modes.

Individualized instruction, use of an experience approach to reading, and manipulative and sensory learning activities are important indicators of the resolving of Level 2 concerns. Items 2, 3, and 4 in Table 5 summarize teachers' questionnaire responses regarding such activities. Again it is noted that teachers of lower grades responded more positively than teachers of upper grades, and Miller teachers responded more favorably than Moffet teachers. The two average scaled responses of less than 2.0 from the upper-grade Moffet teachers are considered to be negative responses. Thus, depending upon which group a teacher was in, the effects of LDP's efforts seem to be varied for Level 2 concerns. The director of LDP indicated that teachers often requested help in planning mathematics and language arts activity centers.

Data relevant to Question 4. To what extent have teachers received help in understanding Piaget's developmental theory (Level 3)?

A weekend workshop with Eleanor Duckworth (a well-known student of Piaget) was provided for all staff members of the two schools. The workshop was well attended, and teachers observed interviews with children and then conducted their own. A general discussion of theory followed.

The teachers' questionnaire responses regarding their understanding of Piaget's theory are summarized in Item 5 of Table 5. Teachers of upper and lower grades indicated approximately the same feelings, but Moffet teachers reported a higher degree of understanding than that expressed by Miller teachers. (The scaled response of 1.9 should be considered negative, and the 2.0 response borderline.) One might hypothesize that the responses were indicative of the Miller teachers' greater desire to know more in relationship to the extent of their involvement with LDP. Taken in this way, the less positive responses indicate that that group of teachers (Miller School, especially in the lower grades) is focusing on Level 3 concerns, but has not yet settled those issues.

The director of LDP related on various occasions that teachers were seeking greater clarification of Piaget's theory and its relationship to understanding their work and the development of their pupils.

Question 1. Have staff development activities been provided throughout the school year to help teachers resolve issues on various levels of concern?

Yes, LDP has provided sustained staff development activities throughout the school year, and these appropriately have focused on the first three levels of concern. The LDP log indicated a greater emphasis on direct in-class help with organizational concerns (Level 1) during the first part of the year, with the issues of curriculum and instruction (Level 2) receiving attention throughout the year. Piaget's developmental theory and its implications (Level 3) received varying amounts of attention each month. More in-class help with organizational concerns might have been provided at Moffet School during the second half-year to coincide with the discontinuance of the cycling procedure there.

Question 2. To what extent have teachers received help in resolving their organizational concerns (Level 1)?

Organizational concerns have been resolved--in a manner consistent with the objectives of LDP--for a large proportion of the teachers at Miller School and for some of the teachers at Moffet School. There is generally more resolution of issues on this level for teachers of Grades K-3 than for teachers of Grades 4-6.

Question 3. To what extent have teachers received help in the development and use of curricular materials (Level 2)?

Curricular and instructional concerns have been resolved for most teachers at the Miller School in a way consistent with the objectives of LDP. Fewer teachers at the Moffet School have so resolved these issues. In general, teachers of the lower grades have resolved more issues on this level than teachers of the upper grades.

Question 4. To what extent have teachers received help in understanding Piaget's developmental theory (Level 3)?

Teachers have indicated that they have at least an overview of Piaget's theory, but their understanding of the fine structure of the theory and of its implications apparently needs greater attention.

A workshop for all the LDP teachers has been planned for the summer of 1971, when an entire week will be devoted to learning specific logical operations consistent with Piaget's theory. Teachers will have the opportunity to apply these logical operations to the development of curricular materials and to discuss their application to interpreting pupils' comprehension of problems.

REFERENCES

- Barbe, W. B. Instructional Causes of Poor Reading. Education, 1957, 77, 534-540.
- Bledsoe, J. C. Self-Concepts of Children and Their Intelligence, Achievement, Interests, and Anxiety. Journal of Individual Psychology, 1964, 20, 55-58.
- Brown, E. K. An Evaluation of the Sayre Junior High School Project. Philadelphia: The School District of Philadelphia, Office of Research and Evaluation, August 1968.
- Brown, E. K. More Effective Educational Research through the Use of Process Evaluation Technique. Journal of Research and Development in Education, June 1970.
- Clark, K. B., & Clarke, M. P. Racial Identification and Preference in Negro Children. In T. M. Newcomb & E. L. Hartley (Eds.), Readings in Social Psychology. New York: Holt, Rinehart & Winston, 1947.
- Cohen, A. The Skills Center Approach to the Teaching of Reading: Administrator's Program for the Improvement of Reading Instruction. Distributed by Ida Kravitz, Reading Supervisor, Curriculum Office, The School District of Philadelphia. Mimeographed, Spring 1967.
- Engel, M., & Raine, W. J. A Method for the Measurement of the Self-Concept of Children in the Third Grade. Journal of Genetic Psychology, 1963, 102, 125-137.
- Fuller, F. F. Concerns of Teachers: A Developmental Conceptualization. American Educational Research Journal, 1969, 2 (2), 207-226.
- General Electric Company-TEMPO: Evaluation of Title I ESEA Compensatory Education. Publication 71TMP-23. Washington, D. C.: General Electric Company, March 1971.
- Raph, J., Lieberman, D., & Pascale, P. Influence of a Piaget-Oriented Curriculum on Intellectual Functioning of Lower-Class Kindergarten Children. Paper presented at meeting of American Educational Research Association, New York, February 1971.
- Raven, R. J. The Effects of a Structured Learning Sequence on Second and Third Grade Children's Classification Achievement. Journal of Research in Science Teaching, 1970, 7, 153-160.

- Raven, R. J., & Salzer, R. T. Piaget and Reading Instruction. Reading Teacher, 1971, 24 (7), 630-639.
- Robinson, H. M. News and Comment--Individualized Reading. Elementary School, 1960, 60, 411-420.
- Safford, A. L. Evaluation of an Individualized Reading Program. Reading Teacher, 1960, 13, 266-270.
- School District of Philadelphia, Office of Research and Evaluation. Digest of ESEA, Title I Projects for Title I Allocation Meetings. Philadelphia: The School District of Philadelphia, 1971. (A digest of evaluations prior to 1970-1971)
- School District of Philadelphia, Office of Research and Evaluation. Interim Reports, 1971, Department of Instructional Systems Research. Philadelphia: The School District of Philadelphia, February 1971.
- School District of Philadelphia, Office of Research and Evaluation, Division of Administrative and Survey Research. Enrollment: Negro and Spanish-Speaking in the Philadelphia Public Schools, 1969-1970. Philadelphia: The School District of Philadelphia, 1970.
- St. Mary's Interparochial School. A Self-Assessment by St. Mary's Interparochial School. A report to the Provincial Council, Sisters of Notre Dame de Namur, Mimeographed, 1971.
- Thomas, D. R., Becker, W. C., & Armstrong, M. Production and Elimination of Disruptive Classroom Behavior by Systematically Varying Teachers' Behavior. Journal of Applied Behavior Analysis, 1968, 1, 35-45.

AUXILIARY SERVICES TO SCHOOLS AND PUPILS

Projects in this cluster have been influential in giving pupils an awareness of career alternatives, in helping them prepare for their chosen careers, and in promoting their successful adjustment to their school experiences. Currently serving only a small percentage of pupils, they represent significant beginnings in an emphasis on the School District's goals in the areas of career guidance, career preparation, motivation, and mental health.

However, these projects represent only a small portion of operating services and federally-funded programs which seek to meet these needs in a larger context.

Current task-force recommendations to implement the career-development needs of youth demonstrate that these Title I projects clearly represent beginning steps in the transition from the traditional concepts of mental health, occupational education, and guidance to a more vital approach to the solution of problems of youth in today's society.

With such massive needs at all grade levels, Title I projects are only beginning to provide the services which are necessary to fulfill the School District's responsibilities to its pupils. Therefore, examination must be made of the School District's operating-budget programs, and other federally-funded programs such as those functioning under the Vocational Education Act of 1968, to adequately assess the degree to which these auxiliary services are meeting the needs of youth.

The evaluation of the "Auxiliary Services to Schools and Pupils" cluster and its component projects was designed, conducted, and reported by Hermine Jeremias Chern, Research Associate, and Bruce J. Yasgur, Herman L. Carter, and Frances R. Byers, Research Assistants. Miss Byers had primary responsibility for the evaluation of the Counseling Services project, and Mr. Carter had similar responsibility for the evaluation of the Counselor Aides project.

AUXILIARY SERVICES TO SCHOOLS AND PUPILS

This cluster report examines (a) the theoretical bases for the creation and integration of projects directed toward the broad-based career development goals of the School District of Philadelphia, and (b) the degree to which these goals are facilitated by the common impact of the projects in this cluster. Separate evaluations of the noncommon features of the individual projects follow this cluster report. Each of the individual project reports should be interpreted in the context of this cluster report.

Projects included in this cluster are Counseling Services (CSP), Counselor Aides (CA), Motivation Program (MP), and Salable Vocational Skills (SVS).

The Cluster of Projects

As a person develops, he needs assistance in handling the appropriate vocational development tasks of various age levels. Guidance and counseling programs must operate as an integral part of the total educational program, because they are important in helping the individual to develop an adequate self-concept in relation to the world-of-work.

In its broad-based career development goals, the School District acknowledges its responsibility to provide each student with (a) an awareness of career alternatives, (b) the skills, motivation, and assistance to choose his own future, and (c) the settings which will assist the continuation or improvement of his mental health. It is believed that the interaction of these objectives will enable pupils to cope constructively with their environment in an atmosphere of respect for self and others.

The School District has long recognized the need for expansion and improvement of vocational guidance and counseling services. Improvement in these services will allow individuals to plan more realistically for their futures. This increased effort must be based upon sound theories of personal and vocational development and appropriate counseling and guidance procedures.

With the accelerating rate of technological change, the School District, through its counselors, has an even greater mission to provide children with learning experiences which will enable them to become socially and economically functioning adults. To this end, the federal government under Title I ESEA has allocated funds for the development and implementation of four projects in Philadelphia which are designed to broaden the base of services to students in the public and parochial school systems.

In order to provide for the unique needs of target-area students it was considered essential that traditional guidance and counseling services be continued and expanded, and that further study and experimenta-

tion be encouraged to find new methods and techniques for dealing more adequately with these problems.

Five components have been identified as highly desirable for projects directed toward broad-based career development goals. While all five are not needed by all projects, one or more are considered necessary for each. Career development projects should, in general, provide the following:

1. Early development of positive values regarding work and education.
2. A satisfying relationship with an esteemed adult.
3. Information about education and work.
4. Experience with a variety of vocational models, settings, and appropriate activities leading to familiarity with the world-of-work, and assistance in organizing and integrating these experiences in order to make them meaningful.
5. Opportunities for decision-making experiences leading to the realization that one must take personal responsibility for the consequences of one's decisions.

While each of the Title I projects in this cluster is designed to meet one or more of these broad-based needs, the diversity of settings and of target populations gives each project its own individuality within the context of the cluster.

The Counseling Services project serves parochial elementary schools by providing specialists who can identify and remediate those environmental conditions which may cause behavioral disabilities in children. Teachers, principals, and parents collaborate in the initiation of a preventive program designed to eliminate many of the social and emotional barriers which hinder the full development of the child.

The Counselor Aides project provides paraprofessional support to the school guidance counselor. By performing clerical tasks the aide relieves the counselor of some parts of the job which do not require professional training. In this way, the professionally trained counselor may be able to offer intensive help and devote more time to disadvantaged children.

The Motivation Program provides activities designed to encourage students to attend college or other post-high school educational institutions. Seeking the active participation of the community, it is based on the belief that the business, neighborhood, and intellectual communities should accept responsibility for the educational process. As in other projects in this cluster, career development responsibilities of the school are assumed.

The Salable Vocational Skills project enables one area vocational-technical school to make its faculty and facilities available to target-area youth on Saturday mornings. It has as its objectives the enhancement of vocational preparation for students who are seeking (a) improvement of skills already partly learned in the classroom, (b) exploratory experience in an occupational area which might be considered for future training, and/or (c) occupational training not otherwise available during their regularly scheduled school day.

Current Evaluation Procedure

While information dealing with the impact of auxiliary services upon the School District is needed, the diversity of the four projects in this cluster has inhibited their examination from a unified point of view. Because one project was clearly outside the domain of the public school system, results for it could not be compared directly with those obtained within the system. By the use of common data-gathering instruments such as the Observational Checklist, questionnaires, and interviews where appropriate, descriptive data were obtained to determine the degree of congruence between project operations and School District goals. But because of the diversity of both the projects and the scope of the goals, a common lens for viewing this cluster is yet to be found.

For this reason, procedures used in the project evaluations are described only in the respective project reports which follow this cluster report.

Results

Each project in the cluster has made a contribution toward the School District's broad-based career development goals.

Salable Vocational Skills, although limited in scope, was seen as a vehicle for the enhancement of vocational opportunities for public and parochial school students. Its direct contribution in providing services to students to enable them to obtain the skills, motivation, and assistance to choose their own future was quite evident.

The Motivation Program, also, was seen as contributing to students' awareness of career alternatives and providing active assistance to those students who have the ability and the desire for some form of post-high school education. Comparison of participating students with a sample of nonparticipants revealed that it was providing students with experiences which motivated them to seek and obtain higher educational opportunities.

However, in both projects only a relatively small percentage of students had the opportunity or motivation to participate.

The other two projects in the cluster were found to be facilitating the School District's goal of providing settings to assist in the improvement of mental health.

Counselor Aides were perceived to be a valuable adjunct to the counseling office. Providing a positive atmosphere and giving immediate and direct service to pupils, parents, teachers, and others who come into the counseling office, they also perform a number of paraprofessional and clerical duties which enhance their capabilities as vital components of the counseling and pupil personnel functions within a school.

The Counseling Services project provides supplementary services to parochial schools that are not normally available to them. In addition, it is a chief source of in-service training in child development which enables teachers to become more knowledgeable.

Conclusions

While most conclusions for this cluster are presented in the individual project reports which follow, a few comments are appropriate here.

Title I projects comprise only one portion of the auxiliary services provided by the School District. Other federal legislation and existing locally-funded operating programs all make contributions in providing students with needed services in the areas of career development, occupational education, and counseling.

It should be noted, however, that each of the Title I projects in this cluster contributes to the broad-based goals which have been established. The goals of providing students with (a) an awareness of career alternatives and (b) skills, motivation, and assistance for choosing their future careers are both met by the Motivation Program and the Salable Vocational Skills project. The third goal, to assist in the improvement of mental health, is being facilitated by the Counseling Services and Counselor Aides projects.

These projects, however, represent only a beginning in terms of their impact upon the School District. While each project is achieving its unique goals, additional resources should be brought to bear to extend the needed services to a larger number of students.

COUNSELING SERVICES
(PBRS #111-06-614)

The Counseling Services project (CSP) offers preventive counseling services to 14 parochial schools in disadvantaged neighborhoods, by providing educational and community consultants who work with teachers, parents, and pupils in Grades K-2.

This project report should be interpreted in the context of the cluster report, "Auxiliary Services to Schools and Pupils," in earlier pages of this volume.

The Project

The transition from home to school for the new kindergarten or first-grade pupil is felt to be critical in his developmental history. Moreover, the success or failure of this transition is deemed to depend upon the degree of disparity between what the child is capable of accepting, understanding, and responding to and what challenges and expectations he meets in school. The family is the vehicle which imparts to the child a sense of self, helps in organizing the child's conceptions of the world around him, and provides him with the opportunities to learn and develop.

The success or appropriateness of any particular family's endeavors with regard to its child's ability to move into school cannot be determined without considering the school itself. The reciprocity between what the school expects and what the child has been taught to expect and respond to, determines the outcome of the child's transition from home to school. Viewed in this manner, an important aspect of the child's successful movement from home to school could be seen to depend upon the degree of compatibility which exists between the family system and the school system. If the child has been successful at home, and if the family's and school's expectations are in reasonable accord, then he should find it easy to move into the school environment.

With the goal of enhancing the child's positive experiences as he enters the school, CSP has developed the following as its principal objectives:

Objective 1. To provide small-group discussions for pupils within Grades K-2.

Objective 2. To provide diagnostic and counseling services to pupils.

Objective 3. To provide parent-child orientation programs and other services to enhance the involvement of parents in their children's education.

Objective 4. To provide teachers with in-service training in child development.

The work of CSP is carried out in 14 parochial elementary schools by seven teams of two persons each: an educational consultant and a community consultant. The former's education and training are in the field of psychology; the latter's are in the area of social services and community projects.

The educational consultant attempts to understand thoroughly the school as a system. At the same time, he tries to increase the school staff's understanding of the project's activities and to help the staff develop the requisite skills to perform these activities.

One of his major tasks is to work out the process(es) by which he and the school staff can improve intrafaculty communication patterns and utilize the problem-solving resources of the staff.

Teachers who are concerned about improving the atmosphere for learning in their classrooms may invite the educational consultant to observe their classrooms. Later, the consultant and the individual teacher discuss what has transpired during the observational period and together seek to devise actions for enhancing the classroom experiences of children.

As envisioned by the project staff, the results of such consultations depend very much upon a collaborative effort between the teacher and the staff member. By combining the project staff's expertise in the areas of mental health, group processes, and learning with the educators' knowledge and experience in teaching, it is hoped that new practices can be evolved which will enhance the overall atmosphere for learning and emotional-social growth in the schools.

Teachers may also ask the educational consultant to help them with a particular child who may be experiencing some difficulties in adjusting to the classroom routines. Where the child is not seriously disturbed, the consultant, after observing the child in the classroom and securing all other relevant data, collaborates with the teacher in developing various strategies which the teacher can carry out in class to help the child.

Occasionally the educational consultant does some individual counseling and testing with a child whose problems are more serious than most. He may even place the child in a small group of children with similar difficulties and work with them. These lines of action, however, are intentionally kept to a minimum in order to conserve the consultant's limited time in the school for his primary objective of prevention.

In rare instances where the degree of disturbance is very great, the consultant refers the child and his parents to a local community treatment facility for services. Following this, the consultant will help the family follow through with the suggested program of treatment.

The community consultant, also, functions in a preventive manner. He attempts to understand thoroughly the family and the community as systems and their influences on children's learning experiences and emotional-social development. Primarily, he is responsible for implementing those programs, both formal and informal, which help parents gain a greater rapport with the school.

From time to time, principals and teachers consult with the community consultants about important school events and seek their assistance in involving parents in the program. Teachers and principals also regularly call upon the community consultant to assist them in learning more about the home-life experiences of various students.

The community consultant seeks to motivate parents to become more interested in school affairs. His particular methods and procedures, as well as the various kinds of involvement to be fostered, are decided upon through the collaborative thinking and planning of principals, teachers, parents, and the team.

There are four basic services which are offered in all the participating schools: (a) small-group discussions with children, (b) individual diagnostic and counseling services where necessary and appropriate, (c) involvement of parents in the basic education of their children, and (d) faculty in-service programs.

In addition, some testing services, referral services, and more than 50 other psychoeducationally oriented activities have been undertaken in one or more of the schools affiliated with this project. Some examples of these activities are (a) a "failure prevention" tutoring program, (b) experience reading as a technique for facilitating motivation and skills for reading, (c) black history and culture appreciation clubs for students, (d) use of systematic procedures for reinforcing in classrooms behaviors and attitudes that encourage learning, and (e) special awards programs to recognize students who are trying to improve their school work, regardless of their level of achievement.

It should be clear that the Counseling Services project differs from the more traditional counseling services in most schools. Its emphasis on prevention, and/or working with parents, teachers, principals and other adults who significantly influence the behavior of children rather than focusing primarily upon the child, reflects what most authorities in the field of counseling today acknowledge to be a practical and effective approach for delivering counseling services within the school.

Previous evaluations of CSP primarily contributed questionnaire data from participating principals and teachers. Because many personnel changes occurred in 1970, both replication and additional evaluations have been deemed necessary to assess adequately the progress of this project.

The 1970-1971 evaluation of CSP has focused primarily on the project's four objectives. In addition, an attempt was made to measure the overall effectiveness of the project as perceived by the principals and teachers in the participating schools. Complementary data were also gathered concerning the additional activities performed by project personnel in response to needs which varied from school to school.

Major foci of the current evaluation were the following questions:

1. How effectively has CSP provided small-group discussions for pupils?
2. How effectively has CSP provided diagnostic and counseling services to pupils?
3. How effectively has CSP involved parents in their children's school experience?
4. How effectively has CSP provided in-service training to teachers?
5. How satisfactory have teachers and principals found the services provided by CSP?

To answer each of the focal questions, both qualitative and quantitative measures were used.

The qualitative measures included (a) direct observation by the evaluating team of some of the project's activities in the participating schools, and (b) interviews with project personnel and school personnel directly involved with the project. The interviews were somewhat structured so that specific questions concerning each CSP goal could be answered for all participating schools. Questionnaire data were also collected from participating school personnel. For comparison purposes, several questions were asked of principals of non-CSP parochial schools, similar in type of community and school population to the schools participating in CSP, regarding the kinds of pupil services they provide.

Quantitative data were extracted mainly from the statistical summary reports made by CSP personnel as to the number and types of services they provided during the school year.

Instruments used were the Observational Checklist, the Teacher and Principal Opinionnaire, and the School Services Questionnaire. (Copies of all three are on file in the Research Library of the Board of Education.)

The Observational Checklist was used to record data during monitoring visits and interviews.

The Teacher and Principal Opinionnaire was sent to all 14 principals and 44 teachers of target grades (K-2) of schools participating in CSP. It is an expanded version of the questionnaire devised for and used in the 1969-1970 evaluation of CSP. Each respondent was asked to identify himself only as one of the following: Principal, Teacher (Grade K), Teacher (Grade 1), or Teacher (Grade 2).

The School Services Questionnaire, constructed for the current evaluation, was sent to a sample of 16 parochial schools chosen for their proximity and similarity to the participating schools. The list of schools in this sample (See Appendix) was approved on the basis of such similarity by the Rev. Paul F. Curran, Assistant Superintendent of Schools for the Archdiocese of Philadelphia.

Interview and observational data were collected for all CSP personnel, as well as all principals and available teachers who were directly involved in the project. In addition, several teachers of "nontarget" grades were interviewed in order to augment this report's complementary data on CSP activities.

Descriptive summaries were prepared from the observational and interview data, all responses to the School Services Questionnaire, and responses to the open-end items in the Teacher and Principal Opinionnaire. Responses to the multiple-choice items of the Teacher and Principal Opinionnaire were tabulated in terms of frequency to permit comparisons of teachers' and principals' responses.

Results

Data relevant to Question 1. How effectively has CSP provided small-group discussions for pupils?

Twenty-three visits to participating schools were made by members of the evaluating team. In all schools it was reported that small-group discussions were taking place on a regular basis, usually daily so that each child was in a discussion at least once a week. When visited, nine of the 14 schools also reported that small-group discussions were being conducted regularly by the classroom teachers on the days when the evaluating team was not present in the school. In 10 schools, small-group discussions had been carried out in grades other than the target grades, usually Grades 7 and 8, but not always with regularity.

Nineteen small-group discussions were observed by members of the evaluating team. The average group included 7.7 pupils. In all discussions except one, all children were encouraged by the discussion leader to participate, and all but a few children (three in the largest group) appeared to take an active part.

A compilation of data from the weekly statistical reports filed by each CSP team revealed that 2,343 small-group discussions were conducted between September and May. In all, 1,582 children in the target grades (K-2) engaged regularly in small-group discussions in their school.

In interviews at nine of the 14 schools, the teachers and principals who stated opinions about small-group discussions made very favorable comments. A typical response was made in December by a first-grade nun who said (a) that she felt more understanding and patient with her pupils, (b) that, as a result of small-group discussions, she had a better idea of the children's life outside class, and (c) that she had noticed less fighting among the pupils since the beginning of the year, a change mentioned previously by the principal as a goal in her school.

In three schools, the reaction was generally favorable but with some reservations. One teacher stated that the lack of discussion guidelines left her initially unsure of the goals she should achieve, making her feel inadequately prepared. However, as the year progressed, she felt more comfortable with the format and was learning to enjoy the discussions. In another school, the principal felt that the groups should not number more than six children so that each child would receive more individual attention. In the third school, the children's exuberance after discussions was viewed as a disruption of the prevailing order and quiet in the school.

The overall reaction to small-group discussions by the principals and faculties of the other two schools was distinctly unfavorable. (In both schools, particular stress is placed on the "traditional" concept of order and discipline, and on the academic aspects of education.) In one such school, the principal said in February that the CSP team conducted the discussions outside the classroom without the teacher (implying that the teacher had "more important" things to do). However, later in the year, while team members continued to conduct discussions, they were frequently in the classrooms with the teachers actively participating. The principal, commenting on the project's small-group discussions, stated that, while shy, retiring children were "brought out" by such exposure, some children were made overly excited and active, presumably becoming a disruptive element when returned to the ordinary classroom setting. In the other school, small-group discussions were specifically cited by several teachers as pointless and a waste of time. The discussions were said to disrupt order and discipline with no positive results in the children. One teacher commented that the CSP team apparently "has no desire" for order and discipline.

A few principals and teachers mentioned the inconvenience caused by the interruption of normal classroom activity by the teams' trying to conduct discussions (mainly in the higher grades), but this objection was directed more to a scheduling problem than to a questioning of the intrinsic worth of the discussions.

The main criticism voiced by some CSP team members about small-group discussions was a reiteration of an objection mentioned by a teacher. They considered that, since conducting discussions well takes a lot of skill, most discussion leaders need something concrete to guide them, at least while they are learning. "Bessell's material" was mentioned once as a possible source for the needed guidelines.

Responses to the Teacher and Principal Opinionnaire were received from 56 of the 58 participating teachers and principals. Responses to the items concerning small-group discussions are summarized in Table 1. Responses to the evaluative items (Items 1-4) were strongly and consistently favorable.

Data relevant to Question 2. How effectively has CSP provided diagnostic and counseling services to pupils?

During visits to the schools, it was learned that teachers were making referrals to the CSP teams concerning specific problems of individual children. Such referrals were being made with great frequency in at least nine schools where, according to the statements of teachers or principals, the CSP team is considered an integral part of the school staff. Teachers and principals in these schools freely admitted using the team as a valuable resource for help in problem cases. Some diagnostic testing was done in almost all schools, but work with individual children was, in general, de-emphasized by CSP team members.

The CSP statistical report revealed that between September 9, 1970, and May 14, 1971, the seven teams made a total of 1,526 contacts in which they provided traditional diagnostic and treatment services to 594 pupils identified as having psychological or academic problems. Sixty-six individual psychological testing sessions were also conducted. Sixty-four additional children were referred to other agencies for testing or treatment as a result of the direct effort of the teams.

In providing these services, the teams held 1,366 meetings with the parents of children identified as having problems. In all, 363 families had such conferences.

Responses to the School Services Questionnaire were received from principals of 13 of the 16 schools in the non-CSP sample. They described the "traditional" services with which CSP services could be compared. Regarding their facilities for recognizing children with potential emotional or learning difficulties, eight principals stated that the teachers (and only the teachers, in four schools) recognize the difficulties of their own pupils. Two principals said they had no facilities; presumably, in those schools, too, only the teachers recognize the problem cases. Asked to cite additional personnel to whom the school can refer for help in recognizing or referring problem cases, two principals mentioned parent aides, four mentioned the remedial reading teacher, two mentioned the school nurse, five mentioned the speech therapist, and one mentioned the Spanish teacher for Puerto Rican students.

TABLE 1

RESPONSES TO OPINIONNAIRE ITEMS ABOUT SMALL-GROUP DISCUSSIONS

| Item | Group Responding to the Item ¹ | Number of Responses | | | |
|---|---|---------------------|--------------|-----------------|-------------------|
| | | Strongly Agree | Mildly Agree | Mildly Disagree | Strongly Disagree |
| 1. Small-group discussions have given me insight into some problems which helps during regular classroom periods. | 42 Tchrs. | 20 | 19 | 0 | 3 |
| | 10 Prins. | 6 | 4 | 0 | 0 |
| 2. Small-group discussions have been valuable additions to my program. | 41 Tchrs. | 19 | 17 | 2 | 3 |
| | 12 Prins. | 7 | 4 | 0 | 1 |
| 3. Most objectives of the small-group discussions in my room (school) were realized. | 38 Tchrs. | 15 | 16 | 3 | 4 |
| | 10 Prins. | 2 | 8 | 0 | 0 |
| 4. My pupils have grown socially as a result of our small-group discussions. | 41 Tchrs. | 18 | 18 | 3 | 2 |
| | 11 Prins. | 5 | 6 | 0 | 0 |
| 5. Children in my classroom (school) do <u>not</u> have an adequate vocabulary for small-group discussions. | 42 Tchrs. | 3 | 5 | 16 | 18 |
| | 11 Prins. | 2 | 3 | 3 | 3 |

¹ Some of the 56 opinionnaire respondents omitted items.

Two principals acknowledged having access to outside resources such as some other school that handles special cases, and the Child Guidance Clinic at Children's Hospital.

The need for counseling services was expressed by some of the principals, two of whom replied, "Most unfortunately, we have no facilities of this kind," and "We need help in this area."

Asked whether children with problems were referred to appropriate agencies, all the principals replied "Yes." Some named agencies such as Temple, St. Christopher's, and Hahnemann Hospitals, the Comprehensive Group Health Center, the Child Guidance Clinic, Rebound Clinic, and the district coordinator affiliated with a nearby public school. Several principals specified that the school frequently advises the parents, rather than school personnel, to take the child to the appropriate clinic or agency.

In the two CSP schools where the evaluating team found most of the teachers and principals unenthusiastic about other aspects of CSP, the most frequently mentioned contribution of the CSP team was its handling of individual cases. One teacher felt that the testing of individuals was valuable but she would like to receive more definite diagnoses and suggestions of ways to help the children more effectively in the classroom. Another teacher, in the same school, said that there should be more individual counseling. The remark was also made that the teachers, especially the more experienced ones, were sufficiently able themselves to handle the problems of the children in their classes.

Responses to the item in the Teacher and Principal Opinionnaire pertaining to CSP diagnostic and counseling services are summarized in Table 2.

TABLE 2

RESPONSES TO OPINIONNAIRE ITEM ABOUT DIAGNOSTIC AND COUNSELING SERVICES

| Item | Group Responding to the Item ¹ | Number of Responses | | | |
|--|---|---------------------|--------------|-----------------|-------------------|
| | | Strongly Agree | Mildly Agree | Mildly Disagree | Strongly Disagree |
| The CSP team has handled social and emotional problems of <u>my</u> pupils that would not have been treated otherwise. | 41 Tchrs. | 13 | 10 | 9 | 9 |
| | 12 Prins. | 4 | 3 | 5 | 0 |

¹Three of the 56 opinionnaire respondents omitted this item.

Data relevant to Question 3. How effectively has CSP involved parents in their children's school experience?

Several activities were undertaken during the year in conjunction with efforts of the CSP teams in all schools to establish and maintain contact with parents whose children did not necessarily have identified problems.

Parent-child orientation. All participating schools were asked to take part in a three-day program in early September (a) to help introduce young children to kindergarten and first grade, (b) to increase the teacher's knowledge of her pupils and their families, and (c) to enlarge the parent's knowledge of and involvement with the school. The children and parents met with the teacher, were introduced to their classwork, and were given some academic tasks which the parents could work on with their children. The teacher could tell the parents her goals for the coming year and enlist their cooperation.

The orientation was carried out in all 14 schools, reportedly attended by 99% of the parent-child pairs. In all, 29 classes took part in the parent-child orientation program involving 913 children and 901 parents.

In contrast, six of the 13 principals of the non-CSP schools replied "No" to the questionnaire item asking whether their school had any orientation activities for new pupils and their parents. Of the seven principals who responded "Yes," three mentioned the Title I Summer Readiness Program, one referred to meetings held in her school with par-

ents to discuss the testing programs and new approaches to teaching reading and mathematics, and three said that their teachers held an "open house" for parents and children before or on the first day of school, during which the principal met with them, explained the program, answered their questions, and gave them a tour of the school.

Of the 29 teachers and 14 principals in CSP schools who express opinions regarding the orientation program, all but one felt that it had accomplished its goals successfully.

Of the 901 parents (or representatives of the parents), 589 replied to another questionnaire concerning their reactions to the orientation program. Each of five items was to be rated on a scale from 0 to 9, the highest rating indicating the most favorable reaction; the mean obtained response for every item exceeded 8.0. Ninety-four percent of the parents agreed that the program should be repeated next year.

Parental involvement. This was reported to be one of the most difficult aspects of CSP to carry out in many schools. However, an attempt was made by the CSP teams in all 14 schools to contact and inform parents on school matters other than on an emergency "problem" basis.

Teams in five schools reported that regular contact was maintained with parents. In one of those schools, the parents of first-grade pupils have met monthly with the teacher to discuss problems and suggestions. The teachers have felt free to call the parents for reasons not limited to poor school performance of their children. One team has conducted community surveys, seeking to learn the parents' interests and concerns.

In the other schools, the principals and CSP team members described the various difficulties involved in contacting parents and especially in drawing them to meetings. Among them were a lack of parental interest, inability to come to the school because of work and home responsibilities, and a fear to travel to the school at night in some neighborhoods. In at least two of these schools, the teams reported that even when they sent notices to the parents or called them on the telephone to attract them to school meetings, attendances were often disappointingly small. In another school, the principal said that the team, after going to great lengths to arrange appointments with the parents (who assured them that the time was suitable), found that those parents repeatedly failed to keep the appointments.

According to the project's statistical report, the CSP teams participated in 42 regularly scheduled home and school meetings, and in 192 smaller parent meetings.

Responses to items in the Teacher and Principal Opinionnaire referring to the effectiveness of the CSP teams' efforts in parental involvement are summarized in Table 3 (Items 1 and 2).

TABLE 3

RESPONSES TO OPINIONNAIRE ITEMS ABOUT PARENTAL INVOLVEMENT

| Item | Group Responding to the Item ¹ | Number of Responses | | | |
|--|---|---------------------|--------------|-----------------|-------------------|
| | | Strongly Agree | Mildly Agree | Mildly Disagree | Strongly Disagree |
| 1. Parents feel closer to school as a result of CSP. | 41 Tchrs. | 2 | 21 | 10 | 8 |
| | 12 Prins. | 1 | 7 | 4 | 0 |
| 2. The activities outside the classroom that were sponsored by CSP personnel were valuable to the parents. | 36 Tchrs. | 9 | 17 | 7 | 3 |
| | 12 Prins. | 2 | 8 | 2 | 0 |
| 3. The PHT program is a valuable program to have in the school. | 20 Tchrs. ² | 13 | 6 | 1 | 0 |
| | 8 Prins. ² | 6 | 1 | 1 | 0 |
| 4. The PHT program has been successful in my school. | 17 Tchrs. | 4 | 9 | 3 | 1 |
| | 8 Prins. | 2 | 4 | 2 | 0 |
| 5. The PHT program has increased the parents' interest in the education of their children. | 19 Tchrs. | 5 | 11 | 2 | 1 |
| | 8 Prins. | 0 | 7 | 1 | 0 |

¹Some of the 56 opinionnaire respondents omitted items.

²Twenty teachers and 10 principals reported that their schools had the PHT program.

Parent as a Home Teacher (PHT) program. Beginning in January 1971, the schools were invited by CSP to take part in this program, designed to help parents work at home with their children on academical relevant tasks. The children's academic, emotional, and social development might be enhanced through this form of parental involvement.

In a typical meeting at the school, the teacher met with small groups of parents, telling them her plans and goals for the children during the next month or two. She then demonstrated tasks which the parents could try with their children at home. The smallness and informality of the meeting were intended to provide parents with the opportunity to ask questions and to seek guidance from the teacher.

The community consultant visited the home of each parent who attended a PHT meeting. During these follow-up sessions, he helped the parents implement the tasks which had been demonstrated at the meeting, answered questions, and offered assistance in overcoming various family problems.

Of the 42 teachers responding to the Teacher and Principal Opinionnaire, 20 acknowledged that the program was being carried out in their school, 18 said that it was not being carried out, one replied that the program was not presently (in May) being conducted but would be started soon, and three left the item unanswered. Of the 14 principals 10 said that the PHT program was conducted in their school, three said not, and one left the item blank. In all, 29 of the respondents said that the program was conducted and 21 said that it was not conducted.

According to the CSP statistical report, 27 classes participated in a total of 49 meetings for the parents of 504 children.

The only criticisms of the PHT program voiced by the CSP teams to the visiting evaluators were (a) that the parents seemed enthusiastic about carrying out the activities for only a few weeks and then gradually tapered off, and (b) that attendance at the meetings was poor, usually less than 50% of the parents.

Teachers' and principals' responses to opinionnaire items about the PHT program are summarized in Items 3, 4, and 5 of Table 3.

Data relevant to Question 4. How effectively has CSP provided in-service training to teachers?

The evaluating team learned that in-service faculty meetings were being held regularly in all 14 schools. They took place as often as needed, usually once or twice weekly (but more frequently in some schools) with the teachers in the target grades. In one school, meetings with target-grade teachers took place only once every two or three weeks.

In 13 schools, CSP personnel have held general in-service meetings with the whole faculty. These meetings were held less regularly

than those for target-grade teachers, ranging in frequency from one meeting for the year to one meeting every other week. In at least three schools, one such meeting was held regularly each month.

In-service training sessions for the entire faculty have been met with varying degrees of receptivity on the part of school personnel. In each of two schools, both hosting the same CSP team, the in-service sessions were so well received that a committee was formed to plan the proceedings for upcoming faculty meetings. Experimentation such as sensitivity and self-awareness techniques has been tried at these meetings with some apparent success. However, a difficulty mentioned by one principal was that scheduling conflicts occurred in the planning of large after-school meetings because many teachers were attending night school. In at least one other school, the CSP team was allotted time for in-service training during regularly scheduled faculty meetings, a possible source of dissatisfaction because one principal noted that the time available at such meetings was so limited that there was barely enough time to cover ongoing school business. The passive resistance to CSP techniques by some teachers, particularly the more experienced ones, was also noted as a source of difficulty in at least one school.

The CSP statistical report revealed that 90 faculty meetings were conducted during the school year. By comparison, 12 of the 13 responding principals of non-CSP schools indicated that their schools did not offer their teachers any in-service training in child development.

In CSP schools, the teams held 3,613 individual consultations with teachers and 1,222 with principals. These consultations served a variety of purposes, particularly to help teachers solve the psychological and academic difficulties of certain children, to plan sessions for "preventive" school and classroom strategies, to establish positive relationships between the CSP team and the school, and to train teachers for such activities as small-group discussions.

Other types of services given to the teachers by the CSP teams included working as aides to the teachers, demonstrating some new teaching strategy with the class, and helping with implementation of the existing curriculum. Such activities were carried out 1,164 times during the academic year.

The evaluating team interviewed the teams and school personnel as to their reactions to the in-service training offered by CSP. All teachers and principals interviewed viewed it favorably, but to varying degrees, from a few who mentioned it in passing in a somewhat neutral tone, to some who acknowledged that it contributed some meaningful information, to the majority who considered it a vital source of information.

Responses of teachers and principals to the opinionnaire item related to the effectiveness of CSP in-service training are summarized in Table 4.

TABLE 4

RESPONSES TO OPINIONNAIRE ITEM ABOUT IN-SERVICE TRAINING

| Item | Group Responding to the Item ¹ | Number of Responses | | | |
|--|---|---------------------|--------------|-----------------|-------------------|
| | | Strongly Agree | Mildly Agree | Mildly Disagree | Strongly Disagree |
| I have improved my classroom (or school) management techniques as a result of CSP. | 41 Tchrs. | 12 | 16 | 7 | 6 |
| | 9 Prins. | 3 | 1 | 4 | 1 |

¹Six of the 56 opinionnaire respondents omitted this item.

Data relevant to Question 5. How satisfactory have teachers and principals found the services provided by CSP?

An expression of the success of CSP, as perceived by the principals and participating teachers in all 14 schools, was discerned by the evaluating team from both interview and questionnaire responses.

In seven schools, the principals and teachers interviewed were very positive in their evaluation of the project and unreservedly delighted in its progress. In five other schools, the principals and teachers spoke favorably of the CSP team members personally, but expressed some reservation about certain aspects of the project. The degree of their reservation varied considerably from school to school. The overall feeling expressed by the school personnel in two of the 14 CSP schools was distinctly unfavorable to the project.

Features of the project that were most frequently praised for their value and effectiveness were the following:

1. Excellence of the teams and their willingness to do more than was expected.
2. Teams' role as indispensable resources to whom the faculties looked when problems arose.
3. Teams' helpfulness to school personnel in broadening their view of education and their recognition of children's problems.
4. Teams' success in increasing parental involvement in the schools.

5. Teams' provision of information and services to parents who would not otherwise have access to them.

6. Teachers' greater understanding and patience with the children.

Negative comments, although much less frequent than positive ones, included the following:

1. Small-group discussions seemed pointless and a waste of time.

2. Order and discipline were disrupted with apparently no positive results in the children.

3. The goals of the project did not coincide with those of some school personnel.

4. Efforts to involve parents seemed inadequate.

5. Some activities seemed to lack thorough planning.

Suggestions made by school personnel for future implementation of CSP included the following:

1. To assign a team full-time to each school, rather than half-time.

2. To assign the same team to a school in consecutive years, to preserve continuity.

3. To plan a unified program of activities for the whole academic year.

4. To improve communications between the CSP team and school personnel.

Responses to the items on the Teacher and Principal Opinionnaire that dealt with the overall need for, and effectiveness of, CSP are summarized in Table 5.

In teachers' and principals' responses to an open-end question about the ways CSP had helped them, the following were most frequently named:

1. Helping with problem children (11 teachers, 6 principals).

2. Helping teachers to focus attention on children as individuals (23 teachers, 2 principals).

3. Being a sounding board, building morale, being open, honest, helpful, and understanding (7 teachers, 5 principals).

TABLE 5

RESPONSES TO OPINIONNAIRE ITEMS ABOUT THE
GENERAL VALUE AND EFFECTIVENESS OF CSP

| Item | Group Responding to the Item ¹ | Number of Responses | | | |
|--|---|---------------------|--------------|-----------------|-------------------|
| | | Strongly Agree | Mildly Agree | Mildly Disagree | Strongly Disagree |
| <u>Need for CSP</u> | | | | | |
| 1. Most schools are in need of a change in the direction emphasized by CSP. | 38 Tchrs. | 17 | 12 | 7 | 2 |
| | 12 Prins. | 4 | 3 | 2 | 3 |
| 2. Only schools like mine should have access to CSP's techniques and personnel. | 42 Tchrs. | 0 | 1 | 10 | 31 |
| | 13 Prins. | 1 | 0 | 5 | 7 |
| 3. Schools in better socioeconomic neighborhoods need projects such as CSP. | 42 Tchrs. | 22 | 14 | 1 | 5 |
| | 12 Prins. | 7 | 5 | 0 | 0 |
| <u>School's Reaction</u> | | | | | |
| 4. CSP personnel were well received in my school. | 42 Tchrs. | 17 | 16 | 8 | 1 |
| | 13 Prins. | 6 | 5 | 2 | 0 |
| 5. My pupils did <u>not</u> respond positively to the new practices of CSP. | 40 Tchrs. | 2 | 5 | 17 | 16 |
| | 12 Prins. | 0 | 0 | 8 | 4 |
| <u>Respondent's Reaction</u> | | | | | |
| 6. As a teacher (principal) I have come to value the CSP personnel in my school. | 42 Tchrs. | 22 | 12 | 4 | 4 |
| | 14 Prins. | 8 | 5 | 1 | 0 |

TABLE 5 (Continued)

RESPONSES TO OPINIONNAIRE ITEMS ABOUT THE
GENERAL VALUE AND EFFECTIVENESS OF CSP

| Item | Group Responding to the Item ¹ | Number of Responses | | | |
|--|---|---------------------|--------------|-----------------|-------------------|
| | | Strongly Agree | Mildly Agree | Mildly Disagree | Strongly Disagree |
| 7. I feel "good" about working with CSP personnel. | 42 Tchrs. | 21 | 14 | 5 | 2 |
| | 12 Prins. | 5 | 6 | 0 | 1 |
| 8. It would be a loss to my school if CSP did not return next year. | 41 Tchrs. | 19 | 13 | 7 | 2 |
| | 14 Prins. | 8 | 4 | 2 | 0 |
| <u>Effects of CSP</u> | | | | | |
| 9. There have been some changes in my school since September as a result of CSP. | 39 Tchrs. | 7 | 16 | 11 | 5 |
| | 13 Prins. | 3 | 9 | 1 | 0 |
| 10. My pupils are better behaved because of CSP. | 40 Tchrs. | 1 | 10 | 19 | 10 |
| | 11 Prins. | 2 | 3 | 5 | 1 |
| 11. I have gained some valuable insights as a result of CSP. | 41 Tchrs. | 20 | 16 | 3 | 2 |
| | 14 Prins. | 7 | 5 | 2 | 0 |
| 12. I am able to see my children in a more positive fashion as a result of CSP. | 41 Tchrs. | 16 | 18 | 4 | 3 |
| | 11 Prins. | 4 | 2 | 3 | 2 |
| 13. The Counseling Services Project lived up to my expectation this year. | 41 Tchrs. | 11 | 16 | 7 | 7 |
| | 13 Prins. | 3 | 6 | 3 | 1 |

¹Some of the 56 opinionnaire respondents omitted items.

4. In-service help, giving insights into education and psychology (10 teachers, 3 principals).

5. Showing great interest in and encouragement to children (6 teachers, 2 principals).

6. Parental contact, home visits, community work (6 teachers, 4 principals).

7. Little or no help (2 teachers, 2 principals).

In teachers' and principals' responses to an open-end question about the ways the schools could help CSP, the following were most frequently named:

1. Following CSP advice, being more responsive, cooperating (14 teachers, 1 principal).

2. Being open and honest with the CSP team (8 teachers, 2 principals).

3. Scheduling more time and giving more space to CSP team (3 teachers, 2 principals).

4. Having more meetings with faculty of other schools and with project administrators (4 teachers, 1 principal).

In teachers' and principals' responses to an open-end question about the ways they would like to see CSP changed or worked differently, the following were most frequently named:

1. Satisfied with project as it is now (3 teachers, 2 principals).

2. Having the CSP team spend more time in the school (4 teachers, 2 principals).

3. Giving more help to individual children (5 teachers, 2 principals).

4. More work in the community by community consultant (8 teachers, 1 principal).

5. Defining roles of CSP personnel more precisely, especially that of the community consultant (2 teachers, 2 principals).

6. Team members to have teaching experience and show more respect for teachers' opinions; knowledge of theory good, but practical classroom experience lacking (3 teachers).

7. More in-service training (9 teachers).

Eighteen respondents added comments at the end of the questionnaire. Following is a categorization of such comments:

1. Grateful for support and encouragement of team; intending to use many CSP ideas permanently (7 teachers).
2. Small-group discussions a great benefit (5 teachers).
3. In-service faculty training valuable (2 teachers).
4. More community involvement needed (3 teachers).
5. PHT program should be structured for the beginning of next year (2 teachers).

As further indication of the image of CSP held by teachers and principals, Table 6 shows the CSP activities that teachers and principals thought best described the program.

TABLE 6
CSP ACTIVITIES DESIGNATED BY SCHOOL PERSONNEL AS
MOST DESCRIPTIVE OF CSP AS THEY HAVE KNOWN IT

| Activity | Number of Citations ¹ by | |
|---|-------------------------------------|------------|
| | Teachers | Principals |
| 1. Individual counseling services and referrals | 16 | 4 |
| 2. Small-group discussions | 33 | 13 |
| 3. Community involvement | 4 | 2 |
| 4. Staff development (in-service training) | 6 | 1 |
| 5. Other (Write-ins): | | |
| Reading techniques | 3 | - |
| Incentive to faculty | - | 1 |

¹Some respondents checked more than one activity.

Complementary Data

Additional activities of CSP teams. All CSP teams engaged in activities designed to meet specific needs that arose in their schools in addition to those directed toward the project's primary objectives. Twenty-six such activities were reported, of which the following received most frequent mention:

1. Small-group discussions in non-target grades--almost all schools.
2. Referrals from teachers of upper grades and individual testing and counseling of older pupils--almost all schools.
3. Expanded reading methods programs, especially language experience approach--11 schools.
4. Discussions and workshops for pupils of upper grades--6 schools.
5. Career development programs--5 schools.

In addition, the CSP personnel had 934 conferences with representatives of community agencies, made 130 contacts with other school personnel and specialists, met with parish pastors on 255 occasions, and organized four parish team meetings with representatives of the pastor's office, the school, and parents.

Opinions expressed by CSP team members. When visiting the schools, the evaluators interviewed the CSP team members for their opinions about (a) how successful they presently considered the project in their schools, and (b) how they thought the project could be successfully carried out in the future.

The teams in the schools where the project was favorably received reported different types of experiences from those of the teams in the schools where CSP was not well received.

In schools where the project was well received, all teams found the principals to be very positive toward CSP and cooperative with the teams' efforts. In every school where the principal felt openly favorable toward CSP, the teachers followed her lead, being receptive, cooperative, and willing to try. In these schools, the faculty members seemed close and usually communicated well among themselves, although some distance was noted between the religious and lay teachers. The teachers have been seen by the teams to change during the course of their exposure to CSP, "opening up" so that children have come to relate more to them. The teams have felt that they were an integral part of their respective schools, although not necessarily considered members of the staff.

In schools where the project was not well received, nearly all the teams mentioned that the strict enforcement of order and discipline interfered with the freedom they needed to carry out CSP activities. Although principals voiced no objection, they were at most just passively cooperative, and were seen by the teams as "getting in the way." The principals, and the teachers following their example, considered the project of value insofar as it provided "traditional" counseling and diagnostic services to individual pupils. Small-group discussions were seen as having dubious value at best, and as being a source of disruption and a waste of time at worst. The "preventive" nature of CSP therefore could not be stressed. The teams noted that the faculties of these schools were not united; little communication went on within the faculties, and gaps between older and younger teachers and between religious and lay teachers were mentioned. These were the faculties which considered themselves able to handle most problems encountered in the classroom, so that they felt little need to consult outsiders like the CSP team members. These same teachers were found by CSP personnel not really to understand the children's life outside school. In these schools, the priority placed on academic achievement was so high that a program serving other aspects of the children's development (like CSP) tended to be treated as little more than a "frill."

Continuing needs cited by CSP teams included the following:

1. The need for full understanding and acceptance of the project's goals and activities by the school principal. This is essential to the success of the program.
2. The need for a similar acceptance by all teachers designated to participate.
3. The need for CSP team members to have more authority and autonomy in carrying out activities, so there is less need to persuade reluctant school personnel to accept them.
4. The need for less frequent transfer of teachers with whom the CSP teams had worked.

Conclusions

Question 1. How effectively has CSP provided small-group discussions for pupils?

An overwhelming majority of the respondents found the discussions to be valuable additions to their ongoing program, providing them with insight into ways to treat some problems in the classroom.

More than 80% of the teachers and principals considered the children to have grown socially as a result of the discussions, and

most (many more than last year) felt that the children had an adequate vocabulary for participating in the discussions.

Question 2. How effectively has CSP provided diagnostic and counseling services to pupils?

Referrals have been made in all schools; in at least nine schools such referrals have been made with great frequency. More than 590 pupils received this service as a result of CSP.

Question 3. How effectively has CSP involved parents in their children's school experience?

To a limited degree. However, each school's location or neighborhood situation has had a significant effect upon parent involvement. In areas where parents are available during the day, a greater degree of flexibility for day or evening meetings has been possible. There appears to be a need for the role of the community consultant to be defined more precisely.

Question 4. How effectively has CSP provided in-service training to teachers?

In-service training of teachers has been conducted in all schools and has been generally considered indispensable by the teachers and principals.

Question 5. How satisfactory have teachers and principals found the services provided by CSP?

In general, quite satisfactory. Some teachers and principals have expectations that differ from the goals of the project. Schools where rigid discipline and order are emphasized (traditional approach) tend to view CSP as having as its main purpose the furnishing of traditional remedial counseling services (i.e., diagnostic testing and counseling of individual children with problems) rather than fulfilling the project's intended role in prevention of problems. Failure of a principal and her teachers to make a commitment, when accepting the project in their school, to cooperate with the team and give it autonomy in carrying out its activities, can seriously restrict the project's long-range effectiveness in that school.

In many schools, maintaining regular contact with parents is difficult at best. In schools where CSP is not endorsed wholeheartedly by the principal and faculty, this difficulty is compounded, with a consequent loss of valuable contact for the team--mainly in areas where it is most needed.

Evaluator's Comment

The attitude of the principal sets the tone for the school. Her acceptance, with that of the faculty, is a big key to the project's success. Where there is little communication among faculty members, several problems arise which tend to discourage the project's success in that school. In some instances the team has difficulty in even scheduling a meeting with the entire faculty, let alone getting their cooperation.

More intensive orientation is needed in the beginning of the school year (or before) to acquaint principals and teachers with exactly what to expect.

Appendix

Schools participating in the Counseling Services Project:

| | |
|---------------------------|-----------------------|
| St. Agatha | Most Precious Blood |
| St. Anthony | Our Lady of Mercy |
| Bambino Gesu Day Nursery* | Our Mother of Sorrows |
| Cathedral | St. Paul |
| St. Elizabeth | St. Rita |
| St. Francis de Sales | Sacred Heart |
| Gesu | Transfiguration |
| St. Ignatius of Loyola | |

Schools not participating in the Counseling Services Project which received the School Services Questionnaire:

| | |
|-----------------|----------------------------|
| St. Bonaventure | St. Michael |
| St. Boniface | Our Lady of the Holy Souls |
| St. Charles | Our Lady of the Rosary |
| St. Columba | Our Lady of Victory |
| St. Edward | St. Peter |
| St. Gregory | St. Philip Neri |
| St. Ludwig | St. Rose of Lima |
| St. Malachy | St. Theresa of Avila |

*Bambino Gesu Day Nursery was not included in the evaluation.

COUNSELOR AIDES
(PBRS #111-03-508)

The Counselor Aides (CA) project provides 28 paraprofessionals (counselor aides) who assist counselors in 14 senior high schools and junior high schools.

This project report should be interpreted in the context of the cluster report, "Auxiliary Services to Schools and Pupils," in earlier pages of this volume.

The Project

The CA project is a response to recent federal legislation which has created greatly increased demands for personnel to provide relevant services and has resulted in the development of a new group of personnel positions which are variously referred to as auxiliary, technical, nonprofessional, paraprofessional, or support personnel.

A critical issue in Philadelphia schools today is the need to provide adequate counseling service, both to help all pupils in their educational and career planning and to give intensive service to those pupils who have problems in school adjustment. The proportion of children with social and emotional problems is very high in urban areas, particularly in low-income neighborhoods.

In an attempt to meet the increasing demand placed on professional counselors, the School District has assigned counselor aides to secondary schools where the pupil-counselor ratio is high. Through the use of the counselor aide, the counselor is relieved of some parts of the job which can be carried out by a person without professional training so that the professionally trained counselor will be able to offer more intensive help to more disadvantaged children.

The activities of support personnel differ from the work of the counselor in several basic respects (Stewart, 1968):

1. The counselor performs the counseling function described by professional policy statements, while support personnel may perform other important and necessary activities that contribute to the overall service.

2. The work of the counselor involves synthesis and integration of interrelated parts of the total range of services with and in behalf of the counselee, while the work of support personnel tends toward the particular and becomes an integral part of the larger whole only as this is developed under the leadership of the counselor.

3. The counselor bases his performance on the use of relevant theory, authoritative knowledge of effective procedures, and evaluation of the total endeavor, while functions of support personnel are characterized by more limited theoretical background and specialization in one or more support functions.

Principal objectives of the CA project are the following:

Objective 1. To give immediate and direct service to pupils, parents, teachers, and others who come into the counseling area.

Objective 2. To respond appropriately to telephone calls into the counseling office.

Objective 3. To gather and organize pupil information needed by other school services or counseling agencies or for preparation of summaries and recommendations.

Objective 4. To assist counselors in accomplishing particular counseling program objectives.

Objective 5. To assist in organizing, maintaining, and distributing resource materials on educational, occupational, and recreational opportunities for students.

Twenty-eight counselor aides are assigned to 14 senior high schools and 7 junior high schools (See Table 1). They assist counselors by acting as receptionists, by answering requests for routine information, by giving direct service on routine matters assigned by the counselors, and by performing clerical activities related to the counseling job. In general, they were selected on the basis of these qualifications: high school graduation, liking for children, ability to establish good relationships with people, intelligence, integrity, and typing skills. The counselor aides normally work in or very close to the counselors' offices, and have their own desks, chairs, and typewriters.

Evaluations in the years 1966-1968 indicated that counselors with aides engaged in a significantly smaller number of clerical and administrative activities and tasks than counselors without aides. No significant differences were noted between counselors with and without aides in number of contacts made with pupils and parents or in time spent in dealing with individual pupil problems. Counselor aides were seen as mature clerk-receptionists who were capable of carrying a major portion of the counselors' clerical load.

In 1968-1969 it was found that, while aides did relieve counselors of routine duties, counselors spent a large portion of their "freed" time directing the activities of the aides. Ratios of counselors to aides ranged from 2:1 to 8:1. No significant differences were found in services to pupils or in parental contacts by counselors with and without aides.

TABLE 1
LOCATION OF COUNSELOR AIDES

| District | Senior High | | Junior High | |
|----------|--------------|-------|-------------|-------|
| | School | Aides | School | Aides |
| 1 | Bartram | 2 | Catto | 1 |
| | West Phila. | 2 | | |
| 2 | Franklin | 1 | Audenried | 1 |
| | Wm. Penn | 1 | Barratt | 1 |
| 3 | South Phila. | 2 | | |
| | Bok | 2 | | |
| 4 | Dobbins | 2 | | |
| | Gratz | 2 | | |
| | Overbrook | 2 | | |
| 5 | Edison | 1 | Stetson | 1 |
| | Kensington | 1 | Wanamaker | 1 |
| | Mastbaum | 1 | | |
| 6 | Germantown | 1 | Roosevelt | 1 |
| | | | Wagner | 1 |
| 7 | Frankford | 1 | | |

The evaluation of 1969-1970 indicated that high ratios (greater than 3:1) of counselors to aides reduced the efficiency of the service. A high turnover of aides has occurred over the past two years. More than half the ex-aides have been transferred to other positions within the School District.

Current Evaluation Procedure

This year's evaluation was focused on the activities performed by the counselor aide and their effect on the overall counseling process. Answers to two questions were sought:

1. To what extent have counselor aides been performing their tasks as stated in the project's five objectives?

2. To what extent have counselor aides facilitated students' and adults' access to counseling services?

Question 1. To what extent have counselor aides been performing their tasks as stated in the project's five objectives?

During the 1970-1971 school year, there were 39 counselor aides in the School District. Twenty-eight of the 39 positions were federally funded. Monitoring was systematically conducted on 19 of the 28 federally funded counselor aides in 15 schools, with the help of the Observational Checklist. (A copy of the checklist is on file in the Research Library of the Board of Education.) Three randomly selected reports by counselors and principals on the activities of their aides were examined.

Observational data were summarized in terms of frequency. Other data were summarized descriptively.

Question 2. To what extent have counselor aides facilitated students' and adults' access to counseling services?

The evaluation team observed counseling offices of the participating schools at different times during the day and recorded clients' waiting times and the disposition of their cases. The Counselor Aide Recording Form, a time checklist developed by the evaluation team, was used. (A copy is on file in the Research Library of the Board of Education.) The form provides space for the observer to record (a) the time when a person entered the counseling office, (b) the type of client (student, parent, or other), (c) whether the visit was made with or without an appointment, (d) the reason for the visit, (e) total waiting time, and (f) final disposition made.

These data were gathered during the same visits which provided data relevant to Question 1.

A review was made of the data to determine the number of persons served by the counselors and the number of persons provided with counseling services by the counselor aides. A frequency distribution was made to determine the median in reference to waiting time of clients.

Results

Data relevant to Question 1. To what extent have counselor aides been performing their tasks as stated in the project's five objectives?

Nineteen visits to participating schools were made by members of the evaluation team between November, 1970, and May, 1971. Thirteen

of the visits were made to senior high schools and six were made to junior high schools.

Six of the visits lasted for one hour each and two lasted for an hour and a half. In no case did a visit last less than 30 minutes.

On each visit, the evaluation team observed counselor aides performing some phase of the stated objectives. In instances where certain activities were not observed, personal interviews revealed that the activities were performed at some other point during the day (See Table 2).

The reports of counselors and principals on their counselor aides indicated that the aides regularly engaged in a variety of activities, depending on the needs of their particular schools. However, the reports agreed on a core of activities which were regularly performed by all three of the aides:

1. Serve as secretary
2. Serve as receptionist
3. Make counseling appointments
4. Answer telephone
5. Make telephone calls for counselors
6. Provide information
7. Maintain records
8. Type reports and general correspondence
9. Perform general clerical duties.

In addition, the aides in senior high schools perform the following activities:

1. Arrange early dismissals
2. Distribute emergency lunch funds and tokens
3. Assist counselors in special programs
4. Assist in orientation of new students.

TABLE 2

SUMMARY OF OBSERVATIONS DURING 19 VISITS

| Aide Activity | Number of Observation Visits | | |
|--|------------------------------|------------------|---|
| | Activity Performed | Activity Lacking | Activity not Appropriate during Observation |
| Answer phone | 17 | 0 | 2 |
| Make phone calls for counselor | 17 | 0 | 2 |
| Receive incoming clients | 17 | 0 | 2 |
| Make counseling appointments for clients | 17 | 0 | 2 |
| Do typing for counselor | 17 | 0 | 2 |
| Process special forms | 17 | 0 | 2 |
| Maintain college information services | 10 | 6 | 3 |
| Process late students | 12 | 4 | 3 |
| Send forms to parents | 11 | 5 | 3 |
| Maintain file for early dismissal | 9 | 4 | 6 |
| Compile absence reports | 1 | 13 | 5 |
| Maintain test-score records | 3 | 10 | 6 |
| Handle information on special programs | 14 | 0 | 5 |
| Order office supplies | 10 | 3 | 5 |
| Handle scholarship applications | 8 | 6 | 5 |
| Handle transcript requests | 9 | 5 | 5 |

Data relevant to Question 2. To what extent have counselor aides facilitated students' and adults' access to counseling services?

Data collected in the participating schools by the evaluation team indicated that clients made 135 visits to the counseling offices during the time when the evaluation team was present. The median waiting time experienced by clients was two minutes. Forty-nine of the visits made were made without appointments.

Fifty-three visits were made by persons who wanted to see the counselor. Fourteen of those persons were serviced directly by the counselor aide; only 39 had the need for professional counseling services.

The counselor aides provided direct services to 85 of the visitors and some form of service to all 135.

Conclusions

Question 1. To what extent have counselor aides been performing their tasks as stated in the project's five objectives?

In every observation visit, counselor aides have been found performing some phase of the project's stated objectives. Interviews with counselors and aides have indicated that at various times the aides perform all of the activities cited in the project's stated objectives. Case reports by principals and counselors also have confirmed the latter indication.

Question 2. To what extent have counselor aides facilitated students' and adults' access to counseling services?

Counselor aides have facilitated access to counseling services to a great extent in all cases by reducing the waiting time of clients to a median of two minutes. Their specific involvement in the counseling process may vary depending on the needs of the particular schools. However, a large part of their activity involves the giving of immediate and direct service to pupils, parents, teachers, social workers, and others who come into or telephone the counseling offices.

MOTIVATION PROGRAM
(PBRS #111-04-555)

The Motivation Program (MP) offers 10th-, 11th-, and 12th-grade students a wide variety of cultural enrichment, curriculum enrichment, and tutoring experiences designed to motivate them to seek some form of post-high school education, with emphasis on college.

This project report should be interpreted in the context of the cluster report, "Auxiliary Services to Schools and Pupils," in earlier pages of this volume.

The Project

The arrangements and expectations of the American culture--particularly the educational system--require every person at certain points to decide on one course of action or another. Some curriculum decision will be made at each choice-point, even if only by drift or by default. But at each choice-point in the educational ladder the individual reduces the number of options available to him in the future because he inevitably leaves at least one of the previously possible roads not taken.

Many students receive insufficient preparation for the task of making their various decisions. In the process of choosing a career, a special need exists for (a) knowledge of one's own potential, (b) knowledge of all available opportunities, and (c) a plan of action for reconciling a and b.

Research by Roe (1964), Super (1957, 1963), and Tiedeman (1961, 1963) has indicated the following statements to be supported by considerable evidence. Identification with a parent or with a substitute for a parent is related to the development of adequate roles, their consistent and harmonious interrelationship, and their interpretation in terms of vocational plans and eventualities.

Parents' increased knowledge of their children also has an indirect effect upon the children's aspiration level. The greater the belief on the part of parents that their children can achieve success, the more frequently will children aspire to higher goals.

The direction and rate of the vertical movement of an individual from one occupational level to another are related to his intelligence, parental socioeconomic level, status needs, values, interests, and skill in interpersonal relationships, and to the supply and demand conditions in the economy.

The occupational field which the individual enters is related to his interests, values, and needs, the identifications he makes with parental or substitute role models, the community resources he uses, the

level and quality of his educational background, and the occupational structure, trends, and attitudes of his community.

It is believed that many persons, especially the disadvantaged, consider themselves to have low ability and therefore develop little expectation of achievement. In contrast, the individual who is convinced of his ability to succeed in attaining a goal within his reach will tend more readily to embrace varied educational opportunities and to strive toward his goal.

It is to these factors that MP has addressed itself. The project is based on the belief that vast numbers of students with excellent potential for higher education are lost each year because they have not considered themselves capable, nor has college been a believable goal. This program was conceived several years ago in response to a need to develop this great resource.

The primary objectives of MP are the following:

Objective 1. To involve and encourage more students actively to seek post-high school education.

Objective 2. To encourage motivation for learning as measured by improved attendance and reduction of lateness.

MP is located in 12 secondary schools. While the project varies somewhat from school to school, four basic activities form the core of its activities. The first of these activities is curriculum enrichment. The students are given developmental classes in English and mathematics on an extended-school-day basis. In some centers, new approaches in biology and history also are used. Special tutoring is offered whenever it is found necessary.

The second major activity of MP is cultural enrichment. This entails the opportunity and encouragement to attend a wide variety of cultural events such as ballet, opera, films, plays, concerts, sporting events, and lectures. Tickets to these events are offered to MP students free, or at a reduced cost. The project announces important events and arranges for tickets and travel. A special feature, also, is the preparation given to students before such events, which enhances the learning and appreciation which can be gained.

Parent and community participation forms a third phase of the project. Parents attend regular meetings designed to help them in understanding their children's strengths, weaknesses, and problems and in encouraging the children to develop their full potential. Community leaders in industry and commerce, professionals, and other talented and accomplished residents offer themselves as hosts to groups of students in order to stimulate their interest in advanced education. Visits to area colleges are undertaken frequently. In addition, students attend classes on college campuses for further enrichment and professors come to the high schools to lecture on their disciplines when requested.

The fourth uniform component of MP is the special counseling of students. Special emphasis upon vocational and educational guidance and counseling is found in each of the participating centers.

In the academic years 1968-1969 and 1969-1970, emphasis was placed upon the academic achievement of Motivation students. Evaluations in those years indicated that, for the most part, these students demonstrated cognitive performance superior to that of their fellow students. For this reason, it was believed that other considerations about the program should be given attention during 1970-1971. Additionally, verification of program elements was necessary in view of economic constraints under which the program functioned during the current academic year.

Current Evaluation Procedure

The evaluation for the 1970-1971 school year was focused upon two questions related to the project's objectives and a third question concerning its implementation:

1. Have Motivation students been encouraged to seek post-high school education?
2. Do Motivation students have better records of attendance and punctuality than other students?
3. To what extent does the project's mode of operation vary from school to school?

Question 1. Have Motivation students been encouraged to seek post-high school education?

Interviews were conducted with Motivation students to determine post-high school plans and specific efforts made to implement these plans. The interviews were recorded and questionnaire data were obtained for project participants at seven of the 12 participating high schools--Gratz, Edison, Overbrook, South Philadelphia, Bok, Franklin, and Bartram. For comparison, similar data were collected for non-MP students with similar I.Q.'s and academic backgrounds at the same schools.

Question 2. Do Motivation students have better records of attendance and punctuality than other students?

Daily attendance and punctuality records were obtained for Motivation students in the seven participating high schools cited for Question 1. For comparison, similar data were collected for non-MP students with similar I.Q.'s and academic backgrounds at the same schools.

Question 3. To what extent does the project's mode of operation vary from school to school?

Direct observations and interviews with Motivation coordinators were conducted to answer this question. Formal observation data were obtained using the Observational Checklist adapted by the evaluator for this purpose. (A copy of the checklist is on file in the Research Library of the Board of Education.)

Results

Data relevant to Question 1. Have Motivation students been encouraged to seek post-high school education?

Observations in 10 of the 12 participating schools and interviews with Motivation coordinators and other teachers in the program indicated that, in all cases, four major activities were being conducted to achieve this objective: (a) student visits to colleges, and college representatives' visits to the school, (b) cooperative plans with colleges, (c) special preparation for college entrance tests such as the College Boards, and (d) summer workshops with participating universities.

The extent to which such observed efforts were translated into student application and acceptance into post-high school training programs is summarized in Table 1.

Despite the relatively low numbers included in the sample and the recognition from previous research that the two groups are not necessarily equivalent, a cursory view of the data would tend to indicate that this program is contributing to the active involvement of the students in seeking post-high school education.

Data relevant to Question 2. Do Motivation students have better records of attendance and punctuality than other students?

The percentages of daily attendance for Motivation students and for the random sample of nonparticipants with similar characteristics during the same period are shown in Figures 1 (Grade 12) and 2 (Grade 11). While attendance records for entire schools were available, they were rejected in favor of grade-by-grade random sample data because of the tendency for poor attendance in Grade 10 to distort the comparison. In every school in the sample, the attendance percentage for the school as a whole (Grades 10-12) was lower than both the Motivation samples and the nonparticipant samples in Grades 11 and 12.

TABLE 1

ACCEPTANCE OF GRADE 12 STUDENTS INTO POST-HIGH SCHOOL PROGRAMS

| School | Motivation Participants | | Nonparticipants | |
|------------|-------------------------|--------------|-----------------|--------------|
| | No. in Sample | No. Accepted | No. in Sample | No. Accepted |
| Gratz | 15 | 15 | 15 | 13 |
| Edison | 15 | 11 | 15 | 7 |
| Overbrook | 15 | 11 | 15 | 6 |
| So. Phila. | 15 | 10 | 15 | 3 |
| Bok | 15 | 13 | 15 | 1 |
| Franklin | 15 | 14 | 15 | 5 |
| Bartram | 15 | 15 | 15 | 8 |
| Total | 105 | 89 | 105 | 43 |

In both grades, with the sole exception of Grade 11 at South Philadelphia High School, the Motivation students had better attendance patterns than did the non-Motivation students.

Patterns of punctuality favored Motivation students to an even larger extent. The school samples' average numbers of latenesses for Motivation students ranged from 6 to 23 for the school year. For non-Motivation students, the range was from 14 to 81.

Data relevant to Question 3. To what extent does the project's mode of operation vary from school to school?

Thirty-two visits were made to seven schools in which the project was located. The following activities were either observed or reported in interviews with Motivation coordinators in each of the seven schools: (a) parent/community involvement, (b) college visits and representatives to the school, (c) weekly "rap" sessions, (d) cultural activities, (e) tutoring, and (f) summer institutes at colleges. Co-operative plans with colleges and host visits were observed in all cases except at Edison High School.

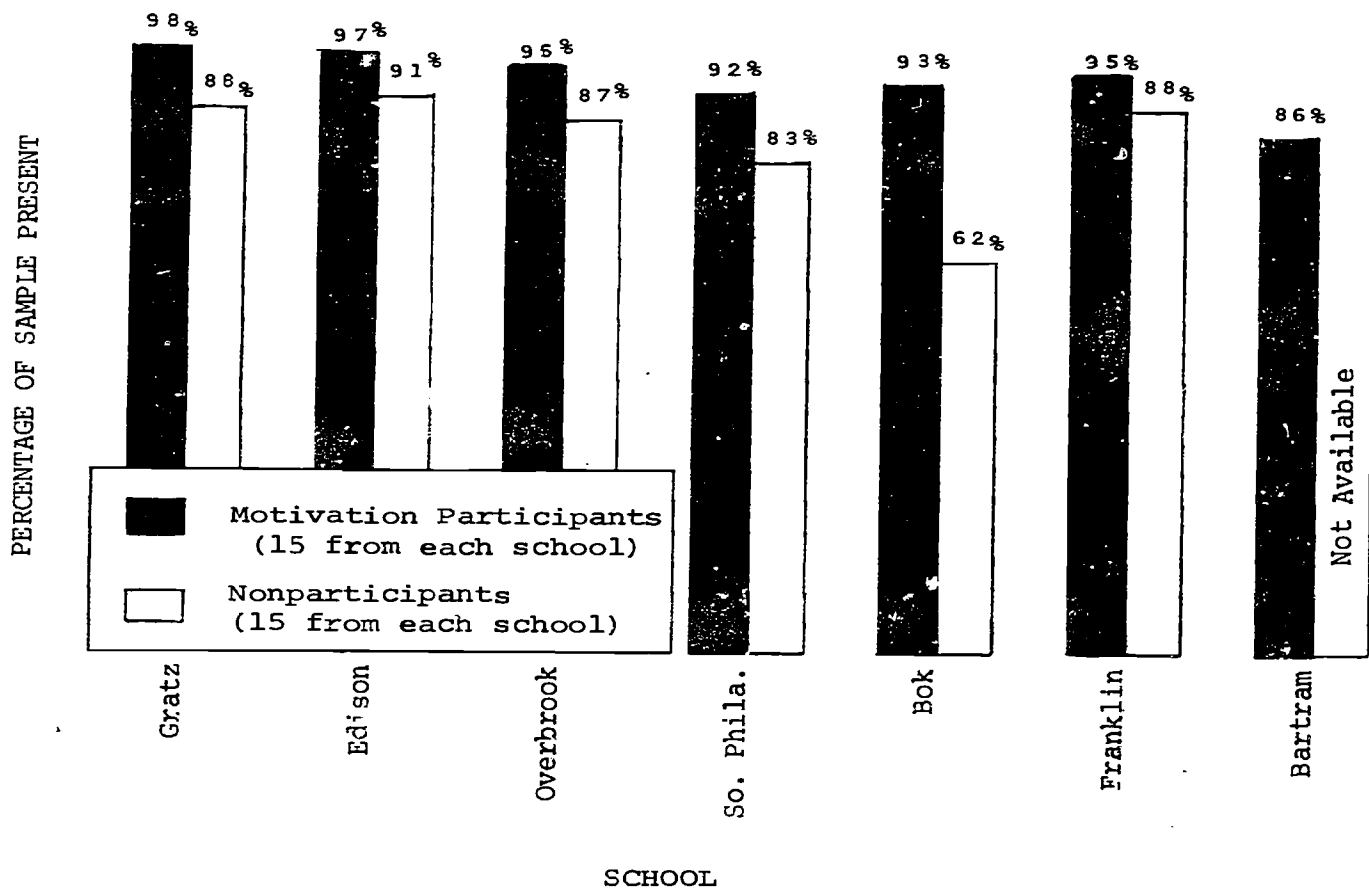


Fig. 1. Average daily attendance during the school year for samples of Motivation and non-Motivation students in Grade 12.

Greater variability existed with other phases of the project. Special Motivation classes in English and mathematics were noted in five of the seven centers. Smaller-than-average classes were observed on some visits. However, this status was not constant but varied from visit to visit.

The greatest variance occurred among the special Motivation classes themselves. In some cases, a considerable amount of informality was demonstrated; in others, classes appeared to have the structure and atmosphere of a standard classroom. With the exception of one school in which cooperative plans with colleges were not present, considerable homogeneity was found among the schools in the overall operation of the program.

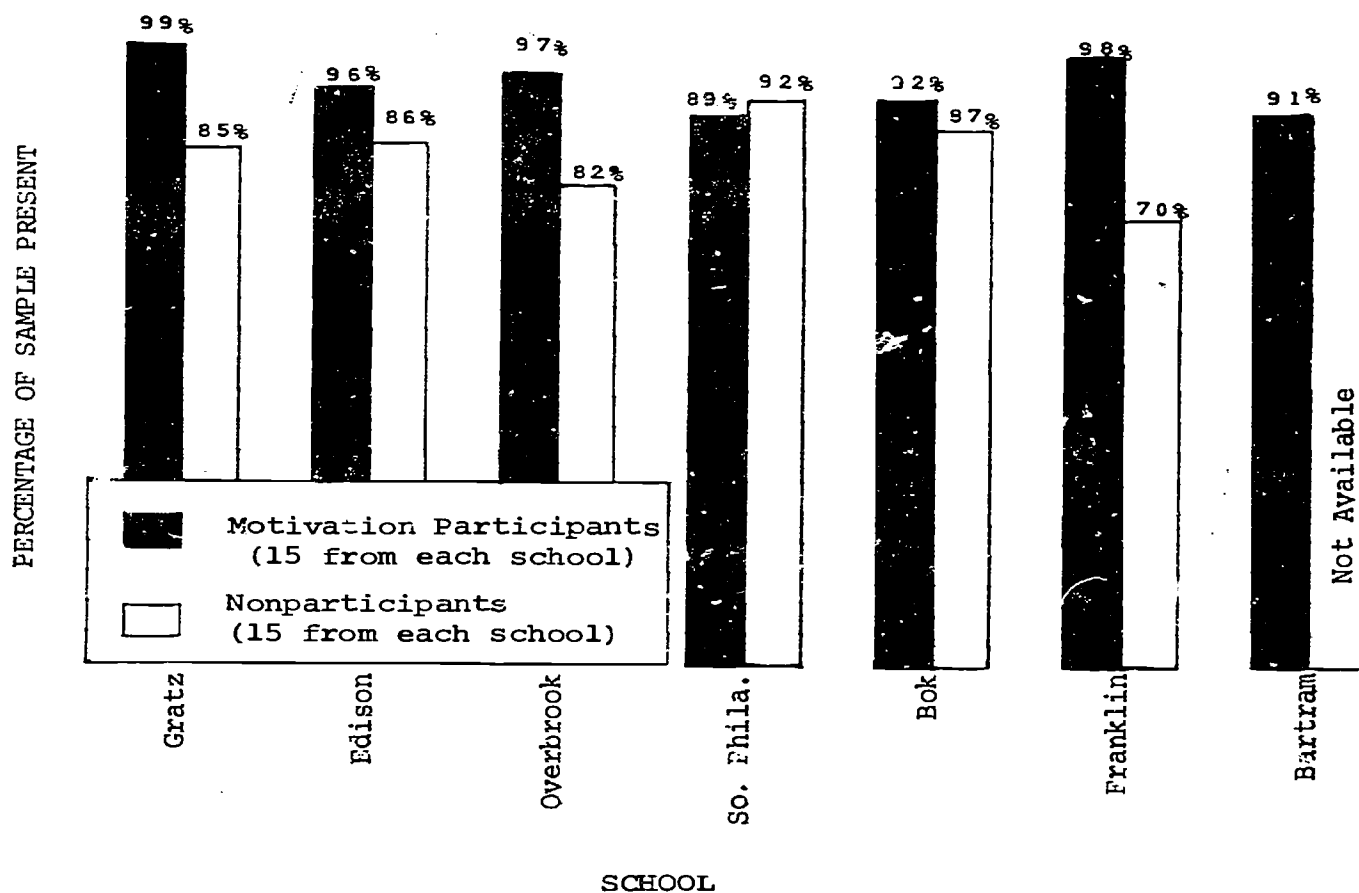


Fig. 2. Average daily attendance during the school year for samples of Motivation and non-Motivation students in Grade 11.

Conclusions

Question 1. Have Motivation students been encouraged to seek post-high school education?

Yes, the activities of the Motivation program have encouraged students to seek post-high school education. In equal samples, approximately twice as many Motivation as non-Motivation students with similar I.Q.'s and academic backgrounds have been accepted into colleges and other post-high school programs.

Question 2. Do Motivation students have better records of attendance and punctuality than other students?

Yes, Motivation students excel in both attendance and punctuality.

Question 3. To what extent does the project's mode of operation vary from school to school?

The project varies little from school to school in terms of the basic activities reported by the director of the project. With the exception of one specialized activity subsumed under a broad general category, each school maintains and participates in the activities so specified.

Within the specialized Motivation classes themselves, however, considerable variation exists. Some classes are conducted on an informal basis, ungraded and often dealing with subjects not taught as part of the regular curriculum (e.g., humanities, including bacteriology and psychology, and remedial mathematics and English). In other schools, classes are more structured and operate in a more formalized way.

SALABLE VOCATIONAL SKILLS
(PBRS #111-04-507)

The Salable Vocational Skills (SVS) project makes faculty members and facilities of the Mastbaum Area Vocational-Technical High School available to students on Saturday mornings.

This project report should be interpreted in the context of the cluster report, "Auxiliary Services to Schools and Pupils," in earlier pages of this volume.

The Project

Disadvantages of inner-city youth in seeking employment are magnified in this inflationary period when Philadelphia is near the top of the list of cities with high unemployment rates. SVS was developed as a vehicle for placing more emphasis on the career needs of youth, particularly in the field of vocational education.

SVS seeks to enhance the vocational preparation of disadvantaged youth specifically through the following objectives:

Objective 1. To enable students to improve skills they have already learned in the classroom.

Objective 2. To give students an exploratory experience in an occupational area which might be considered for future training.

Objective 3. To provide specific occupational training for those students who do not have such an opportunity during their regularly scheduled school day.

The mode of operation for this year's SVS project was similar to that of the previous two years. In 1970-1971, an average of 325 students in secondary grades elected to participate in one of the 14 classes held on Saturday mornings at the Mastbaum Area Vocational-Technical High School. These students were primarily from Mastbaum or neighboring parochial schools. The classes were four hours in length and ran from October through May.

Previous evaluations of SVS revealed that, in the areas of instruction which were sampled, students who remained in the program profited from instruction. Test scores in auto servicing and tailoring indicated that the participants had improved their job-entry proficiency. In elementary data processing and elementary typewriting, the test scores indicated substantial gain.

Current Evaluation Procedure

The evaluation this year was descriptive in that it sought answers to the following questions:

1. How consistent is student attendance at SVS classes?
2. Which of the SVS objectives has attracted most student participants?

Question 1. How consistent is student attendance at SVS classes?

The project administrator was designated to provide descriptive accounts of monthly attendance rates for each class at the center.

The monthly attendance rates (available from February through May) provided an estimate of the average number of students participating.

Question 2. Which of the SVS objectives has attracted most student participants?

The students were interviewed by the project administrator to ascertain their reasons for attending SVS classes. Percentages were computed to answer this question.

Results

Data relevant to Question 1. How consistent is student attendance at SVS classes?

In terms of monthly averages, students maintained reasonably constant attendance in eight courses: commercial art (14 students), cosmetology (25), data processing (23), electricity (22), machine shorthand (16), sheet metal (7), Gregg shorthand (12), and wood shop (17).

In five courses attendance dropped consistently over the four-month period: auto maintenance (50 to 31), electronics (51 to 31), machine shop (19 to 13), beginners' typewriting (51 to 39), and advanced typewriting (27 to 18). Students in the drafting course followed an irregular pattern of attendance (from 24 up to 29 and down to 20).

Data relevant to Question 2. Which of the SVS objectives has attracted most student participants?

Students' reasons for attending classes, obtained from interviews, are summarized in Table 1.

TABLE 1

REASONS CITED BY 355 STUDENTS FOR
THEIR PARTICIPATION IN SVS

| Reason (Related to SVS Objectives) | Percentage of Students Citing the Reason |
|---|--|
| 1. Improvement of skills or grades, or make-up of regularly assigned shop | 39% |
| 2. Exploratory experience | 22% |
| 3. Preparation for a vocational objective | 39% |

Thus, reasons covering skill improvement and specific occupational training were most frequently listed, with exploratory experience the least frequently listed.

Conclusions

Question 1. How consistent is student attendance at SVS classes?

In general, the pattern of attendance over all courses was fairly stable. Monthly attendance reports by project personnel indicated only minor attrition occurring over a four-month period.

Question 2. Which of the SVS objectives has attracted most student participants?

Preparation for vocational objectives and improvement of skills or grades each accounted for 39% of the students' reasons for attending the SVS classes. Only 22% stated that they were using SVS as an opportunity to explore an unfamiliar trade.

REFERENCES

- Roe, A. The Origin of Interests. Washington, D. C.: American Personnel and Guidance Association, 1964.
- School District of Philadelphia, Office of Research and Evaluation. Digest of ESEA, Title I Projects for Title I Allocation Meetings. Philadelphia: The School District of Philadelphia, 1971. (A digest of evaluations prior to 1970-1971)
- School District of Philadelphia, Office of Research and Evaluation. Interim Reports, 1971, Department of Instructional Systems Research. Philadelphia: The School District of Philadelphia, February 1971.
- Stewart, L. H. Increasing the Academic Achievement of Culturally Disadvantaged Youth. Research in Education, 1968, 3 (2).
- Super, D. E. The Psychology of Careers. New York: Harper, 1957.
- Super, D. E. Career Development: Self-Concept Theory. New York: College Entrance Examination Board, 1963.
- Tiedeman, D. V. Research Explorations in the Realm of Choice. Journal of Counseling Psychology, 1961, 8 (3).
- Tiedeman, D. V. Career Development: Choice and Adjustment. New York: College Entrance Examination Board, 1963.

OTHER TITLE I PROJECTS

"Other" Title I projects are those which are not specifically included in the three preceding clusters. More general in their concerns, they seek (a) to provide preschool and lower school children with additional personnel, activities, and care so that their initial exposure to learning will be enriched, (b) to provide target-area children with the opportunity for cultural enrichment in the fields of art, music, and creative dramatics, and (c) to help children gain a greater understanding of themselves, their environment, and interpersonal relations.

Projects in this group are Art Specialist Teachers (AST), Closed-Circuit Television (CCTV), Creative Dramatics (CD), Instructional Materials Centers (IMC), Music Specialist Teachers (MST), Special Mathematics Project (SMP), Walnut Center (WC), and Youth Serving Youth (YSY).¹

With the exception of Walnut Center, descriptive evaluations were used during the 1970-1971 school year, assessing the current status of the projects with respect to their goals. Extensive project monitoring was conducted by the District Research Associates in Districts 1 through 7 between December and May, using the Title I Observational Checklist. Findings, which are summarized in the individual reports which follow, permit these generalizations:

1. The schools in the Title I target area are receiving the services of the projects reported in this cluster.
2. The practice of sharing personnel among several buildings extends services in name only. In reality, this technique dilutes concentrated efforts required by compensatory programs. Issues and policies concerning the assignment of projects to schools may need reexamination.
3. The common practice of leaving one's class after the arrival of the specialist teacher diminishes the possibility of meaningful follow-up lessons by the regular teacher.

¹The following Title I projects are not reported in this volume: District reading projects, Learning Centers, Affective Education, Computer-Assisted Instruction, Pennsylvania Advancement School, and certain Diocesan projects. District reading projects and Learning Centers will be reported by personnel in the Department of Field Operations Research. Reports on Affective Education and Computer-Assisted Instruction will be prepared by the respective resident evaluators. The Pennsylvania Advancement School report will appear as a separate publication of the Department of Instructional Systems Research. Reports on the Diocesan projects will be forwarded directly to the project directors.

The evaluation of the Walnut Center project was designed, conducted, and reported by Bruce J. Yasgur, Research Assistant. With that exception, the evaluation of the "Other Title I Projects" was conducted by the District Research Associates and reported by Stephen H. Davidoff.

ART SPECIALIST TEACHERS
(PBRS #111-02-513)

The Art Specialist Teachers (AST) project provides instructors who teach art and art appreciation in target-area elementary schools.

The Project

AST rationale focuses upon providing a variety of experiences designed to enrich the environment of economically disadvantaged children. The project aims to give the children enjoyment and skill in art activities as well as to provide contact between the professional artist and the child.

The objective of this project is to improve the pupil's abilities in the handling of art materials and to develop within each child an appreciation of art.

Sixty-four instructors serve 111 Title I schools. They are allocated to each district on the basis of percentage of underprivileged children. Each instructor teaches two morning and two afternoon classes daily for a total of 20 periods every week. Specific classes are assigned by the school principal within this schedule. Staff development sessions for the teachers are conducted on a district level by AST supervisors.

In past evaluations, children in this project were found to have a better attitude toward art than other children, manifested by their claimed participation in various art activities and their satisfaction with their art teachers.

Current Evaluation Procedure

A descriptive evaluation was used during the 1970-1971 school year, assessing the current status of the project with respect to its goals.

Extensive project monitoring was conducted by the District Research Associates in Districts 1 through 7 between December and May, using the Title I Observational Checklist. Findings were summarized in terms of frequency and percentage.

Results

Data obtained from use of the Title I Observational Checklist are summarized in Table 1. The lessons observed were characterized by

TABLE 1

SUMMARY OF MONITORING DATA BASED ON 46 OBSERVATIONS

| Condition Monitored by Observer | Percentage of Observations* | |
|-------------------------------------|-----------------------------|-------------------|
| | Condition Present | Condition Lacking |
| Art supplies present for lesson. | 72% | 8% |
| Sample of technique on display. | 70% | 15% |
| Pupils using materials for lesson. | 78% | 4% |
| Pupils participating in discussion. | 60% | 15% |
| Classroom teacher present. | 24% | 76% |

No. of visits to group per week by Art Specialist Teacher: 1 visit

No. of minutes per visit by Art Specialist Teacher: 50 minutes

*Where total is less than 100%, responses were omitted from the Observational Checklist by the observer.

the presence of appropriate supplies, art samples commonly on display, active pupil participation, and the absence of the regular teacher.

Conclusions

While the individual lessons observed were of high quality, the quantity of exposure was quite limited (e.g., one 50-minute period per week). Although the vast majority (80%) of the classes were described as interested, cooperative, and participating, what happens after the Art Specialist Teacher leaves? The potential for meaningful follow-up lessons existed in only 24% of the classrooms. In the other 76%, the regular classroom teacher left the class after the arrival of the AST. While it is the teacher's legal right to do this, it should be recognized that this action diminishes the possibility of meaningful follow-up lessons.

CLOSED-CIRCUIT TELEVISION
(PBRS #111-18-511)

The Closed-Circuit Television (CCTV) project involves students in the use of CCTV equipment and the production of CCTV programs for use in target-area schools.

The Project

The primary original objective of this project was to videotape open-circuit ITV so that its programs would be available to target-area schools and thus would offer them flexible viewing choices.

Currently, the major objective is to develop, produce, and broadcast CCTV programs designed to meet specifically selected problems of pupils in areas such as behavior and task proficiency.

Past evaluations of this project indicated that the equipment was primarily employed for ITV taping in grades K-8. Grades 9-12 used the equipment for pupil-directed activities. The difference by grade-level effect was shown to be directly related to the availability of ITV programs (i.e., most of the programs were geared to a K-6 audience). More recently, use of CCTV with disruptive senior high school students was found to produce group interest and cooperation, and a decrease in pink-slips, suspensions, cuts/lateness, and absenteeism.

Current Evaluation Procedure

A descriptive evaluation was used during the 1970-1971 school year, to assess the current status of the project with respect to its goal. Extensive project monitoring was conducted by the District Research Associates in Districts 1 through 7 between December and May, using the Title I Observational Checklist. In addition, reports from CCTV aides were examined and relevant descriptions were noted. Findings were summarized in terms of frequency and percentage.

Results

Data obtained from use of the Title I Observational Checklist are summarized in Table 1. Most equipment was found to be in working order but some of the antenna systems are in poor condition. Failure to rectify this condition adversely affects a school's entire CCTV effort.

TABLE 1

SUMMARY OF MONITORING DATA BASED ON 34 OBSERVATIONS

| Condition Monitored by Observer | Percentage of Observations* | |
|---|-----------------------------|-------------------|
| | Condition Present | Condition Lacking |
| Equipment in working order. | 70% | 30% |
| Classroom available as a studio. | 65% | 35% |
| Program being taped for later use. | 41% | 52% |
| Classroom teacher present. | 29% | 61% |
| Aide showing students how to use equipment. | 35% | 58% |
| No. of service calls per month: | 1 | |
| No. of students using CCTV equipment: | 200 | |

*Where total is less than 100%, responses were omitted from the Observational Checklist by the observer.

Complementary Data

The following information has been provided by CCTV Supervisors as examples of the type of programs found in many schools. Although not necessarily representative of the entire project, the descriptions do reveal that creative efforts are being attempted within target-area schools to develop, produce, and broadcast CCTV programs designed to meet specifically selected problems.

Elementary School. The neighborhood librarian visited the school and was videotaped. The purpose of her visits was to stimulate interest in using this facility. The tape was replayed at various times so that the entire student body became more aware of both the school and the neighborhood libraries.

One elementary school experimented successfully with a story-

participants via CCTV.

Junior High/Middle School. As an integral part of the English Department curriculum, ten classes were assigned television script-writing exercises. When students completed their assignments, they became actively involved in the production of the various plays. This procedure provided the opportunity for each student to participate in and to become familiar with many areas of TV production.

Staff development benefited from the use of CCTV in demonstrating to teachers, in one district, how to administer the California Achievement Tests. Two District Research Associates produced the program which was then aired over a commercial station. The tape was then made available to all the schools in the district to instruct teachers prior to administration of the tests. Thus, an entire district was able to share the expertise of the Research Associate despite the geographical limitation posed by such an undertaking.

Senior High School. Vocational Education conducted a course designed to give students a working knowledge of minor maintenance and repairs for television hardware. The students also learned the operation of a complete television studio. While the course of study was technically oriented, many academic areas were included in the curriculum, e.g., English composition, mathematics, and graphic arts. Several graduates of this program have become employed as full-time television materials assistants in the School District.

College Guidance Services in a high school invited representatives to discuss opportunities made available to students who would not normally apply for college entrance. Significantly, among those invited were representatives of the United Negro College Fund. As a direct result of their counseling via television, young people were encouraged to take the college entrance examinations.

Conclusions

The data collected during the 1970-1971 school year indicate that varied positive activities are being carried out in target-area schools. The activities reported require both student and teacher participation.

There were some constraints which hampered the implementation of this project. Monies have never been specifically allocated for service to antenna systems. Without this service the CCTV operation is extremely handicapped. In addition, videotape-recorder failures have seriously hampered many programs. Much of the problem stems from extended use and age. Revised videotape-recorder specifications may reduce the incidence of this problem.

It is anticipated that through the cooperation of CCTV personnel, measures of pupil product will be attempted during the 1971-1972 school year.

CREATIVE DRAMATICS
(PBRS #111-02-548)

Creative Dramatics (CD) is a staff development project which attempts to provide experiences designed to enable participants to become more effective teachers.

The Project

The importance of in-service programs for all educational personnel is recognized throughout the teaching profession. Much emphasis is being placed upon the need for programs to upgrade the effectiveness of teachers. Thus the CD program came about.

CD teachers are responsible for attending workshops and other meetings which assure a continued growth through discussion of problems and presentation of new materials.

The main objective of this project is to afford children the opportunities of growing by overcoming language and social problems via teacher familiarization with the techniques of creative dramatics. During the current year 70 schools and 271 personnel were served.

Past evaluations indicate that as a staff development program CD has been achieving its objective.

Current Evaluation Procedure

A descriptive evaluation was used during the 1970-1971 school year, to assess the current status of the project with respect to its goal. Reports from the project director were studied, and the Creative Dramatics Workshop Questionnaire (described in the 1969 evaluation of the project) was used to assess the perceptions of all available participating teachers. Findings were summarized in terms of frequency and percentage.

Results:

A summary of CD activities and participants is shown in Table 1. This display is not all-inclusive but is representative of the type and extent of services rendered across the entire school system.

The key findings provided by the respondents to the Creative Dramatics Workshop Questionnaire are summarized in Table 2. The responses of the participants were very favorable. The questionnaire contained 29 items which could be answered either positively, neutrally or negatively. Of the 1,508 responses (52 persons X 29 items), 1,268 (84%) were positive, 161 (10%) were neutral, and 79 (6%) were negative.

TABLE 1

CD SERVICES GIVEN TO PHILADELPHIA SCHOOLS

| Dis- trict | No. of Schools | No. of Persons | Type of Persons Served | Examples of Services |
|---------------|-------------------|-------------------|---|--|
| 1 | 7 | 7 | EIP leader Teachers Library aide | 2-hour workshop Continuing staff workshop |
| 2 | 17 | 67 | EIP leader Reading teacher Supervisors Teachers | 12-week workshops Continuing staff workshop Teenage CD workshop After-school program |
| 3 | 15 | 40 | Special Ed. staff Volunteer coordinators Teachers Library aides | Florida Educators Follow-Through Model workshop 12-week workshops |
| 4 | 15 | 70 | Parents of RT pupils Teenagers Teachers Behavior Analysis personnel | 12-week workshops After-school programs 2-hour workshops |
| 5 | 3 | 30 | Bank Street personnel RE teacher Classroom aides | As above |
| 6 | 9 | 43 | Counseling services EDC personnel | As above |
| 7 | 3 | 4 | ILC personnel | As above |
| 8 | 1 | 10 | Students | 12-week workshop |
| Total | 70 | 271 | | |

TABLE 2

SUMMARY OF 52 PARTICIPANTS' RESPONSES TO THE
CREATIVE DRAMATICS WORKSHOP QUESTIONNAIRE

| Questionnaire Item* | No. of Responses | | |
|--|------------------|-----------------|------------------|
| | <u>Yes</u> | | <u>No</u> |
| 1. Workshop well organized | 50 | | 2 |
| 2. Positive gain from workshop | 51 | | 1 |
| 3. Desire to use CD in classroom | 52 | | 0 |
| 5. Completed independent reading | 31 | | 21 |
| 6. Development of original materials | 37 | | 15 |
| | <u>Agree</u> | <u>Disagree</u> | <u>Undecided</u> |
| 9. CD should be available to more teachers | 51 | 0 | 1 |
| 10. CD should have citywide workshops | 50 | 0 | 2 |
| 11. CD should be part of elem. curriculum | 50 | 1 | 1 |
| 12. CD gave me many new ideas | 43 | 2 | 7 |
| 13. My pupils are more eager to learn | 37 | 2 | 13 |
| 14. CD is excellent for pupils with learning disabilities. | 49 | 1 | 2 |
| 15. I gained much. . . | 49 | 1 | 2 |
| 16. I learned new techniques (basic skills) | 48 | 2 | 2 |
| 17. I have better rapport with my pupils | 31 | 3 | 18 |
| 18. I feel freer and more creative | 40 | 4 | 8 |
| 19. I have better insight into content | 37 | 7 | 8 |
| 20. I gained sense of each child's worth | 38 | 3 | 11 |
| 21. CD adds zest to my classroom | 50 | 1 | 1 |
| 22. I'm more sensitive to people | 42 | 2 | 8 |
| 23. CD opened lines of communication | 46 | 2 | 4 |
| 24. I feel more creative | 41 | 2 | 9 |
| 25. I feel more relaxed | 39 | 1 | 12 |
| 26. I'm more aware/imaginative | 43 | 1 | 8 |
| 27. I encourage pupils to listen, think, and verbalize | 48 | 1 | 3 |
| 28. CD helps independent thinking | 44 | 1 | 7 |
| 29. CD gives self-confidence to children | 48 | 0 | 4 |
| 30. CD gives meaning to content | 48 | 0 | 4 |
| 31. CD causes greater pupil involvement | 42 | 1 | 9 |
| 32. Desire to participate in future meetings | 33 | 2 | 17 |

*See text for special comment on Items 4, 7, and 8. The responses to those items were different in format (i.e., multiple choice) from those displayed here.

Analysis of responses to Workshop Questionnaire Items 4 (Perception of value of CD), 7 (Receptivity of pupils), and 8 (Presentation of ideas to your faculty) revealed that 17 of the participants had presented CD techniques at faculty meetings or in other classes, 21 tended to consider CD a part of the curriculum, and all 52 reported that CD techniques were accepted by their pupils.

Complementary Data

A meeting was held at the end of the school year between the "ongoing CD staff" and the project evaluator. The following recommendations for 1971-1972 were generated via this interaction:

1. Invited speakers should conduct staff development workshop type activities showing how their innovative programs relate to CD.
2. As many staff meetings as possible should be geared to sharing of activities and ideas of the CD participants. (This was felt to be the most urgent need for the Creative Dramatics 1971-1972 staff.)
3. The guide should be explored during staff meetings and used as a framework for personal growth.
4. A certain amount of time per meeting should be devoted to exploring areas of the CD sequence. (Example: sense memory--what new ideas can be added to those already in the handbook.)
5. There are definite areas in CD that need to be developed. (Examples: story dramatization, children's literature, music.)
6. More ideas are needed about how CD is directly related to the curriculum (reading, social studies, science, etc.).
7. More concentration on "one school" participation is needed.
8. Research and the CD staff should work together to tailor some devices to see reactions, etc., in given situations.

Conclusions

The current project provides a variety of in-service activities across the entire school system. The participants tend to be very favorable toward its ideas, techniques, activities, and materials. There is some evidence that participants tend to disseminate their newly learned CD techniques to their faculties.

This year's evaluation confirms earlier findings which indicated that, as a staff development program, CD has been achieving its objectives.

INSTRUCTIONAL MATERIALS CENTERS
(PBRS #111-02-503)

Instructional Materials Centers (IMC's), as repositories of information, are resource facilities containing books and audiovisual instructional materials. The rich diversity of print and nonprint materials in IMC's makes them more than just traditional libraries.

The Project

The IMC might be effectively used as an extension of the classroom instructional units. Pupils could be brought into direct contact with important ideas and experiences in such a manner that learning becomes a self-initiated process of seeking further knowledge through multimedia presentations and individualized instruction. The project serves grades K-12.

The chief objectives of this project are to provide library services to teachers and pupils, to instruct children in basic library skills, to maintain books, hardware, and software for the instructional needs of the school, and to provide teachers with needed instructional materials.

Past evaluations indicated that IMC's were understaffed and experiencing difficulty in providing services to teachers and pupils. As an overall observation, the development or utilization of IMC's has been limited to updating and maintenance functions.

Current Evaluation Procedure

A descriptive evaluation was used during the 1970-1971 school year, assessing the current status of the project with respect to its goals.

Extensive project monitoring was conducted by the District Research Associates in Districts 1 through 7 between December and May, using the Title I Observational Checklist. Findings were summarized in terms of frequency and percentage.

Results

Data obtained from use of the Title I Observational Checklist are summarized in Table 1.

TABLE 1

SUMMARY OF MONITORING DATA BASED ON 50 OBSERVATIONS

| Condition Monitored by Observer | Percentage of Observations* | |
|---|-----------------------------|-------------------|
| | Condition Present | Condition Lacking |
| IMC has study area without distraction from browsers. | 60% | 38% |
| IMC has adequate storage space. | 50% | 48% |
| IMC <u>lacks</u> materials for specific reading levels. | 30% | 62% |
| IMC <u>lacks</u> printed materials for a major curriculum area. | 26% | 64% |
| Full-time librarian present.** | 44% | 52% |
| Library staff helping the teacher. | 30% | 60% |
| Parental/community volunteer present. | 14% | 80% |

*Where total is less than 100%, responses were omitted from the Observational Checklist by the observer.

**In 62% of the observations, a library aide was available.

Conclusions

The findings for the current school year mirror the evaluations done in 1968-1969 and 1969-1970. Shortage of professional staff (e.g., only 44% of the IMC's observed had full-time librarians) has fostered a reduction of services (e.g., library staff observed helping faculty only 30% of the time).

Although suggested in the 1968 Annual Evaluation, the use of parental/community volunteers has not yet become a widespread technique for expanding IMC services. If parental/community volunteers could be trained in the updating and maintenance functions, the professional librarians might have time to provide more extensive professional services to pupils and teachers.

MUSIC SPECIALIST TEACHERS
(PBRS #111-02-514)

The Music Specialist Teachers (MST) project provides instructors who teach music and music appreciation in public and nonpublic target-area elementary schools.

The Project

MST provides specialized music instruction in disadvantaged areas to bring enjoyment, develop skills in music activities, and provide interaction with professional musicians.

The major purpose of this project is to afford children the opportunity of acquiring proficiency and confidence in some music activities and to allow for regularly scheduled musical activities.

Each Music Specialist Teacher is assigned to work with special classes by the school principal, and instructs two morning and two noon classes daily for a total of 20 periods per week. Staff development is conducted at district levels by the Music Specialist Supervisor.

Past evaluations indicated that children with MST scored slightly but not significantly higher than children without the MST on the Colwell Music Achievement Test. Vocal performances of MST pupils were rated higher than those of comparison groups. The Equipment Survey revealed that 84% of the instruments listed were available and were frequently used.

Current Evaluation Procedure

A descriptive evaluation was used during the 1970-1971 school year, assessing the current status of the project with respect to its goals.

Extensive project monitoring was conducted by the District Research Associates in Districts 1 through 7 between December and February using the Title I Observational Checklist. Findings were summarized in terms of frequency and percentage.

Results

Data obtained from use of the Title I Observational Checklist are summarized in Table 1. The pupil activity most frequently observed was singing, noted in 61% of the observations. Instruction about music by musicians (55%) and listening to music (53%) were also noted in a major

of the observations. The least frequently observed activity was instrumental instruction.

TABLE 1

SUMMARY OF MONITORING DATA BASED ON 34 OBSERVATIONS

| Condition Monitored by Observer | Percentage of Observations* | |
|-------------------------------------|-----------------------------|-------------------|
| | Condition Present | Condition Lacking |
| Students using musical instruments | 41% | 35% |
| Students singing | 61% | 14% |
| Students listening to music | 53% | 23% |
| Students instructed about musicians | 55% | 20% |
| Classroom teacher present | 20% | 80% |

No. of visits to group per week by Music Specialist Teacher: 1 visit

No. of minutes per visit by Music Specialist Teacher: 50 minutes

*Where total is less than 100%, responses were omitted from the Observational Checklist by the observer.

Conclusions

While the individual lessons observed were of high quality, the quantity of exposure was quite limited (e.g., one 50-minute period per week). Although the vast majority (75%) of the classes were described as interested, cooperative, and participating, what happens after the Music Specialist Teacher leaves? The potential for meaningful follow-up lessons existed in only 20% of the classrooms. In the remaining 80%, the regular teacher left the class after the arrival of the Music Specialist Teacher. While it is the teacher's legal right to do this, it should be recognized that this action diminishes the possibility of meaningful follow-up lessons.

SPECIAL MATHEMATICS PROJECT
(PBRS #111-02-797)

The Special Mathematics Project (SMP) provides college instructors with comprehensive mathematics background to teach fourth-, fifth- and sixth-grade elementary school children various mathematics concepts for 40 minutes a day, four days a week, for the entire school year.

The Project

The depressing effects of cultural deprivation on school achievement in mathematics has been documented in several investigations. The ability to count, to recognize symbols, and to demonstrate understanding of the concept of ordinal numbers was significantly less among the culturally deprived than among middle-class first-grade children (Dunkley, 1965). Furthermore, the evidence indicates that where no specific intervention takes place, the target-area children tend to deviate negatively from national reference groups by increasingly large amounts during the period of nonintervention (Unkel, 1965).

SMP is designed to counteract or reverse the trend toward drastic underachievement in arithmetic frequently found in Title I schools. The project's key objectives are the following:

Objective 1. To improve understanding and basic computational skills in arithmetic.

Objective 2. To develop a positive self-image with respect to the pupil's ability to learn mathematics.

Current Evaluation Procedure

A formative evaluation was conducted during the 1970-1971 school year. With emphasis on long-range planning, procedures were established for obtaining longitudinal assessment of pupil performance. At the request of the project administrators, assessment of student performance in mathematics was deferred during the initial evaluation. It is anticipated that pupil gain will be measured in subsequent school years in a longitudinal (i.e., repeated measures) design. The Arithmetic subtests of the Iowa Tests of Basic Skills will be used to evaluate the cognitive objective of this project during the summative stages.

A modification of the "Faces" Attitude Inventory was selected to evaluate the affective objective. In order to establish its

reliability, 60 pupils were retested with the same instrument 90 days after the initial administration. A test-retest correlation coefficient was computed and compared with a desired minimum of .70.

Results

The test-retest correlation coefficient for the "Faces" inventory was found to be .57. This was considerably below the desired reliability coefficient of .70. The mean score on the inventory dropped from 12.11 to 11.88 over the three-month period. The slight change is better interpreted as resulting from the inadequate reliability (e.g., possible insensitivity) of the instrument than from any characteristic of the project itself. Because of the lack of acceptable reliability, no test of the inventory's validity was attempted this year.

Conclusions

The need for a valid and reliable affective measuring device is crucial for the evaluation of this project. Once a suitable affective instrument is developed ($r > .70$), scores on it may be examined in relation to scores on cognitive instruments, in order to explore the relationships of positive self-image and arithmetic achievement. Scores on the ITBS Arithmetic subtests should be used in the project's 1971-1972 evaluation.

Walnut Center (WC) is a racially and socioeconomically integrated early childhood center which serves 173 children in a public school educational program and 56 in a day care program.

The Project

WC brings together children from a variety of socioeconomic and ethnic backgrounds to participate in shared learning experiences. This practice is consistent with a number of recent studies which report that, when pupils from varied social, ethnic, and educational backgrounds are placed together in a common learning situation, achievement rates of pupils from more deprived backgrounds tend to increase, while those of more privileged children continue to increase as expected. Not only is academic achievement higher for deprived children placed in an integrated setting early in their academic careers, but attitudes of all children toward other ethnic groups tend to be more positive the earlier they begin school in such an environment (Coleman, 1966; Henderson, 1969; Pettigrew, 1968; St. John, 1969, 1970).

Established in 1967, WC provides a prekindergarten through first-grade program which emphasizes both cognitive and affective elements of learning. Project objectives include the following:

Objective 1. To improve general intellectual functioning.

Objective 2. To improve academic functioning, particularly in language and arithmetic skills.

Objective 3. To improve pupils' self-images.

Objective 4. To foster interaction among pupils from different backgrounds.

Objective 5. To foster positive attitudes toward school.

Objective 6. To ease problems of transition from kindergarten to first grade, and from WC to other schools.

Objective 7. To increase parent and community involvement in the school's program.

In the summer of 1970, WC moved from 39th and Walnut Streets, on the campus of the University of Pennsylvania, to 38th Street and Lancaster Avenue, in a highly integrated area between the university district and Mantua, a predominantly black ghetto area. Nevertheless,

the Center seeks to continue to attract a racially and socioeconomically integrated "clientele." Enrollment is voluntary, and families of all pupil applicants are interviewed by social workers, whose recommendations for acceptance are made in a way that will insure a reasonable balance among various racial and socioeconomic groups. The pupil population of the Center as of April 1, 1971, is described in Table 1.

TABLE 1

WC ENROLLMENT CLASSIFIED BY RACIAL AND SES GROUPS¹

| * SES Group ² | Racial Group | | | |
|--------------------------|--------------|-------|-------|-------|
| | Black | White | Other | Total |
| Upper | 9 | 26 | 9 | 44 |
| Middle | 30 | 31 | 12 | 73 |
| Lower | 83 | 19 | 10 | 112 |
| Total | 122 | 76 | 31 | 229 |

¹Enrollment on April 1, 1971, consisted of 173 children in the public school program and 56 in the day care program.

²Classification was done by the WC social workers. In this evaluation, upper- and middle-SES groups were combined into a single "higher-SES" group.

Methods of instruction at WC vary with the teacher, from generally structured to generally unstructured classrooms. Nevertheless, all pupils receive individual and small-group instruction. Possibilities for variation in teaching methods are enhanced by the large adult-to-pupil ratio at the Center. Because of an actively involved community, parents and other community volunteers are often found in the classroom, observing or working with the class. A teacher aide or assistant teacher, often supplemented by a student teacher, is assigned to each classroom. Particularly in the first-grade classes, the teacher is free to work with individual pupils or to present a lesson to the entire class, while one or more of the other adults either supervises the class or works with individual children needing additional help.

As achievement levels for each student are ascertained, an increased emphasis is placed on small-group instruction. As the autonomy of these groups increases, adults tend to serve them more and more as supervisors and consultants. In this manner, pupils are provided with the opportunity not only to work independently, but to engage in a variety of face-to-face relationships with peers from diverse backgrounds.

Previous evaluations have indicated that WC's goals have consistently been achieved in both cognitive and noncognitive spheres. In 1968-1969, WC pupils were found to be on a par with, or ahead of, nonparticipant peers in development of cognitive skills as measured by the Preschool Inventory, the Associative Vocabulary Test and the Numerical Concept Formation Test. In 1969-1970, WC was found to have involved many segments of the community in its program, particularly parents, who have all along played a major role in the project. Although a certain amount of intergroup bias continued to exist among Center pupils, a high degree of interaction was observed among pupils from different backgrounds. A follow-up of children who had attended WC showed that they had, in most cases, made a better-than-average adjustment to second-grade classes in their new schools.

Current Evaluation Procedure

This year's evaluation has been in part an extension of previous WC evaluations, and in part an attempt to seek previously unsought information. Academic achievement has been monitored on a continuing basis. Since no direct measure of pupil attitudes had previously been obtained, such a measure was included in the present evaluation. In addition to data gained through direct measurement, information on the Center's operation was obtained through regular monitoring of WC classes.

This year's evaluation has sought answers to the following questions related to the project's objectives:

1. How do the academic readiness skills of WC kindergarten pupils compare with those of all kindergarten pupils in Philadelphia public schools?
2. How do the readiness skills of lower-SES kindergarten pupils at WC compare with those of higher-SES kindergarten pupils at WC?
3. How well do WC first-grade pupils perform in reading and arithmetic?
4. How does the performance of lower-SES first-grade pupils at WC compare with that of higher-SES first-grade pupils at WC in read-

ing and arithmetic?

5. Do WC first-grade pupils display a generally positive attitude toward school?

6. Do lower-SES first-grade pupils at WC differ from higher-SES first-grade pupils at WC in attitude toward school?

Question 1. How do the academic readiness skills of WC kindergarten pupils compare with those of all kindergarten pupils in Philadelphia public schools?

A mean score of 20.0, based on a maximum possible score of 27.0, on the Philadelphia Readiness Test (PRT) was established as the achievement goal for WC kindergarten classes. This target score was derived from the citywide mean (20.1) and the District 1 (the district in which WC is located) mean (19.6) as of the latest citywide administration of the PRT, in May, 1969.

In the current year, the PRT was administered in May to all 73 WC kindergarten pupils (48 in half-day public school, 25 in day care) by their teachers, in groups of four or five at a time.

Summary data were organized in tabular form.

Question 2. How do the readiness skills of lower-SES kindergarten pupils at WC compare with those of higher-SES kindergarten pupils at WC?

The design, instrumentation, and subjects were the same as for Question 1. A Kruskal-Wallis two-by-three (2 SES groups X 3 kindergarten classes) analysis of variance was performed on the data to determine whether differences between PRT scores of lower- and higher-SES pupils were statistically significant. The "higher-SES" group was defined as encompassing those pupils classified as middle- and upper-SES.

Question 3. How well do WC first-grade pupils perform in reading and arithmetic?

Continuous Progress Primary (CPP) achievement levels in reading and arithmetic were reported by teachers and charted for all WC first-grade pupils in November and again in April. The minimum achievement level expected by project personnel for first graders by April of each school year is Level 2 in both reading and arithmetic. A minimum achievement criterion of Level 2 in both subject areas was therefore established for WC pupils. The tasks which a child must successfully perform to achieve Level 2 are as follows:

Reading. Read pre-primers and charts; learn a specified list of words by sight; read aloud and silently; understand and remember what

is read; learn simple study skills, such as following directions.

Arithmetic. Read, write, and count numerals from 1 to 50; add and subtract numbers with sums through 5, using vertical and horizontal forms; recognize coins; solve number problems orally; recognize plane geometric figures such as circle, square, and triangle; tell time to the hour.

Data charting CPP achievement levels were summarized graphically.

Question 4. How does the performance of lower-SES first-grade pupils at WC compare with that of higher-SES first-grade pupils at WC in reading and arithmetic?

The design, instrumentation, and subjects were the same as for Question 3. Because of the disparity in numbers between the two SES groups, no formal statistical analysis was applied to the data.

Question 5. Do WC first-grade pupils display a generally positive attitude toward school?

The Children's Attitudinal Range Indicator (CARI) was administered in March, by the project evaluator, to all WC first-grade pupils, in groups of six at a time. The instrument consists of four subscales of eight projective items each, which measure attitudes toward school, peers, home, and society. (A copy of CARI is on file in the Research Library of the Board of Education.)

Mean scores of WC pupils were computed for the full scale and each subscale. CARI scores were obtained from a comparison group of 20 first graders participating in a special reading program in another district, and mean scores were computed for this group. Since the comparison group was composed exclusively of lower-SES pupils, a multivariate analysis of variance was applied to the data to determine what differences in attitude, if any, existed among (a) higher-SES WC pupils, (b) lower-SES WC pupils, and (c) the lower-SES comparison pupils. "Higher-SES" was defined to include middle- and upper-SES.

Question 6. Do lower-SES first-grade pupils at WC differ from higher-SES first-grade pupils at WC in attitude toward school?

The design and instrumentation were the same as for Question 5. However, a multivariate analysis of variance was performed on the full scale score, as well as that of each subscale, for only the two SES groups from WC.

kindergarten pupils compare with those of all kindergarten pupils in Philadelphia public schools?

Performance of kindergarten groups on the PRT is shown in Table 2. The 1971 mean score of WC kindergarten pupils was above the

TABLE 2

KINDERGARTEN PERFORMANCE ON PHILADELPHIA READINESS TEST

| Group | N | Mean Score | Percentage of Pupils Scoring at or above 20 |
|--|----|------------|---|
| WC Kindergartens (1971) | 73 | 21.9 | 78.1% |
| Lower-SES Pupils | 42 | 20.8 | 71.4% |
| Higher-SES Pupils ¹ | 31 | 23.4 | 90.3% |
| District 1 Kindergartens (1969) ² | -- | 19.6 | -- |
| City Kindergartens (1969) ² | -- | 20.1 | 62.2% |

¹Middle- and upper-SES groups combined.

²Source: Division of Testing, May 1969.

established criterion of 20.0, and above the 1969 mean scores of both District 1 and the city. The percentage of WC pupils scoring at or above the criterion in 1971 exceeded the corresponding percentage for the city as a whole in 1969 by 15.9 percentage points.

Data relevant to Question 2. How do the readiness skills of lower-SES kindergarten pupils at WC compare with those of higher-SES kindergarten pupils at WC?

The reader is again referred to Table 2, which indicates that the higher-SES group's mean score on the PRT exceeded that of the lower-SES group by 2.6 points. The percentage of higher-SES pupils scoring at or above the criterion exceeded the corresponding percentage of lower-SES pupils by 18.9 percentage points. Despite the difference between

the two SES groups of WC kindergarten pupils, both groups scored higher than their counterparts in District 1 and the city.

The Kruskal-Wallis two-by-three analysis of variance indicated that the difference between the mean scores of the two SES groups was statistically significant at the .05 level of probability. It is, then, at least 95% certain that a real difference in attainment of readiness skills existed between the lower-SES pupils and the higher-SES pupils, with the latter group attaining higher scores.

The SES-group difference was apparent also in each of the three WC kindergarten classes, although not to a statistically significant degree (See Figure 1). The difference was most pronounced in the half-day classes.

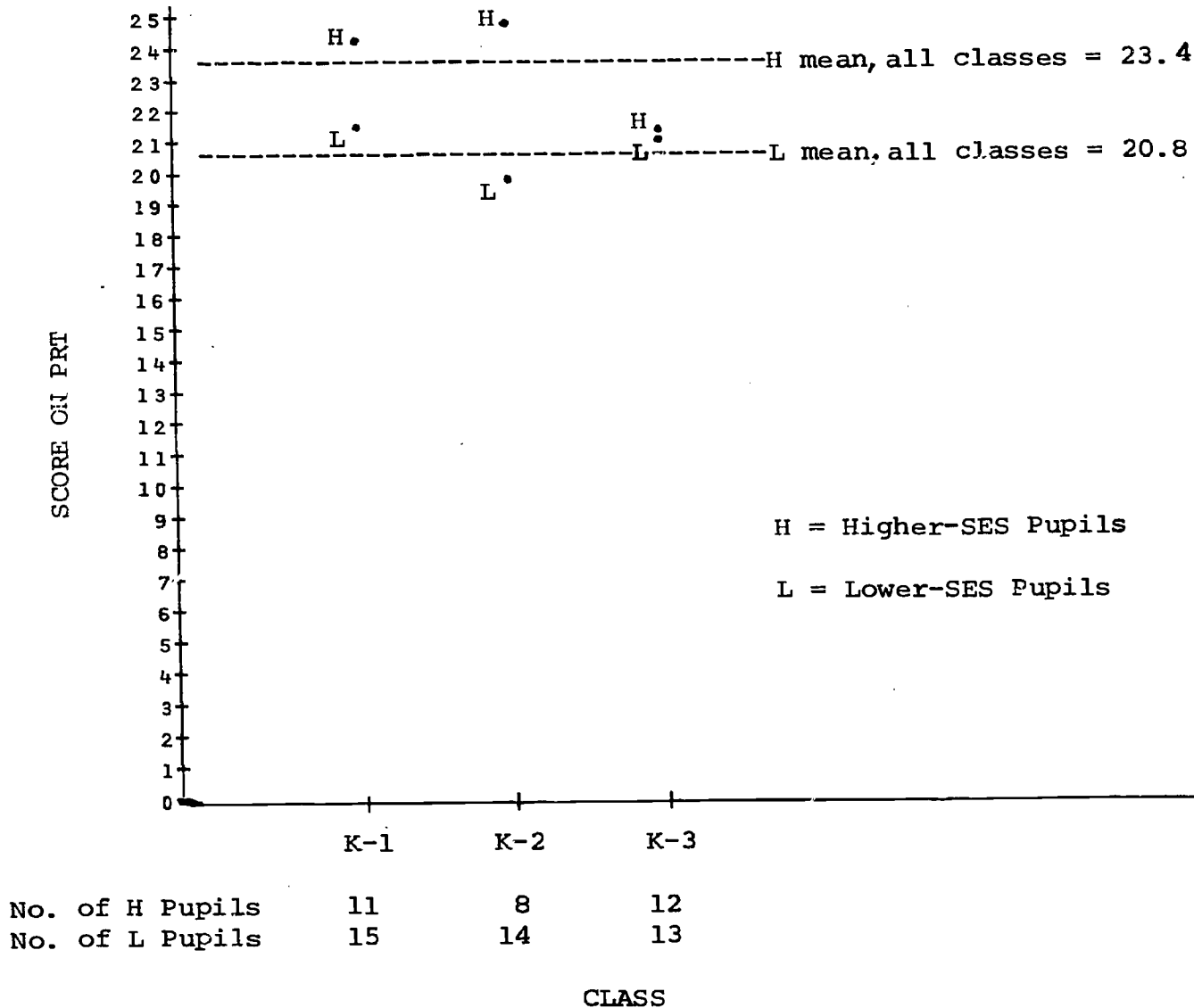


Fig. 1. Mean PRT scores of lower- and higher-SES pupils in the three WC kindergarten classes.

When the mean scores of the three classes were compared without regard to SES, no statistically significant difference was found.

The fact that the mean score of one lower-SES group was slightly higher than that of one higher-SES group signals an interaction effect between SES and kindergarten class. In other words, attainment of readiness skills by WC pupils seems to be related to a combination of factors: the class in which they are enrolled and their socioeconomic background.

Data relevant to Question 3. How well do WC first-grade pupils perform in reading and arithmetic?

In reading, the median CPP level for all WC first-grade pupils as of April, was Level 4. This was two levels above the minimum expected achievement level. All attained at least Level 2; 44 of the 48 achieved a higher level (See Figure 2).

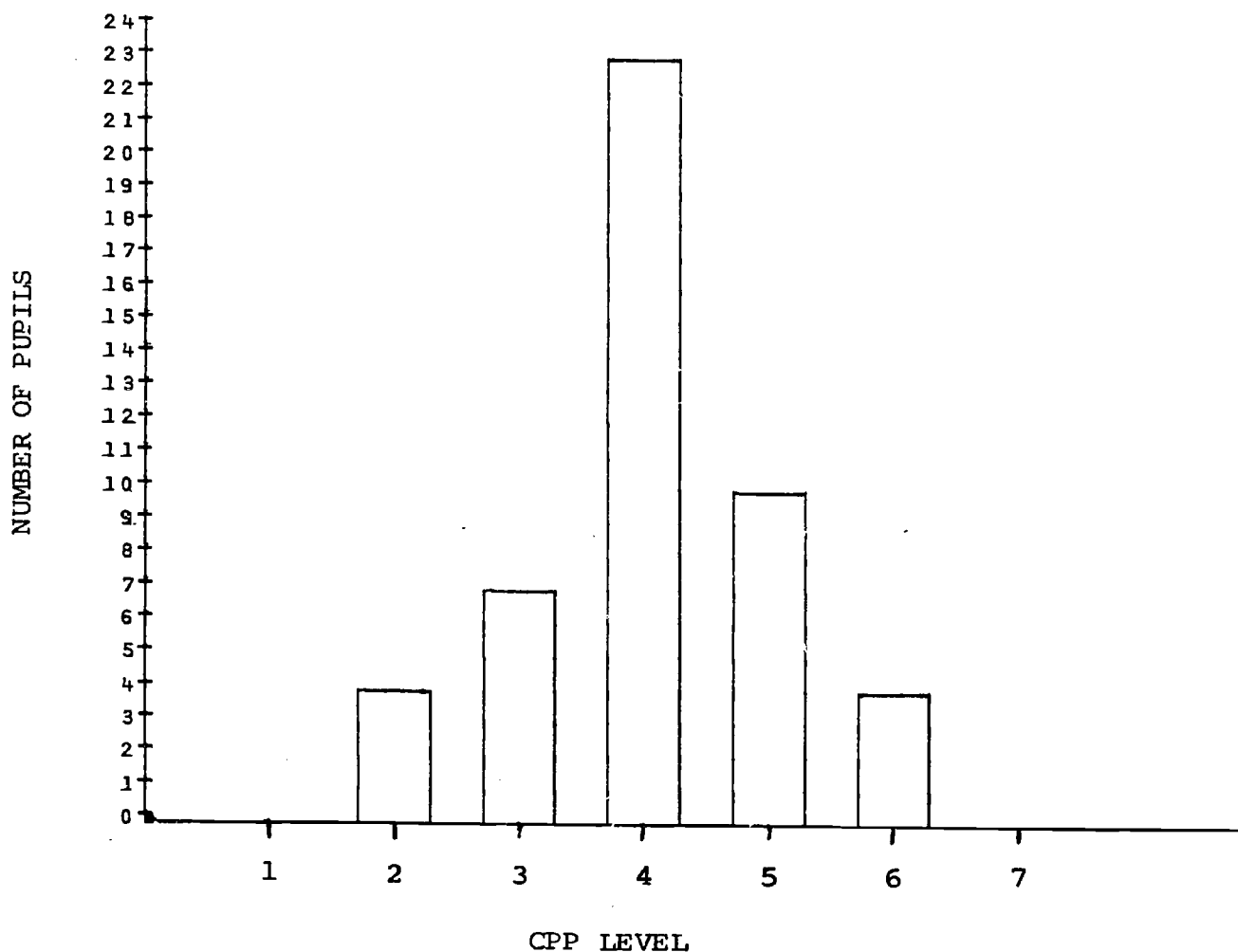


Fig. 2. Number of WC first-grade pupils (N=48) at each Continuous Progress Primary level of reading achievement, April 1971. Level 2 was set as the minimum expected achievement level.

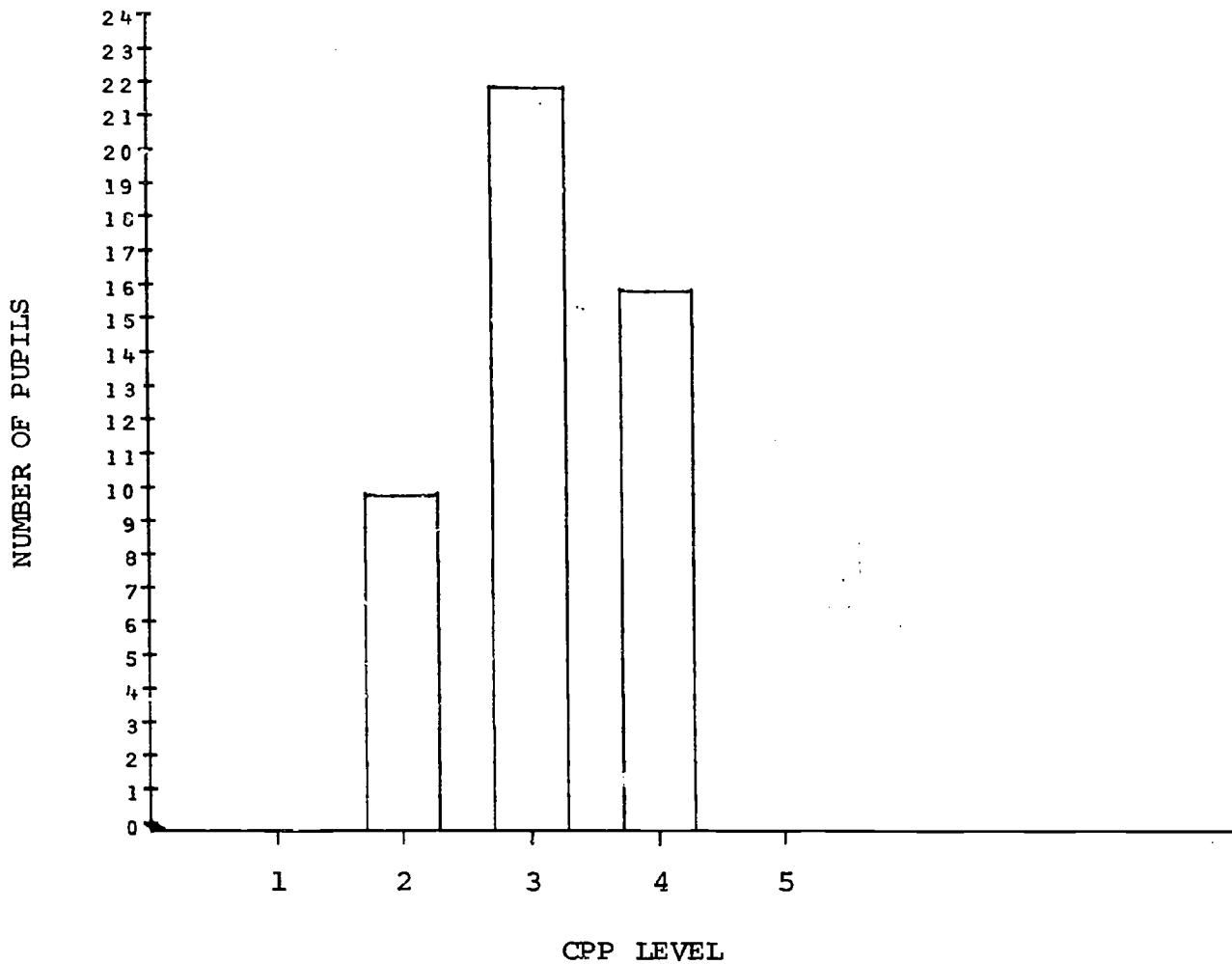


Fig. 3. Number of WC first-grade pupils (N=48) at each Continuous Progress Primary level of arithmetic achievement, April 1971. Level 2 was set as the minimum expected achievement level.

Data relevant to Question 4. How does the performance of lower-SES first-grade pupils at WC compare with that of higher-SES first-grade pupils at WC in reading and arithmetic?

Reading. In April the median CPP level for both lower- and higher-SES WC pupils was Level 4. Fourteen (93%) of the 15 lower-SES pupils and 30 (91%) of the 33 higher-SES pupils achieved above the expected Level 2. Twenty-six (79%) of the higher-SES pupils attained Level 4 or above, while 11 (73%) of the lower-SES pupils achieved at or above this level. The chief difference between the two groups in reading achievement was in their upper limits of achievement: 13 (39%) of the higher-SES pupils attained CPP Levels 5 and 6, while one (7%) of the lower-SES pupils attained Level 5 and none attained a higher level.

Arithmetic. In April the modal CPP level of lower-SES WC pupils was Level 3, while that of the higher-SES pupils was Level 4. However, the median for both SES groups was Level 3, one level above the criterion. Twenty-seven (82%) of the higher-SES pupils performed above Level 2, as did 11 (73%) of the lower-SES pupils. Of the 33 higher-SES pupils, 14 (42%) attained Level 4 (the upper limit of achievement for 1971 WC first-grade pupils), while two (13%) of the 15 lower-SES pupils attained this level of achievement.

Data relevant to Question 5. Do WC first-grade pupils display a generally positive attitude toward school?

Results of administering the "Attitude toward School" subscale of CARI are summarized in Table 3. The mean score for WC first-grade pupils on this subscale was 2.48, approximately midway between a "neutral" attitude score (2.0) and a "happy" attitude score (3.0). WC pupils scored slightly higher in attitude toward school than the comparison group of non-WC pupils, although the difference was not demonstrated to be statistically significant.

TABLE 3

SUMMARY OF RESULTS ON ATTITUDE-TOWARD-SCHOOL SUBSCALE OF CARI

| Group | Mean Score | Difference |
|---|------------|------------|
| WC First-Grade Total | 2.48 | |
| Higher-SES Pupils | 2.50 | |
| Lower-SES Pupils | 2.46 | |
| WC Higher-SES minus Lower-SES* | | +0.04 |
| Comparison Group | 2.28 | |
| WC First-Grade Total minus Comparison Group* | | +0.20 |

*No statistically significant differences were found.

Data relevant to Question 6. Do lower-SES first-grade pupils at WC differ from higher-SES first-grade pupils at WC in attitude toward school?

The reader is again referred to Table 3, which indicates that no significant difference was found between the attitudes toward school of lower- and higher-SES WC first-grade pupils as measured by CARI.

Complementary Data

Thirty-eight monitoring visits were made to WC between October 1970 and May 1971: 18 to kindergarten classes, 20 to first-grade classes. The average length of an observation was 20 minutes.

In first-grade classes, teachers placed a heavy emphasis on reading and arithmetic skills. Pupils were generally subgrouped according to activity and achievement level. Basic skill-building activities (working on puzzles, drawing, listening and responding, etc.) were used widely in kindergarten classes.

On all visits, teachers were observed talking to individual pupils as well as to larger groups. Teachers, as well as the other adults present in the classroom, were generally observed to move around the room, rather than to maintain a stationary position. On 16 occasions, a parent or other community volunteer was observed in the class-

room; on 11 of these occasions, she (or he) was observed interacting with pupils. On every visit, at least one other adult was observed in the classroom: a teacher aide, an assistant teacher, or a student teacher.

On 97% of the visits, teachers were observed to encourage active participation by the class.

On 87% of the visits children from different racial and/or ethnic backgrounds were observed interacting. Nevertheless, children were more often observed associating with members of their own race.

The average daily attendance at WC for the 1970-1971 school year was 88% of enrollment. This figure was the same as for all District 1 elementary schools (excluding special remedial centers) for the year.

Conclusions

Question 1. How do the academic readiness skills of WC kindergarten pupils compare with those of all kindergarten pupils in Philadelphia public schools?

Academic readiness skills of WC kindergarten pupils compare favorably with those of all kindergarten pupils in Philadelphia public schools. In May 1971, WC kindergarten pupils achieved a PRT mean score of 21.9--1.8 points higher than the 1969 citywide mean, and 2.3 points higher than the 1969 District 1 mean.

Question 2. How do the readiness skills of lower-SES kindergarten pupils at WC compare with those of higher-SES kindergarten pupils at WC?

WC kindergarten pupils of higher SES scored an average of 2.6 points higher on the PRT than did WC kindergarten pupils of lower SES. This difference was found to be statistically significant. However, scores of many lower-SES pupils overlapped those of many higher-SES pupils. Not only was this the case within each class, but the mean score for the lower-SES pupils in one class was almost identical to that of the higher-SES pupils in another class.

Question 3. How well do WC first-grade pupils perform in reading and arithmetic?

By April all WC first-grade pupils had attained at least Level 2 on Continuous Progress Primary ratings (the criterion achievement level established at the beginning of the school year) in both reading and arithmetic.

In reading, 92% of the pupils were above Level 2. The median CPP reading level was Level 4.

In arithmetic, 79% of the WC first-grade pupils were rated above the criterion Level 2. The median CPP arithmetic level was Level 3.

Question 4. How does the performance of lower-SES first-grade pupils at WC compare with that of higher-SES first-grade pupils at WC in reading and arithmetic?

Both SES groups of WC first-grade pupils performed above the CPP Level 2 criterion in reading and arithmetic. However, in both skills the tendency has been for higher-SES pupils to achieve at higher levels than lower-SES pupils.

Question 5. Do WC first-grade pupils display a generally positive attitude toward school?

Yes, WC first-grade pupils have displayed a generally positive attitude toward school. On the subscale of CARI measuring attitudes toward school, WC pupils scored slightly higher than a comparison group of non-WC first graders, although the difference was not statistically significant.

Question 6. Do lower-SES first-grade pupils at WC differ from higher-SES first-grade pupils at WC in attitude toward school?

No statistically significant difference in attitude toward school was found between lower- and higher-SES pupils, as measured by CARI.

Evaluator's Comment

It is evident that the WC program has succeeded in preparing pupils to meet the academic requirements which will be placed upon them in subsequent years. Many WC first-grade pupils are already reading on a second-grade level. Although higher-SES WC pupils, as a group, consistently perform on a level higher than that of their lower-SES classmates, the tendency for both groups is to achieve at levels above those expected of children in the same age/grade group.

Attitudes of WC pupils toward school, and toward life in general, are quite positive. This is true regardless of their respective socioeconomic backgrounds.

One could hypothesize that the positive results of the WC program may be attributed, in large part, to four major ingredients: (a) the large adult-to-pupil ratio in every WC classroom; (b) the active interest in WC's program taken by parents and other community members; (c) the intentional racial and socioeconomic balance maintained by the Center; and (d) the independence-fostering methods employed by WC teachers.

A longitudinal study is proposed for future evaluations, in which the academic achievements and attitudes of WC "alumni" will be followed. It is anticipated that, given an academic environment which continues to foster independence, WC alumni will continue to perform at high levels throughout their school careers.

YOUTH SERVING YOUTH
(PBRS #111-02-782)

Youth Serving Youth (YSY) is a tutorial project in which under-achieving teenage students tutor underachieving elementary school children.

The Project

A great deal has been written regarding the beneficial impact of tutorial programs. A review of the literature indicates that tutoring programs have not consistently produced positive changes in pupil academic performance that were commensurate with the programs' expectations.

Cloward (1967) examined the impact of tutoring on both the tutee and the tutor. Tutoring by community people who had received preliminary training was found to be as effective in raising student achievement scores as tutoring by specialists. In addition, utilizing community residents as tutors was seen to have the advantage of putting money into the community and increasing community involvement in the schools.

The objective of the YSY project is to provide tutorial services to elementary pupils in order to improve performance in basic skills. In addition, it is anticipated that the junior high school tutors also will benefit in terms of improved performance in school subjects.

Since this was the first year of funding, no past evaluation results were available.

Current Evaluation Procedure

A descriptive evaluation was used during the 1970-1971 school year. Information obtained from the project's Summary Report was noted and summarized in terms of frequency.

Results

Data obtained from the YSY Summary Report are summarized in Table 1. Tutors' improvement was measured by report-card grades. Tutees' improvement was measured by grades indicated on the Summary Report. The ratio of tutors to tutees was 1:1.4.

TABLE 1

PARTICIPATION AND IMPROVEMENT FROM DECEMBER UNTIL MAY
AT EIGHT YSY CENTERS

| Group | Number Participating | Number Improving in | |
|--------|----------------------|---------------------|--------------------|
| | | <u>English</u> | <u>Citizenship</u> |
| Tutors | 64 | 39 | 37 |
| Tutees | 90 | <u>Reading</u> | <u>Work Habits</u> |
| | | 57 | 53 |

Conclusions

Progress was made by both tutors and tutees who participated in YSY on a regular basis. The program provided opportunities for elementary school children to improve their basic skills and work habits, and, at the same time, helped many tutors to improve their own scholastic achievement. In addition, the program provided dignified and constructive part-time employment for 88 teen-age students.

REFERENCES

- Cloward, R. D. Studies in Tutoring. Journal of Experimental Education, 1967, 36, 14-25.
- Coleman, J. S. Equality of Educational Opportunity. Washington, D. C.: United States Department of Health, Education, and Welfare, 1966.
- Dunkley, M. E. Some Number Concepts of Disadvantaged Children. Arithmetic Teacher, 1965, 12, 359-361.
- Henderson, R. W. Positive Effects of a Bicultural Preschool Program on the Intellectual Performance of Mexican-American Children. Paper presented at meeting of American Educational Research Association, Los Angeles, February 1969.
- Pettigrew, T. The Case for School Integration. Address presented at Special Training Institute on Problems of School Desegregation, Columbia University, July 1968.
- School District of Philadelphia, Office of Research and Evaluation. Digest of ESEA, Title I Projects for Title I Allocation Meetings. Philadelphia: The School District of Philadelphia, 1971. (A digest of evaluations prior to 1970-1971)
- School District of Philadelphia, Office of Research and Evaluation. Interim Reports, 1971, Department of Instructional Systems Research. Philadelphia: The School District of Philadelphia, February 1971.
- St. John, N. H. Minority Group Performance and Economic Integration: A Review of Research. ERIC Clearinghouse for Urban Disadvantaged, 1969.
- St. John, N. H. Desegregation and Minority Group Performance. Review of Educational Research, 1970, 40, 111-133.
- Unkel, E. A Study of the Interaction of Socioeconomic Groups and Sex Factors with the Discrepancy between Anticipated Achievement and Actual Achievement in Elementary School Mathematics. Doctoral dissertation, Syracuse University, 1965.

