R E P O R T R E S U M E S

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ANNUAL EVALUATION REPORT, TITLE I P.L. 89-10, FISCAL YEAR 1966. APPENDIXES. (TITLE SUPPLIED).

MISSOURI STATE DEPT OF EDUCATION, JEFFERSON CITY

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DESCRIPTORS- *COMPENSATORY EDUCATION PROGRAMS, *PROGRAM EVALUATION, *FEDERAL PROGRAMS, *DISADVANTAGED YOUTH, *ANNUAL REPORTS, DATA ANALYSIS, PROGRAM PROPOSALS, GUIDELINES, EXHIBITS, COMMUNITY AGENCIES (PUBLIC), TESTS, ART, MUSIC, PHYSICAL EDUCATION, BIBLIOGRAPHIES, MEASUREMENT INSTRUMENTS, SMALL SCHOOLS, REGIONAL LABORATORIES, GUIDES, ESEA TITLE 1, MISSOURI, CENTRAL MIDWESTERN REGIONAL EDUC LAB

THIS EXTENSIVE REPORT, WHICH CONSISTS OF A NUMBER OF SEPARATE APPENDIXES, PROVIDES A COMPREHENSIVE DESCRIPTION OF COMPENSATORY EDUCATION PROJECTS IN MISSOURI FUNDED UNDER TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT. THE FIRST APPENDIX CONTAINS A PROPOSAL FOR THE ANALYSIS AND INTERPRETATION OF DATA FROM THE PROJECTS. THE CATEGORIES OF INFORMATION PRESENTED IN THIS APPENDIX ARE--(1) METHODS FOR ESTABLISHING TITLE I PROJECT AREAS, (2) COOPERATIVE PROGRAMS, (3) PROJECT METHODS AND PROCEDURES, (4) USE OF STANDARDIZED TESTS AND OTHER MEASUREMENT INSTRUMENTS, (5) ATTENDANCE AND MEMBERSHIP RECORDS, AND (6) DISBURSEMENT OF TITLE I FUNDS. OTHER APPENDIXES CONTAIN--(1) EVALUATION AND SUPPLEMENTARY FORMS, (2) A LISTING OF COMMUNITY ACTION AGENCIES, (3) THREE SEPARATE REPORTS ON THE CENTRAL MIDWESTERN REGIONAL EDUCATIONAL LABORATORY, AN ORGANIZATION FOR RESEARCH, INNOVATION, DIFFUSION, AND IMPLEMENTATION OF EDUCATIONAL PRACTICES, (4) A LISTING OF ART AND MUSIC TESTS AND A DESIGN FOR PHYSICAL EDUCATION EXAMINATION, (5) REGULATIONS AND GUIDELINES FOR TITLE I PROJECTS, (6) AN EVALUATION GUIDE FOR LOCAL EDUCATIONAL AGENCIES, (7) A DESCRIPTION OF AN EXEMPLARY SMALL SCHOOL PROGRAM, (8) PERTINENT QUESTIONS AND ANSWERS ON TITLE I, AND (9) A BIBLIOGRAPHY ON MEASUREMENT AND EVALUATION. (LB)

ANNUAL EVALUATION REPORT, TITLE I 94469

APPENDIX A

Vaughn Contract and Report

HUBERT WHEELER
COMMISSIONER

AREA CODE 314
PHONE 636-8171

STATE DEPARTMENT OF EDUCATION
DIVISION OF PUBLIC SCHOOLS
JEFFERSON BUILDING
P. O. BOX 480
JEFFERSON CITY, MISSOURI 65102

To: John T. Lawrence
John Alberty
Glenn White
Ed Downey
Donald Shire

From: P. J. Newell, Jr. P.J.N.

Subject: Annual Report Concerning Analysis of FY 1966 Title I Evaluations Due in the U. S. Office of Education December 1, 1966.

Date: October 11, 1966

1. As of this date we have mailed a contract to Mr. A. R. Vaughn to provide the State Department of Education with an analysis and interpretation of data from the evaluation reports of FY 1966 Title I, PL 89-10, projects.

2. This contract calls for us to provide IBM punch cards from the Title I evaluation reports to Mr. Vaughn by November 7, 1966.

3. I have asked Glenn White to be the liaison representative from the State Department of Education during the course of the contract with Mr. A. R. Vaughn.

4. Ed Downey and Donald Shire are to spend full time, if needed, to obtain evaluation reports as complete as possible from the local educational agencies and punch cards of the material on the evaluation reports to be presented to Mr. Vaughn by November 7, 1966.

5. Ed Downey and Donald Shire are to spend full time, if needed, after November 7, 1966, to produce the narrative and other aspects of the annual evaluation report to the U. S. Office of Education that will not be provided under the contract with Mr. A. R. Vaughn.

P. J. NEWELL, JR.
ASSISTANT COMMISSIONER

DIVISION OF INSTRUCTION

DEPARTMENT OF EDUCATION
STATE OF MISSOURI
JEFFERSON CITY

October 11, 1966

Mr. Abb R. Vaughn
210 Reedway Drive
Kirkwood, Missouri

Dear Mr. Vaughn:

Enclosed is an agreement for Analysis and Interpretation of Data from Title I Projects pursuant to your proposal received with your letter of September 25, 1966.

Please sign both copies, retain the copy, and return the original to me as soon as possible.

I am asking Mr. Glen White to act as the liaison for the State Department of Education and work with you concerning the carrying out of the work under this agreement.

Sincerely,

P. J. Newell, Jr.
Assistant Commissioner
Division of Instruction

PJN:jrs

Enclosures

AGREEMENT BETWEEN THE MISSOURI STATE DEPARTMENT OF EDUCATION
AND ABB R. VAUGHN, 210 REEDWAY DRIVE, KIRKWOOD, MISSOURI
FOR
ANALYSIS AND INTERPRETATION OF DATA
FROM FY 1966 TITLE I, PL 89-10 PROJECTS

The State Department of Education hereby enters into an agreement with Abb R. Vaughn for analysis and interpretation of data from the evaluation reports of FY 1966 Title I, PL 89-10, projects. Work under this agreement will commence immediately upon the signing of the agreement, and the analysis and interpretations shall be completed and furnished to the State Department of Education by November 30, 1966.

1. The State Department of Education will:

   a. Provide one State Department of Education employee as liaison during the course of the work under this agreement.

   b. Provide IBM punch cards for the Title I, PL 89-10, evaluation reports to be analyzed and interpreted, by November 7, 1966.

   c. Pay upon completion and delivery of the analysis and interpretations the amount of $3,450 to Abb R. Vaughn.

2. Abb R. Vaughn will:

   a. Carry out the work as set forth in his "Proposal for Analysis and Interpretation of Data from Title I Projects" that is attached, and becomes part of this agreement. A one-page progress report shall be submitted weekly.

   b. Work with the liaison employee of the State Department of Education in carrying out the work under this agreement.

3. All programs, data, and interpretations resulting through this agreement, will become property of the State Department of Education, who becomes sole owner, and no part is to be released or provided to any other person or agency.

STATE DEPARTMENT OF EDUCATION

October 10, 1966
Date

Hubert Wheeler
Commissioner of Education

Date

Abb R. Vaughn

PROPOSAL FOR ANALYSIS AND INTERPRETATION OF DATA FROM TITLE I PROJECTS

Name of Applicant: Abb R. Vaughn

Address of Applicant: 210 Reedway Drive,
Kirkwood, Missouri

Submitted to: Mr. John Alberty, Director
Title I Section, Public Law 89-10
State Department of Education

Date of Submission: 29 September 1966

Beginning Date of Contract: 3 October 1966

Termination Date of Contract: On or before 22 November 1966

Total Amount of Contract: $3,450

PROPOSAL FOR ANALYSIS AND INTERPRETATION OF DATA FROM TITLE I PROJECTS

This proposal offers a design, on a contract basis, to the State Department of Education of the State of Missouri for the performance of computer services, statistical analyses, and interpretation of the data collected from educational projects funded by the State government under Title I of the Elementary and Secondary Act, Public Law 89-10. These services will take their final form in a report submitted to the Missouri State Department of Education. The report would represent a major portion of the requirements for the State Annual Evaluation Report for the Previous Fiscal Year requested by the federal Office of Education (April, 1966). Provisions can be made for detailed analyses of specific sections of the data; the results so derived may serve as an additional source of information about the characteristics of Title I projects, and these may be appended to the report.

This proposal is divided into four sections. Three of these concern directly the obligation to the federal government; the fourth deals with measures which, while not required by the federal office, may be of interest to those who at the state level deal with more highly differentiated facets of Title I. The work to be done under the proposed contract is not intended to fulfill all of the requisites indicated by the U.S. Office of Education. Rather, the areas of principal concern here are those where quantitative information is required, and discussion of results will in the report be focused upon this aspect of Title I projects.

Six classes of ordinal and/or interval data from Title I projects may be distinguished, for which statistical measurements are appropriate. These classes are: the methods used to establish Title I projects areas, the cooperative programs among two or more varieties of project (including non-Title I programs), project methods and procedures, the use of standardised tests and

other rating instruments, attendance and membership records, and the disbursement of Title I funds. A large portion of this data can be handled via tabular format; graphs will be used where possible to illustrate relationships; data will be ranked and lists prepared where specified by the requirements and where the material lends itself to no other kind of presentation.

While a discussion of proposed measures for each of the classes noted above would constitute one systematic approach for this presentation, an attempt is made in the sections which follow to adhere to the arrangement of categories indicated in the outline prepared by the federal office. The categories indicate the components of the information which will be contained in the report.

Section I. General Dimensions of Title I Projects

Three rather disparate aspects of Title I projects are treated in this section: the types of evaluation design used by the projects, extra- and intra-project coordination, and a compilation of standardised test usage together with their scores.

Five different types of evaluation (experimental) design were suggested for Title I projects. The distribution for these, together with a summary of designs which deviated from the indicated patterns, will be expressed in terms of sums to indicate the number of projects that used each design. The types of design include:

1. Two-group design, with an experimental (project) group and a non-project group, used as a control.
2. One-group design, using pre- and post-test scores for the comparison of observed gain or loss with expected gain.
3. One-group design, allowing comparison of pre- and posttest scores with local, state, or national norms.
4. One-group design, allowing comparison of observed project

performance with expectancies based on data collected on previous project-school performance.

5. One-group design, using project data alone, without an objective criterion.

Extra- and inter-project coordination, with respect to the work here under consideration, also involves simple counting measures. Extra-project cooperation between Local Educational Agencies (LEA) of Title I and Community Action Programs (CAP) will be indicated in a table showing the sum of Title I projects initiated in areas where there were approved CAPs, together with the total amount of Title I funds allocated to these areas. (Other characteristics of the relation between these programs, e.g., State-level intervention, successes and failures, will not be considered in this report.) The relation of Title I to other Titles of the Elementary and Secondary Education Act (i.e., Titles II and III) will be described with reference to the purposes for which funds were allocated from Title I.

Interproject coordination includes an evaluation of the development and implementation of cooperative venture among two or more districts. Some estimate of the successes and the difficulties encountred in the development of these programs may be derived from ratings of their projects by the districts involved, if these are available. While an element of bias (and therefore error) may be introduced with self-rating procedures, the ratings would furnish some concrete evidence for the required information; they may in addition provide some rationale for recommendations and future planning of the programs.

A table will be provided to show the degree--in terms of kinds of services and activities (arrangements)--to which non-public school children participated in Title I projects. The numbers of projects and of children so involved will be represented by sums for each.

Two appendices of the report will contain supplementary material concerning the use of standardised tests. Projects which used the same tests will be rank-ordered so as to derive an estimate of relative effectiveness for each project. The differences between projects will be discussed in terms of the amount of change produced relative to project objectives. If pre- and post-test scores for these programs are available, and if a sufficient number of projects used the same standardised test (say, N=10 or more), a measure of association such as the Spearman rank correlation coefficient (rho) could be applied which would allow, with an appropriate test of significance (e.g, Student's t), a more objective determination of the degree of change in terms of project objectives. Moreover, a search for similarities and differences among projects might then be made more meaningful.

In the second appendix will be compiled the achievement test scores of educational attainment. Projects will here be grouped according to the similarity of their objectives and their use of the same tests.

Section II. Comprehensive Analysis

Eight categories, dealing mainly with methodological aspects of Title I projects, are considered in this section. For each category here separate treatment will be given each of the five Standard Metropolitan Statistical Areas (SMSA) as the latter are defined by the Bureau of the Budget.

The first category requires tabulation: for each SMSA the sum of LEAs for which Title I programs were approved is to be shown, together with the amount of funds finally apportioned to these groups. Also indicated in this table will be an unduplicated count of children, divided so that subtotals show the number of public school, nonpublic school, and unenrolled (i.e., neither public nor private school) participants. The sum of these subgroups will be divided by the amount of funds committed, to yield an average per pupil cost.

Methods used to establish project areas (e.g., census information, AFDC payments, and other types of deamographic material) will be rank-ordered in terms of the frequency with which they were utilised. These data may also be represented graphically to show the shape of the distribution.

Those pupil needs (e.g., poor language ability, physical needs) most pertinent to the identified purposes of Title I will be rank-ordered and also represented graphically. Elaborations and other qualification for these data will be provided.

The problems which evolved at LEA levels will be indicated: these include such factors as insufficient personnel, poor attendance by students, poor cooperation by parents, and so on. (An interesting study with respect to these factors might begin with an attempt to identify the elements which produced the difficulties, particularly as regrds those LEAs that report the same problem but for different reasons.)

A table will be used to show the frequency with which specific types of project activity were funded. The emphasis here will be upon those types of activity for which funds were appropriated most frequently.

The methods used by LEAs to increase to to develop staff for Title I projects will also be represcated by a table. Any qualitative data that is available might be used to indicate the efficiency of these methods.

Psychometric instruments, including achievement tests, are again given attention in this section. Here, for each school level (i.e., pre-kindergarten/kindergarten, grades 1-3, 4-6, 7-9, and 10-12), psychometric measures will be listed by type, according to the frequency with which they were employed.

The effectiveness of project methods and activities are considered in both this and the following section. Project effectiveness is viewed here in

terms of grade levels: five project activities are to be cited for each level (i.e., early school years--preschool through grade 3; middle years--grades 4-6, and adolescent years--grades 7-12). Selection ofthe five activities for discussion is to be based upon a judgment of their effectiveness by local project directions; the most effective activities being given precedence. Some criterion for effectiveness must therefore be established prior to the selection of activities. Utilisation of the frequency with which LEAs choose a particular type of activity (e.g., reading, arithmetic, etc.) for their projects would perhaps yield only an estimate of the popularity of a given activity, rather than an objective estimate of effectivenss. It is suggested that, in addition to these ratings, test scores be used as a criterion; that projects conducting the same activity and which used the same standardised achievement test be grouped together (so that activity and test are matched and an N x 3 x 5 table is obtained); and the significance of the difference tested between the top one-half of the pre- and posttest scores for each category, for each grouping of grade levels. The relative strengths and weaknesses in procedure for the activities thus selected may then be viewed with respect to other, more qualitative variables each as personnel qualifications, scheduling, equipment, and the like. Of course, if quantitative data is available for any of these factors, and if the necessary statistical assumptions can be met, the analysis outlined above may be adjusted to permit the use of higher-powered statistical tests.

Section III. Tabular Data

Several two-way tables are included in this section. Two of these deal with classes of material that have been considered earlier; five others are concerned with relatively new data. The list below is intended only to serve as a brief indication of the content of each table.

Table 1. Tests for Development in Skill Subjects, Attitudes and Behaviour used by Selected Projects. Using a scheme similar to the one developed for the last category of the preceding section, a subsample will be selected from Title I projects representative of highest, middle, and lowest in effectiveness of activity. In the table, sums for the number of projects that employed each kind of test (i.e., instruments rging in reliability and nalidity from anecdotal records to standardised tests) will be shown for development in skill subjects, attitudes and behaviour. These sums will be further classified by grade levels.

Table 2. Summary of Effectiveness fo Types of Projects. For major types of projects (a concept that might be defined statistically or qualitatively) several subtables may be constructed, which will summarise the numbers of projects that showed maximum, medium, or minimal progress toward their objectives. The objectives of the projects, serving as criteria here, shall to the two that are shown by the project directors to be te most important.

Table 3. Average Daily Attendance and Average Daily Membership Rates for Title I Project Schools compared to State Norm. In this table will be presented the average daily attendance and membership rates for Title I project schools. These rates will be compared with State Norms (i.e., all non-Title I schools in the State). The terms used in the title of the table are defined in accordance with the government phlication (April, 1966).

Table 4. Dropout Rates (Holding Power) for Title I Project Schools Compared to Non-Title I Schools and State Wide Norm. Dropout rate will be computed according to the formula given by the U.S. Office of Education publication (April, 1966). These rates, as with those for Table 3, will be compared with the State Norms.

Table 5. Percentage of Students in Title I Project High Schools Continuing Education beyond High School Compared to State Norm. These percentages can be handled statistically (using Chi square procedures) for a comparison of Title I with non-Title I high schools in the State.

Table 6. Results for Most Widely Used Tests in Skill Subject Areas for Title I Schools. It is possible that the raw data for this table may be collected through an arrangement with the Missouri Statewide Testing Service. This table will include the raw scores, means, standard deviations, and percentile ranks for the tests in skill subject areas. The percentile ranks shown in this table will be based upon the standardisation groups that were used to establish the norms for the achievment tests under review.

Table 7. The Five Most Frequently Funded Title I Projects for the State. This table will include qualitative materials, i.e., project objectives, and the most frequently used approach to these objectives will be matched with the frequency with which projects received funds.

Section IV. Supplementary Analyses

A number of ancillary designs can be developed for the comparison of two or more variables drawn from the classes of data discussed earlier. These comparisons might be instructive with respect to the structure of Title I projects; they may also enhance and help bring into focus specific aspects of the projects that may be of value for future planning. The following is not intended to be an exhaustive survey of possible analyses, but only to serve as an indication of the possibilities in this regard.

A series of comparisons may be conducted among variables that concern the development and implementation of Title I projects on local levels. The assumptions underlying the majority of these sutdies would permit the application of nonparametric statistical procedures.

The methods used to develop or increase Title I staff by LEAs that reported that lack of personnel played an important part in the development

of their programs may be compared with the methods used by districts which indicated that insufficient staff was a minor difficulty. Resutls would be expected to show how the first group of LEAs solved their problem, and the sources from which their personnel was gathered.

The types of project activities developed by LEAs that received assistance from colleges and/or universities in the State may be compared with the programs which did not utilise this source. It might be speculated that the activities of the first group differed in both type and effectiveness from those of the second; attention might also be given to the direction, in terms of success or failure, toward which the activities of both groups varied.

An estimate can be made of the proportions for expenditure of funds for three major categories (salaries, supplies,and equipment, remodeling and construction) for general information purposes. In this connexion it may be of interest to find whether there were significant differences in the amounts of funds appropriated for purchase of school supplies and other facilities by LEAs that reported that they received assistance from commercial companies, and those that did not so report.

Differences in types of activities developed by LEAs that reported lack of attendance by students to be a problem may be compared with, e.g., a group of LEAs using the same standardised test that did not report this problem. Components of this study might include attention to the relation between lack of attendance and dropout rate; poor attendance and lack of parental cooperation; the ratio of success to failure of the activities developed (as defined by test scores); percentages of attendance during the Title I program vs. that of the regular school period; the structure and quality of available staff, and such concrete characteristics of the programs as amounts of space, supplies, and other facilities.

The use of such extra-instructional personnel as social workers, psychologists, psychiatrist, and psychometrists on a basis which integrated their services into the project may have played an important part in the way in which Title I programs were perceived by those who conducted them. It might be speculated, for example, that LEAs for which these services were available, and which attempted to use them, may also have established one or more structured, non-teaching services as part of their programs (i.e., screening procedures, diagnostic and/or treatment procedures, special groups or special activities for children who manifested emotional and/or environmental difficulties).

Another aspect, not unrelated to the foregoing, would involve an attempt to get an estimate of the distribution of Title I personnel in terms of activity assignments and type(s) of employment for all projects. Such a distribution would provide a basis for a comparison of staffing patterns in the LEAs, and the latter could be classified by SMSA definitions.

Suggested Schedule of the Work to be Completed Under this Contract

The review and analysis of the data to be studied under this contract can begin on 3 October 1966. It is expected that the contract will terminate on or before 22 November 1966, on which date the final report will be submitted. It is also expected that the State Department of Education would supply the data on standard IBM punch cards, on a schedule that could be determined by the applicant and the liaison person from the State Department of Education. It is further suggested that all key-punching and other preparation of the data for which the State Department of Education is directly responsible be completed by 31 October 1966, so that it will not be necessary for the applicant to accept fresh data from the Department at any time after this date.

Budget

Salaries	Amount
Professional Staff	$2,000
Clerical and Secretarial Staff	450
Other Costs	
Data-Processing Services	1,000
Total	$3,450

The professional staff will consist of one full time position for six weeks and one full time position for four weeks or the equivalent.*

* Certain portions of the work will be done by several individuals working on a part-time basis.

ANALYSIS AND INTERPRETATION OF DATA FROM TITLE I PROJECTS

This report is in fulfillment of a contract between Abb R. Vaughn and the State Department of Education of the State of Missouri for the analysis and interpretation of data from FY 1966 Title I, Public Law 89-10 Projects. Liaison between Abb R. Vaughn (hereafter, the writer) and the Missouri State Department of Education (hereafter, SDE) was maintained by an employee of the SDE. This individual provided the general prœdural outline of the United States Office of Education requirements, transmitted data from SDE to the writer, and received progress reports at various stages of the analysis. The liaison employee was also available to answer specific questions regarding administrative procedures for Title I projects, to offer counsel about the format of this report, and to review sections of the material at different points in its preparation.

In overall pattern, presentation of the data from Title I projects follows the structure of the outline distributed by the United States Office of Education in the paper, State Annual Report for Previous Fiscal Year (1966). Before proceding to this presentation, however, attention much be given to certain general procedures which bear directly upon the nature of the analysis. Data which meets the assumptions of nominal and/or ordinal statistical measurement is of primary concern in this report. Noparametric procedures have been employed where appropriate. Purely descriptive material required by the federal office has not been included in the analysis.

General Description of the Data

Results, and their derived implications are, as with any research effort, necessarily limited by the nature of sampling procedures. With one exception, discussed below, the samples under consideration here were collected solely by SDE and then transmitted for analysis. The writer became acquainted

with the material at a relatively late stage of collection; further, the calendar dates by which completion of the work was expected left little opportunity to evolve a plan for analysis which may have allowed for more comprehensive statistical predictions to be made for outcomes of Title I projects.

Of the population of Title I projects, two of three possible subsamples have been studied. Table 1 contains the total number of Local Educational Agencies (LEA) in the State of Missouri that conducted projects under Title I grants. These numbers, 513 LEAs and 981 projects, constitute the population of Title I projects for the State; and are designated Sample 1 in Table 1. Of this population there was received for analysis a subsample which contained reports for 302 LEAs and was inclusive of 320 Title I project evaluations. In Table 1, this subsample is designated Subsample A.

Another subsample was drawn in order to arrive at an estimation particularly for various categories of information necessarily lost in the course of the coding procedure employed for Sample A. In Table 1, this subsample is labeled Subsample B. It was selected via a systematic process similar to quota sampling (a varient of stratified sampling [Dubois, 1965]) which involved entering a table of random numbers in order to determine the point in Subsample A from which members of Subsample B would be chosen. Following entry in the table of random numbers, two selection procedures were followed: each tenth report from X_{10} to X_{300} of Subsample A was chosen, and an attempt was made to approximate the distribution of LEAs in Standard Metropolitan Statistical Areas (SMSA) found in the latter sample. Sample B, then, has an N of 41 LEAs, and contains 65 Title I projects. Table 1 shows that it contains 13.57 per cent of the LEAs included in Subsample A.

The relations between Sample 1 and Subsamples A and B may be seen in Table 1, in terms of their respective Ns for participating LEAs, projects, and activities, together with the percentage of these Ns in Sample 1 that are represented by Samples A and B (N' and N", respectively), and the percentages

Table 1

Local Educational Agencies Participating in Title I for the State of Missouri

Samples	N LEA	N Projects	N Activities	Per Cent of Total LEA: N' LEA	N' Projects	N' Activities	Per Cent of Analysed Sample: N" LEA	N" Projects	N" Activities	Mean Projects/ District	Mean Activities/ District	Mean Activities/ Project
Number of Local Educational Agencies in the State of Missouri. [Sample 1]	513	981	1,735	---	---	---	---	---	---	1.91	3.38	1.77
Number of Local Educational Agency reports studied for this Analysis.. [Subsample A]	302	320	720	58.87	32.62	41.50	---	---	---	1.05	2.38	2.25
Number of Local Educational Agency reports included in Selected Subsample. [Subsample B]	41	65	139	7.99	6.63	8.01	13.57	20.31	5.18	1.58	3.39	2.14

of projects and activities contained in Subsample B of the N' Subsample A. It must be noted that neither Sample 1 nor Subsamples A and B may be considered random samples in the sense that every case in the population of Sample 1 had equal probability of being selected at each step in the development of the Subsamples. This factor is a limiting one in terms of the choice, but not necessarily in level of significance or power-efficiency, of appropriate statistical models.

Further observations may be made regarding the similarities between Sample 1 and Subsamples A and B. As the LEAs are subdivided into individual projects and activities, the sums for these categories represent an increase over the sums for LEAs. The average LEA operated more than one project, and within these, more than one activity was conducted. Inspection of Table 1 also reveals that mean projects per district, and mean activities per district and per project were more closely aligned between Sample 1 and Subsample B than between either Sample 1 and Subsample A or Subsample A and Subsample B. This kind of regression is characteristic of a linear relation between two variables, when the relationship is less than perfect (cf. Dubois, 1965). Insofar as this relationship is concern, therefore, sampling criteria for this Subsample appear to have been met.

Two quantitative methods were used to determine the representativeness of Subsample A relative to Sample 1. Project activities and services for Sample 1 and for Subsample A were rank-ordered with respect to the frequency with which each activity was reported used by the LEAs. The results of this procedure may be seen in Table 2. Agreement in rank was obtained for three out of 18 categories of operation: reading, ranked first for both groups, social studies/social science, ranked 13th, and science, ranked 12th. For Sample 1, the six most frequently operated activities and/or services were reading, English Language Arts, mathematics, use of teacher aides, health services, and kindergarten. The secondmost popular activity for Subsample A was mathematics,

Table 2

Comparison of Project Activities and Services for Subsample A and Sample 1

Subsample A				Sample 1			
Rank	Activity Code	f	Per Cent	Rank	Activity Code	f	Per Cent
1	116	189	25.00	1	116	330	19.02
2	121	71	9.86	2	114	193	11.12
3	216	52	7.22	3	121	167	9.63
4	120	46	6.39	4	133	133	7.67
5	114	46	6.39	5	216	130	7.49
6	130	44	6.11	6	120	130	7.49
7	133	41	5.69	7	222	112	6.46
8	222	30	4.17	8	223	105	6.04
9	123	25	3.47	9	221	84	4.84
10	113	25	3.47	10	123	76	4.38
11	223	24	3.33	11	113	75	4.32
12	125	18	2.50	12	125	38	2.19
13	122	17	2.36	13	126	33	1.90
14	126	16	2.22	14	119	27	1.56
15	128	16	2.22	15	112	24	1.38
16.	221	14	1.94	16	128	21	1.21
17	119	10	1.39	17	219	12	..69
18	1.2	6	.83	18	129	12	.69
19	21?	6	.83	19	134	33	1.90
20	112	5	.69			N=1,73[illegible]	
21	224	5	.69				
22	227	4	.56				
23	124	3	.42				
24	219	3	.42				
25	127	2	.28				
26	129	2	.28				
27	213	2	.28				
28	218	2	.28				
29	220	2	.28				
30	118	1	.14				
31	131	1	.14				
32	211	1	.14				

N = 720

the third, health services, followed by kindergarten, English Language Arts, and summer school.

The chi-square one-sample test (Siegel, 1956) was applied to the ranked data described above to determine whether the observed frequencies of Subsample A were sufficiently close to the expected frequencies of Sample 1 to be likely to have occurred under the null hypothesis of no differences between groups. The data for this computation, together with the results, may be seen in Table 3. None of the chi-square values in column (O-E) /E were observed to have reached significance of the level p .01; neither did the sum of these values, 10.312, attain this level. With respect to operation of projects, then, the distributions of activities and services were, despite differences in ranks, similar for Sample 1 and Subsample A, since the attained chi-square value was not significant.

In the absence of an external criterion, Title I projects might be considered subjects operating as their own controls. The lack of a general criterion, theoretically probable but impractical, allows only for the use of comparison data in specific categories of the presentation to follow.

A major portion of the data was analyzed using an IBM 360 Model 30 computer. This computer has a storage memory of 65 K. The programs were written in Fortran IV programming language. The computer programs together with specific statements not apropos here may be found in the appendix.

This report is based upon non-random samples of the population of Title I projects operated in the State of Missouri. Without further substantiation, speculation regarding the actual representativeness of these samples appears unnecessary; our test of significance indicates only that the data have been derived from the same populations.

Table 3

Chi Square for Distribution of Project Activities for Subsample A and Sample 1

Activity Code	Observed Frequencies	Expected Frequencies	O - E	$(O-E)^2/E$
116	25.00	19.02	5.98	1.880
121	9.86	9.63	.23	.005
216	7.22	7.49	- .27	.010
120	6.39	7.49	-1.10	.162
114	6.39	11.12	-4.73	2.011
133	5.69	7.67	-1.98	.511
222	4.17	6.46	-2.29	.811
123	3.47	4.38	- .91	.189
113	3.47	4.32	- .85	.167
223	3.33	6.04	-2.71	1.215
126	2.22	1.90	.32	.053
128	2.22	1.21	1.01	.842
125	2.08	2.19	- .11	.006
221	1.94	4.84	2.90	1.737
119	1.39	1.56	.17	.018
112	.69	1.38	.69	.345
219	.42	.69	.27	.106
129	.28	.69	.41	.244

$\chi^2 = 10.312$
df = (N-1) = 17
Not significant,
p = .01.

General Dimensions of Title I Projects

Three aspects of Title I projects are considered here: the types of evaluation designs used by the projects, extra and interproject coordination, and a compilation of standardized test usage(s) together with their scores. In this and succeeding sections there are several variables for which subcategories are not mutually exclusive; thus any percentages summed for these subcategories will equal more than one hundred per cent. E.g., many LEAs used two or more evaluation designs for the same project; these integers were entered once for each category, and so the total percentage for this variable is 105.06 per cent.

Evaluation Designs. Five different types of evaluation (experimental) designs were suggested for Title I projects. A sixth category, "other," was permitted when the proposed evaluation failed to meet the requirements of the suggested patterns. The distribution for use of these categories of evaluation design, together with their percentages, may be seen in Table 4. Two classes of percentages are presented for Subsample A; percentages of N' Subsample, and percentage of evaluation designs. While Subsamples A and B are combined in these totals and percentages, sums and percentages for Subsample B are also presented separately, so that differences in percentage N' Subsample may be inspected. The Table shows that, of the six possible categories of design, Categories B and F ("other") were the most popular for both Subsamples. Category F has the highest frequencey for Subsample A; Category B occupies the same position for Subsample B. Use of Category B occupies the same position for Subsample B. Use of Category F allowed respondents to report evaluation designs that varied from those suggested.

Category F was reviewed for Subsample B, for indications of the nature of these variants. Several observations may be made. Twelve of the 21 respondents who used this category limited their measurements to either academic or nonacademic "professional observation." Three LEAs combined such observations

Table 4

Distribution of Projects Using Suggested Evaluation Designs

Type of Evaluation Design	n' Sub-sample A	Per Cent N'	Per Cent n' Designs	n' Sub-sample B	Per Cent N"
A. Two-group design, with an experimental (project) group and a control (nonproject) group	3	.009	.007	0	0
B. One-group design, using pre- and posttest scores for the comparison of observed gain or loss with expected gain.	103	34.10	.25	23	35.38
C. One-group design, allowing comparison of pre- and posttest scores with local, state, or national norms.	63	20.86	.15	16	24.61
D. One-group design, allowing comparison of observed project performance with expectancies based on data collected on previous project-school performance.	19	6.29	.05	7	10.77
E. One-group design, using project data alone, without an objective criterion.	76	25.16	.18	13	20.00
F. Other	147	49.00	.36	21	32.30
Total[a]	414			80	

[a]All evaluation designs used by each LEA for each project were summed, including LEAs that reported the use of two or more designs per project. Since an entry was made for each design reported used, $n' \neq N'$.

with some standardized measuring instrument; one LEA used a nonstandardized instrument, two used standardized tests alone, one used progress reports, another specified that a "one-group design" was used without detailing its nature, and two projects were not operative at the time of their reports. The statement "professional observation" seems a highly ambiguous one which one which admits of no speculation regarding the validity or reliability of such measures. Further, some LEAs appear in their reports to have responded to the item in terms of test materials, rather than with an account of overall design, I.e., their remarks leave unanswered the questions of comparison data, placement in time of examinations during the project, etc. Any number of factors, then, may have operated to produce the high frequencies in Category F relative to the remaining design Categories. It is speculated that, for those respondents unacquaintedwith basic research procedures, the least conflictful choice rested with this category, it being moreover the Category requiring the least rigorous attention to unbiased reporting.

Coordination of Title I and Community Action Programs. The data indicate that 171 LEAs served areas where there were approved Community Action Programs. These LEAs operated 342 Title I projects. It must be remembered that a number of LEAs have submitted only a portion of the evaluation for their total number of approved projects, thus N' for Subsample A projects (N' - 320) does not thereby increase with these numbers. The amount of funds committed for LEAs where there was an approved Community Action Program has been summed. This figure is $6,847,787.00.

Relationship of Title I with other Titles of ESEA. The distribution of LEAs that used Title I funds in connection with funds of Title II and Title III may be seen in Table 5. This distribution has been arranged by SMSA classifications. The majority of these LEAs used Title II funds.

Table 5

Distribution of LEAs using Funds from Titles II and III in Connexion with Funds from Title I

SMSA Classification					
A-1	B-2	C-3	D-4	E-5	Sum
Frequencies:					
0	1	6	11	56	74

Cooperative Projects Between Districts. The sample of cooperative projects was analyzed independently of all other samples. The figures reported here do not appear as part of the computations for any other data.

Fifteen LEAs conducted Title I projects in which there was for the duration of the project cooperation between two or more districts. Of the reports, nine LEA evaluations were received for analysis. Thirteen projects were operated by these districts; they served a total of 28,403 children. Four variables for cooperative projects were selected and are reported here: "problem areas" encountered in the development of the projects (cf. USEO, 1966, p.3), the use of funds, per pupil expenditure, and personnel. The data for these variables have been summed, and the results may be seen in Table 6. Figure 1 shows the differences in N and percentages for instructional and noninstructional personnel. One cooperative project had as activity a workshop for personnel, in which few children were immediately involved. Nevertheless, while the ratio of instructional to noninstructional personnel appears to be in the expected direction (i.e., more teachers than nonteachers); it can also be observed that the prorated staff: children ration of 1:134.61 seems disproportionately large. A relatively small number of these cooperatives used formal instructional procedures as project activity. The purposes of most projects were of a service nature, e.g., physical examinations, dental care, etc. It would seem unlikely that any one staff member was responsible for such large groups of children at one time.

Nonpublic School Participation. The numbers of projects and of nonpublic school children that participated in Title I projects may be seen in Table 7. The weekly participation of these children is indicated in the Table. These figures do not represent an unduplicated account. The totals for each type of arrangement may be seen in the row Subtotals for each category.

Table 6

Summary of Variables for Cooperative Projects

Principal Problems				Funds				Personnel		
				Expenditures				Personnel:Pupil Ratios		
Personnel	Space	Attendance	Parents	Amount Approved	Salaries	Supplies & Equipment	Remodeling	Per Pupil Expenditure	Instructional Staff: Children	Noninstructional Staff: Children	All Staff: Children
4	5	4	0	2 $214,641.32	$100,959.58	$119,022.42	$12,741.25	$75.05	133: 28,403 =213.56[a]	74: 28,403 =383.82[a]	211: 28,403 =134.61[a]

[a]Sums for half-time and less than half-time personnel were prorated by treating them by N/2 before adding them to the sums for full-time personnel.

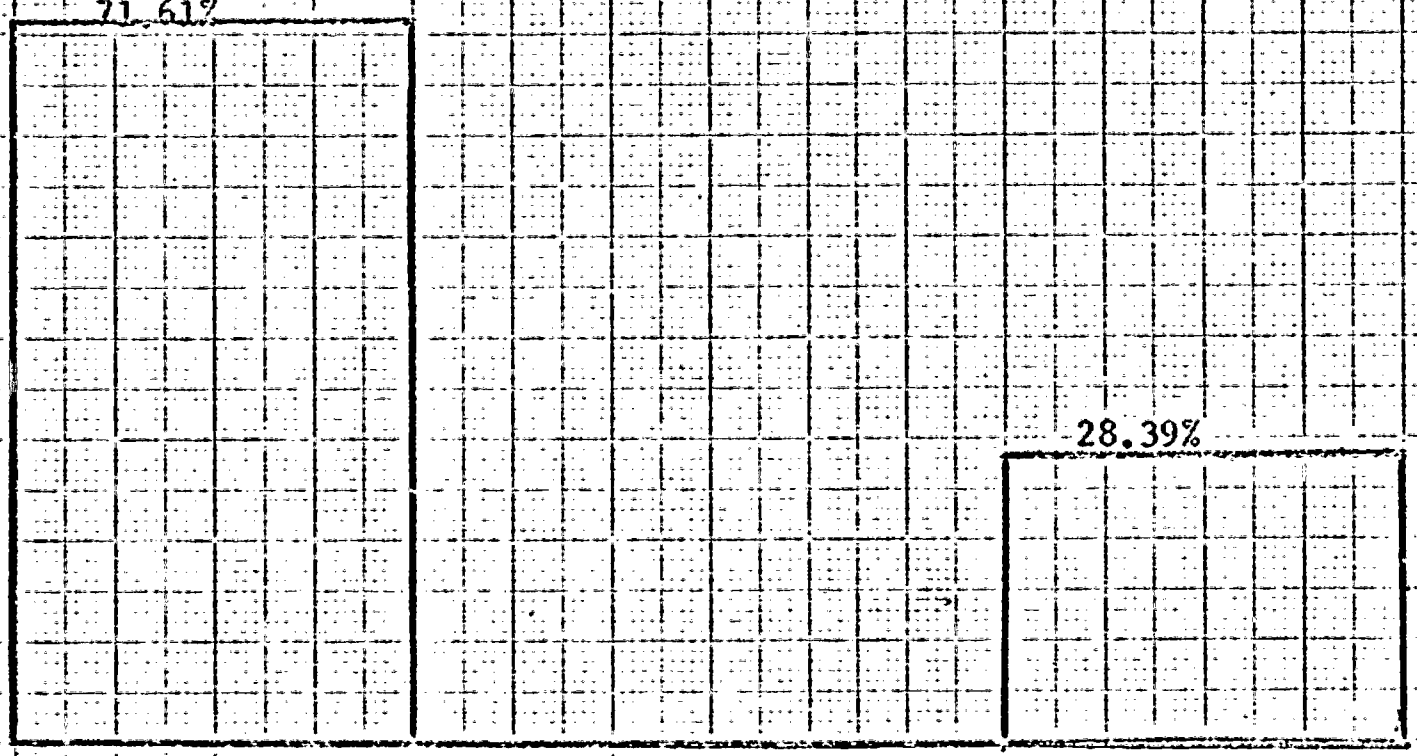


Figure 1. Personnel for Cooperative Projects.

Table 7

Types of Arrangement in Title I Projects for Nonpublic School Children

Times of Participation		Number of Projects	Number of Nonpublic School Children
On public school grounds only			
During the regular school day		0	0
Before school		0	0
After school		13	455
Weekends		8	312
Summer		0	0
	Subtotals	21	767
On nonpublic school grounds only			
During the regular school day		6	759 (?)
Before school		0	0
After school		2	67
Weekends		0	0
Summer		0	0
	Subtotals	21	826
On both public & nonpublic school grounds			
During the regular school day		4	131
Before school		0	0
After school		1	4
Weekends		1	2
Summer		2	31
	Subtotals	8	168
On other than public or nonpublic school grounds			
During the regular school day		0	0
Before school		0	0
After school		1	12
Weekends		0	0
Summer		3	391
	Subtotals	4	403
	Total	41	2,164

Analysis for Classes of SMSA

Material in this section concerns the methodological aspects of Title I projects. For each subsection, separate treatment is accorded each of the five Standard Metropolitan Statistical Areas, as they are defined by the Bureau of the Budget. The results for this section, unless otherwise specified, are those for Subsample A.

Summary of LEAs Relative to Children. The average cost per pupil for Subsample A LEAs was obtained. These results may be seen in Table 8. In this Table, for each SMSA Classification, the sum of LEAs for which Title I programs were approved is shown, together with the amount of funds that were apportioned to these districts. An unduplicated count of children is included here, divided so that subtotals show the number of public school, nonpublic school, and unenrolled participants. The sum for these subgroups was divided by the amount of funds committed, to yield an average per pupil cost.

In the following discussion, percentages are used to show relationships among the SMSA classifications for this variable. These figures are not included in Table 8, as an effort was made in its preparation to conform to the federal requirement. The Table shows that SMSA Class B served the smallest number (.47 per cent) of children, and received the smallest amount of Title I funds (.37 per cent). Classes C, D, and E received the largest grants of funds, these being, respectively, 7.71, 34.39, and 55.32 per cent of the total amount committed. The LEAs in these classes served the largest numbers of children (8.82, 33.56, and 54.99 per cent, respectively). The distribution for both funds and participants shows an increase with each of the last three SMSA classifications, so that Class E received the largest amount of money and had the greatest number of children for all classifications. Class A is in rank between Classes B and C, serving 2.18 per cent of the pupils and receiving 2.19 per cent of the funds committed. There do not appear any large discrepancies in average cost per pupil for the

Table 8

Statistical Information

SMSA	N' LEAs with approved Title I programs	Funds Actually Committed	$\sum$ Cols 5, 6 & 7	Public School	Non-Public School	Not Enrolled	Average Cost Per Pupil Cols 3/4
1	2	3	4	5	6	7	8
A	1	$ 196,575.00	2,252	1,917	335	0	$87.00
B	1	33,366.00	484	242	0	242	69.00
C	33	691,732.00	9,104	7,913	938	253	76.00
D	42	3,086,710.00	34,605	31,575	2,562	468	89.00
E	225	4,968,160.00	56,670	52,937	2,-27	1,706	88.00
Total	302	$8,796,543.00	103,115	94,584	5,862	2,669	$87.00

five classifications. The largest variation for this category (column 8) is on the order of $19.00, between Class B (which received the smallest amount) and Class E (which received the largest amount of money). The differences between Classes in amounts received relative to per pupil cost appears to have been taken up by differences in the numbers of children served.

Establishing Project Areas. Table 9 shows the methods used by LEAs to establish project areas. These methods are in the Table rank-ordered in terms of the frequency with which they were utilized. The shape of this distribution is shown in Figure 2, where the percentage for each method is given relative to total LEA (N = 302). Use of AFDC payments was by far the most popular method of establishing eligibility for Title I grants, while housing statistics were used the least often. Much of the data reported under the category heading, "Other welfare data" may have easily been subsumed under one of the other categories, since these statements differed semantically, but not actually, from other methods. The percentage of LEAs that used this category may, however, be seen in the Figure.

Pupil Needs. Blank lines in the Tables for this and succeeding subsections are meant to indicate that the particular variable was not reported by LEAs in a given SMSA classification. Material for this subsection has been divided into two parts. Table 10 shows in rank-order the reported pupil deficiencies that were used by LEAs as data for determining the types of project activities to be operated by them. Table 10a provides a rank-order of ancillary services held by the LEAs to be needed to function as additional support for the school child. The first group, pupil deficiencies, includes deficiencies in the usual skill subject areas, together with reported needs for provision of some type(s) of aesthetic experiences (e.g., music, art, "cultural enrichment," etc.). Many of the

Table 9

Rank-Order and Frequency of Methods of Establishing Project Areas

Method	SMSA Classifications A[a] Rank	A[a] f	B[a] Rank	B[a] f	C Rank	C f	D Rank	D f	E Rank	E f	Over-all Rank	Over-all $\sum$ f
Census information	0	0	1	1	6	2	5	12	5	44	5	59
AFDC payments	1	1	0	0	1	22	1	34	1	195	1	252
Health statistics	0	0	1	1	4	8	4	14	4	64	4	87
Guidance records	0	0	1	1	3	15	3	24	3	81	3	121
School Surveys	1	1	0	0	2	21	2	31	2	135	2	188
Housing statistics	0	0	0	0	7	1	6	3	6	25	6	29
Other welfare data	0	0	0	0	5	3	7	1	7	11	7	15

[a]For this Subsample, there was only one LEA each for Classes A and B. Since each LEA used each method (where there are entries in the table) with the same frequency, the ordering procedure led to tied ranks.

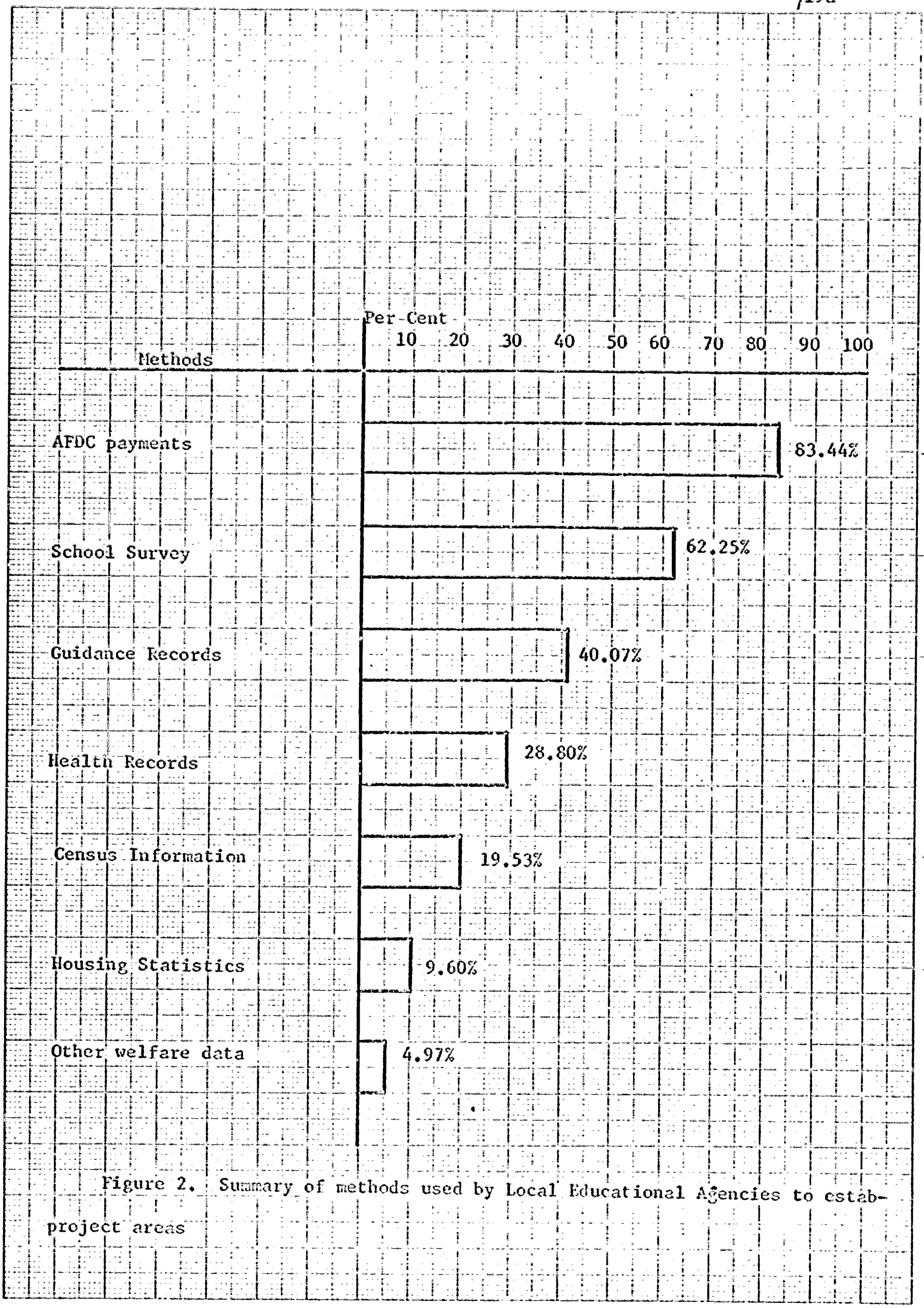


Figure 2. Summary of methods used by Local Educational Agencies to establish project areas

Table 10

Pupil Needs for which Title I Projects were Designed: Instructional Areas

Pupil Needs	Rank Order SMSA Classifications A[a]	B[a]	C	D	E	Over-All Rank
Improvement in Reading	1	---	1	1	1	1
Improvement in Mathematics	1	---	2	2	3	2
Participation in Kindergarten program	1	---	---	4	2	3
Improvement in Language Arts	1	---	3	3	4	3
Physical Education Activities	---	---	6	9	5	4
Cultural Enrichment	1	---	4	5	6	5
Music Activities	---	---	6	6	7	6
Improvement in the Social Sciences	1	---	---	8	9	7
Correction of Speech Defects	---	---	6	7	8	8
Improvement in Science	---	---	6	7	9	9
Art Experiences	---	---	5	6	11	10
Pre-vocational experiences in Industrial Arts and Home Economics	---	---	---	10	---	11
More time for Individual Instruction	---	---	6	10	10	12
Improved instruction in Vocational Skills	---	---	6	10	12	13
Pre-school Experiences	---	1	6	---	13	14
Special Services for Handicapped Children	---	---	1	---	---	15

[a]For this Subsample, there was one LEA each for Classes A and B. Entries in the table for each project for these LEAs led to tied ranks.

Table 10a

Pupil Needs for which Title I Projects were Designed:
Ancillary Services

Pupil Needs	Rank Order SMSA Classifications A[a]	B[a]	C	D	E	Over-all Rank
Improved Physical Health Services	1	2	1	1	1	1
Improved Library Services	---	---	1	1	2	2
Development of Curriculum Materials	---	---	2	3	2	3
Provision of Guidance and Counseling	---	---	2	4	3	4
Improved Nutritional Health	---	---	2	4	3	5
Development of Tutoring Centres (for individual instruction)	---	---	---	2	5	6
In-Service Training for Personnel	1	1	---	4	6	7
Provision of Social Workers	-	---	2	4	---	8
Provision of Psychological Services	1	2	2	---	---	9
Improvement in Average Daily Attendance	---	---	---	---	4	9

[a]For this Subsample, there was one LEA for each of Classes A and B. Entries in the table for each project for these LEAs led to tied ranks.

ancillary services reported as pupil needs seem to fall into four classes: physical health (e.g., need for health services, nutrition, etc.), personal adjustment (counseling, social work, psychological services, etc.), improvement of facilities (libraries, materials, transportation), or personnel (inservice training). It would appear, then, that the first-order critical deficiencies for Title I students were, on one hand, inability to read and to deal with mathematical materials, and on the other hand, poor health and inadequate school facilities.

Local Educational Agency Problems. Problems that arose at LEA level during the operation of Title I projects were rank-orderd by frequency, and may be seen in Table 11. The central problems for 207 LEAs were lack of space in which to operate their projects, and/or lack of personnel. Figure 3 shows a 21.19 per cent difference in the percentages of LEAs reporting these factors as problems, and that these factors, together, account for the largest percentage of problems reported. LEAs appear to have experienced particular difficulty in filling staff positions for remedial teachers (especially reading) and such ancillary personnel as school counselors, speech therapists, and individuals trained to teach mentally retarded children. There is a drop of about 22.18 percentage point for the remaining problems, with poor cooperation from parents being the problem reported the fewest number of times by all LEAs.

Activities Funded. Activities for which LEAs received Title I grants have been treated in three ways. Table 12 shows in combined rank order the instructional areas and ancillary services offered by Title I projects, together with assigned frequencies and (for each activity) the percentages of total projects, summed over all SMSA classifications. Table 12a shows the frequency and rank-order for instructional areas alone, while Table 12b shows in similar fashion the relative position of ancillary services.

Table 11

Principal Problems in Operation of Title I Projects

Problems	SMSA Classifications A Rank	A f	B Rank	B f	C Rank	C f	E Rank	E f	D Rank	D f	Overall Rank	Overall f
Lack of Personnel	0	0	0	0	2	8	1	15	2	80	2	103
Lack of Space in which to conduct Project	0	0	0	0	3	7	2	14	1	83	1	104
Lack of Attendance by Students	0	0	0	0	2	8	3	13	4	38	4	59
Lack of Cooperation by Parents	0	0	0	0	4	4	5	2	5	22	5	28
Other	0	0	0	0	1	9	4	7	3	46	3	62

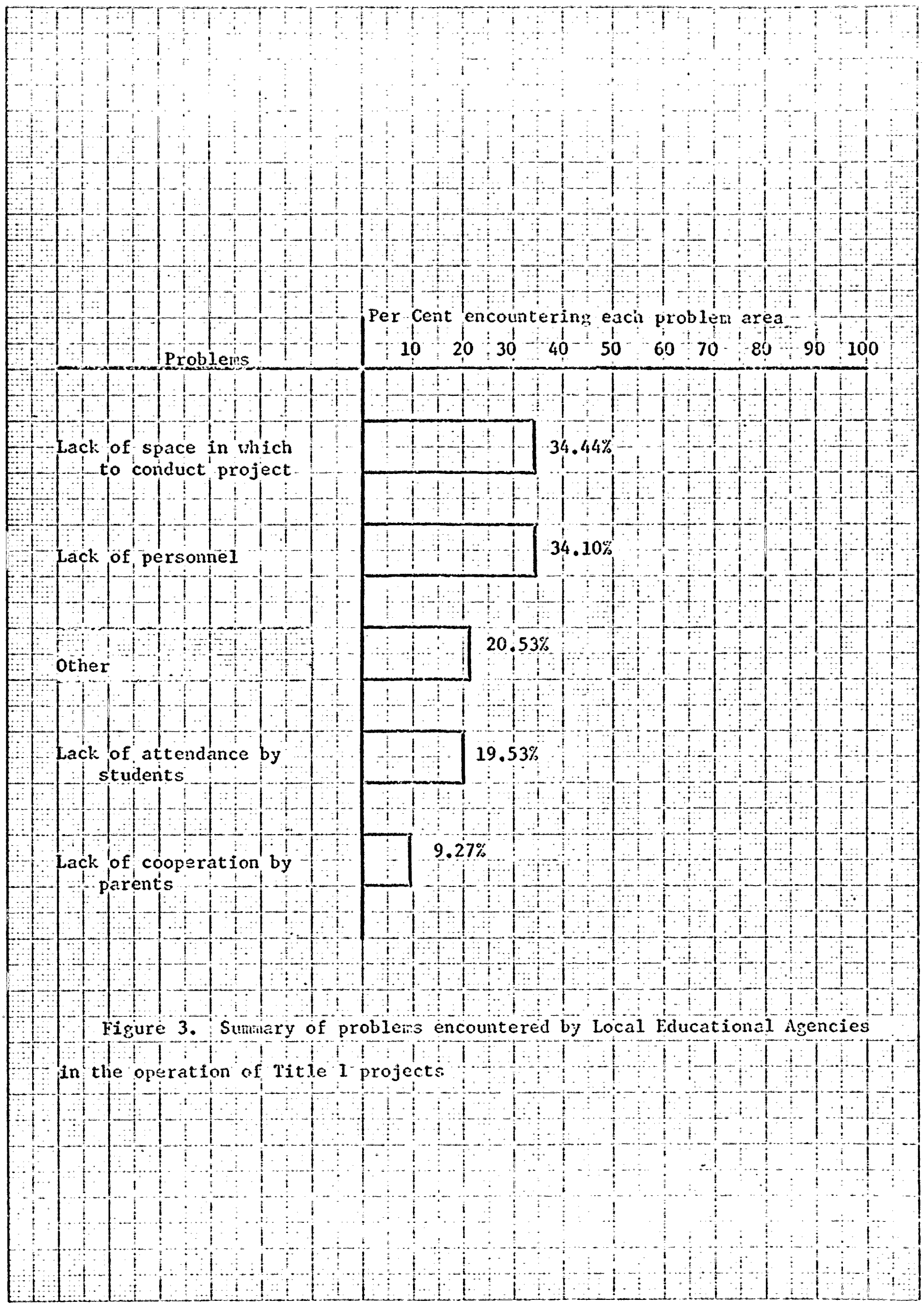


Figure 3. Summary of problems encountered by Local Educational Agencies in the operation of Title I projects

Table 12

Combined Rank Order for Types of Project Activities that Commonly Received Title I Grants: Instructional Areas and Project Services

Rank	Activity	f	Per Cent
1	Reading	180	25.00
2	Mathematics	71	9.86
3	Health Services	52	7.22
4	[a]Kindergarten	46	6.39
5	[a]English Language Arts	46	6.39
6	Summar School	44	6.11
7	Teacher Aides & other Subprofessional Help	41	5.69
8	Library Services	30	4.17
9	[a]Physical Education/ Recreation	25	3.47
10	[a]Cultural Enrichment --General	25	3.47
11	Curriculum Materials Centre Service	24	3.33
12	Science	18	2.50
13	Music	17	2.36
14	[a]Social Studies/ Social Sciences	16	2.22
15	[a]Speech Therapy	16	2.22
16	Guidance & Counseling	14	1.94
17	Industrial Arts/ Other Vocational	10	1.39
18	[a]Reductional of Class Size/Additional Teaching Staff	6	.83
19	[a]Food Services--Lunch	6	.83
20	[a]Business Education/ Office Occupations	5	.69
21	[a]Tutoring & After School Study Centre Services	5	.69
22	Inservice Training	4	.56
23	[a]Pre-Kindergarten	3	.42
24	[a]School Social Work Services (including Home-School Visiting)	3	.42
25	[a]General Elementary & Secondary Education	2	.28
26	[a]Special Education for the Handicapped (not including Speech Therapy)	2	.28
27	[a]Food Services--Other	2	.28
28	[a]Psychological Services	2	.28
29	[a]Attendance Services	2	.28
30	[a]Home Economics	1	.14
31	[a]Work-Study	1	.14
32	[a]Food Services--Breakfast	1	.14
33	[a]Waiver of Fees for Books, Supplies, & Materials	1	.14
34	[a]Transportation Services	1	.14

[a]Tied ranks.

Table 12a

Rank Order for Types of Project Activities that Most Often Received Title I Grants, by SMSA Classification: Instructional Areas

Instructional Areas	SMSA Classifications A Rank	A f	B Rank	B f	C Rank	C f	D Rank	D f	E Rank	E f	Overall Rank	Overall $\sum$ f
Art	---	---	---	---	6	1	7	7	13	4	10	12
Business Education/ Office Occupations	---	---	---	---	6	1	11	1	14	3	12	5
Cultural Enrichment --General	1	1	---	---	5	2	6	8	8	12	6	23
English Language Arts	---	---	---	---	4	4	3	13	6	22	4	39
Reading	1	1	---	---	1	25	1	31	1	101	1	158
Home Economics	---	---	---	---	---	---	11	1	---	---	15	1
Industrial Arts/ Other Vocational	---	---	---	---	---	---	11	1	---	---	15	1
Kindergarten	1	1	---	---	---	---	5	9	2	34	3	44
Mathematics	1	1	---	---	2	6	2	18	3	32	2	57
Music	---	---	---	---	6	1	7	7	9	9	8	17
Physical Education/ Recreation	---	---	---	---	6	1	10	4	7	14	7	19
Pre-Kindergarten	---	---	1	1	6	1	---	---	15	1	13	3
Science	---	---	---	---	6	1	8	6	11	7	9	14
Social Studies/ Social Sciences	---	---	---	---	---	---	9	5	11	7	10	12
General Elementary & Secondary Education	---	---	---	---	6	1	11	1	---	---	14	2
Speech Therapy	---	---	---	---	---	---	8	6	10	8	9	14

(Table continued on next page.)

Table 12a (Continued)

Rank Order for Types of Project Activities that Most Often Received Title I Grants, by SMSA Classification: Instructional Areas

Instructional Areas	SMSA Classifications A Rank	A f	B Rank	B f	C Rank	C f	D Rank	D f	E Rank	E f	Over-All Rank	Over-All f
Special Education for the Handicapped (not including Speech Therapy)	1	1	---	---	6	1	11	1	---	---	13	3
Summer School	---	---	---	---	3	5	4	10	5	24	4	39
Work-Study	---	---	---	---	---	---	11	1	---	---	15	1
Reduction of Class Size/ Additional Teaching Staff	---	---	---	---	---	---	11	1	12	5	11	6
Teacher Aides & Other Subprofessional Help	---	---	---	---	---	---	6	8	4	27	5	35

Table 12b

Rank Order for Types of Project Activities that Most Often Received Title I Grants, by SMSA Classification: Service Activities

Service Activity	SMSA Classifications A Rank	A f	B Rank	B f	C Rank	C f	D Rank	D f	E Rank	E f	Overall Rank	Overall f
Food Services--Lunch	---	---	---	---	2	1	4	2	3	4	4	7
Waiver of Fees for Books, Supplies, & Materials	---	---	---	---	---	---	---	---	6	1	8	1
Health Services	1	1	2	1	1	4	1	6	1	33	1	44
Psychological Services	1	1	2	1	2	1	---	---	---	---	7	3
School Social Work Services (including Home-School Visiting)	---	---	---	---	2	1	2	4	---	---	6	3
Attendance Services	---	---	---	---	---	---	---	---	4	3	6	3
Guidance & Counseling	---	---	---	---	2	1	4	2	3	2	7	4
Library Services	---	---	---	---	1	4	1	6	2	18	2	28
Curriculum Materials Centre Service	---	---	---	---	2	1	3	3	2	18	3	22
Tutoring & After School Study Centre Services	---	---	---	---	---	---	2	4	5	2	5	6
Transportation Services	---	---	---	---	---	---	5	1	---	---	8	1
Inservice Training	-1	1	1	2	---	---	4	2	6	1	5	6
Other	---	---	2	1	2	1	---	---	---	---	7	2

Aside from two strictly academic subjects (reading and mathematics) and one ancillary service (health), considerable adjustment in rank occurs as the data of Tables 12a and 12b are shifted to Table 12. For example, reading is ranked first for both instructional areas alone and the combined ranks, but such activities as science and the library services move from ninth and second to 12th and eighth places, respectively. It may also be observed that, of a total of 42 possible project activities, on 36 were selected by LEAs and figure in these Tables as funded projects. While all instructional area activities were used, six of 18 possible services were not operated: these include such activities as services and instructions for parents, clothing and additional food services, etc.

Methods of Increasing Staff for Title I Projects. This variable contains six subcategories. These data are shown in Table 13. Only a small number of the LEAs (1.66 per cent) used the sixth subcategory ("other"), and these generally specified some method that could have been subsumed under one of the five remaining subcategories. The absence of any qualitative data which may have indicated the efficiency of the methods selected by LEAs make evaluation of this aspect impossible. About one-half of the LEAs (50.33 per cent) made use of the personnel they already had, by employing them in overtime hours. It will be recalled that a relatively large number of LEAs (34.10 per cent) reported that lack of personnel was a central problem in the operation of their projects. In general, the data indicate that LEAs in SMSA Classification E (5) contributed much weight to the frequencies for both of these variables. It would appear that even the use of regular personnel in extra-assignment positions did not reduce the needs of these LEAs for additional staff.

Table 13

Methods used by LEAs to Reduce Personnel Shortages

Method	A Rank	A f	B Rank	B f	C Rank	C f	D Rank	D f	E Rank	E f	Over-all Rank	Over-all f
In-service training	1	1	1	1	2	10	4	19	4	45	4	76
Utilised present personnel in hours other than regular working hours	1	1	1	1	1	18	1	28	2	104	2	152
Summer school training arrangements	1	1	0	0	4	3	5	7	5	30	5	41
Recruited from local population	0	0	1	1	2	10	2	26	1	149	1	186
Recruited from outside of district	0	0	1	1	3	9	3	10	3	78	3	98
Other	0	0	0	0	5	1	6	1	6	3	6	5

Measuring Instruments. The psychometric instruments, including achievement tests, that were used by LEAs operating Title I projects are shown by frequency of use in Table 14. These measures are listed by type, for each school level, according to the frequencies with which they were employed. Of the eight standardized tests included in this Table, the Stanford Achievement Tests received the most usage, perhaps because, as with relatively few other instruments for educational achievement, the grade-range for this test is somewhat wide. The Iowa Test of Basic Skills was the next most popular test, followed in rank by the California Achievement, the Gates Reading Test, the Metropolitan Achievement Test, Iowa Silent Reading Test, the SRA Achievement Series, and the Gates Primary Reading Test.

Analysis of Effective Activities and Methods. Five project activities were selected from Subsample A, and were judged by two raters for effectiveness of project activity. The raters achieved 61 per cent agreement for their ratings. These projects were selected from a group which were judged effective by the LEAs by whom they were operated. The data that resulted from these ratings may be seen in Table 15. They are not present in rank order.

Seven project activities are listed in the Table; all do not receive the same rating for all grade-levels. Several general statements can be made, however, regarding factors in operation which seemed to have effected the outcomes of the projects. First, teacher-pupil ratios for the project activities appear to have been relatively smaller than those obtained during the regular school year; thus there were increased opportunities for individual instruction, for students to develop potential, and for observation of individual learning rates. There appear to have been during the operation of these projects facilities which were available for pupil use, such that required adult supervision but not operation, in the sense that the latter would have prevented students from independent exploration. Finally, the projects appear to have provided those types of experiences which the

Table 14

Measuring Instruments Used in Title I Projects, by Frequency of Use

Test	Subtest	Grade Level Pre-Kg.	Kg.	1-3	4-6	7-9	10-12	Total
California Achievement	Reading	---	---	13	19	17	11	60
	Arithmetic	---	---	13	17	12	6	48
	Language	---	---	16	20	20	12	68
Gates Reading Test		---	---	11	28	18	3	60
Gates Primary Reading Test		---	---	5	---	---	---	5
Iowa Silent Reading Test		---	---	---	10	8	---	18
Iowa Test of Basic Skills	Reading	---	---	23	57	32	---	112
	Arithmetic	---	---	6	22	15	1	44
	Language	---	---	8	24	14	---	46
	Spelling	---	---	---	3	3	---	6
	Study Skills	---	---	4	15	8	---	27
Metro-politan Achievement Test	Reading	---	---	11	29	11	4	55
	Arithmetic	---	---	7	6	5	2	20
	Language	---	---	2	6	3	2	13
	Social Studies	---	---	---	3	3	2	8
SRA Achieve-ment Series	Reading	---	---	---	3	7	1	11
	Arithmetic	---	---	---	---	2	---	2
	Language	---	---	---	---	2	---	2
Stanford Achievement Test	Paragraph Meaning	---	---	50	53	23	2	128
	Word Meaning	---	---	53	41	---	---	101
	Arithmetic	---	---	20	13	9	5	47
	Language	---	---	14	23	10	2	49
	Social Studies	---	---	7	11	3	2	23
	Science	---	---	---	12	8	2	22
	Spelling	---	---	14	20	10	2	46
	Study Skills	---	---	7	4	---	---	11

Table 15

Effective Activities and Methods

Project Activity	Early Years Preschool-Grade 3	Middle Years Grades 4 - 6	Adolescence Grades 7 - 12
Kindergarten	x		
Cultural Enrichment	x	x	x
Language Arts	x	x	x
Reading		x	x
Mathematics		x	x
Physical Education	x	x	x
Teacher Aides & Other Subprofessional Help	x	x	x

students could incorporate in terms of their own socioeconomic and/or psychosocial levels.

Tests, Attendance, and Test Results

Several 2-by-2 tables are included in this section. A portion of the data is repeated in another form, it being an elaboration of some of the material considered earlier (e.g., frequencies for the usage of standardised tests). Other subsections concern relatively new data.

Summary of Standardised Tests and Other Measures used in Title I Projects. In Table 16, measuring instruments for Title I projects (Subsample A) are classified according to type, and the frequency of use for each type is presented. Tables 16a through 16e are similarly organised, and present this data for each of the SMSA Classifications. This set of Tables may serve as adjunct to Table 14, since the former includes frequencies for nonstandardised test materials in addition to standardised instruments. The discussion which follows concerns the data of Table 16.

It can be seen that, for skill development activities within the standardised test group, achievement tests received the most use, probably as a function of the nature of most project activities (cf. Table 12). Standardised tests take precedence, also, over all other types of measures. Of the nonstandardised groups in Table 16, those constructed by teachers were used most, followed by a classification, "observer reports," by which LEAs reported the use of teacher observations made in the course in classroom periods. The differences, in terms of reliability and validity, or standardised and nonstandardised measuring instruments are well known; thus it is of interest to note that, in test usage for attitudinal and behavioural development activities, the attention paid to rigorous observation shown for skill development areas seems lacking.

The majority of the measures used in the second half of the Table are those that depend upon some kind of personal observation and selection in reporting. It would appear, then, that considerably more observer bias was introduced in

Table 16

Use of Standardised Tests and Other Measures for All SMSA

Measures	Skill Development Activities					Attitudinal and Behavioural Development Activities				
	Grade Levels									
	Pre-Kg.					Pre-Kg.				
	Kg.	1-3	4-6	7-9	10-12	Kg.	1-3	4-6	7-9	10-12
Standardised Tests & Inventories										
a. Achievement	15	151	159	151	70	---	2	3	1	2
b. Intelligence	17	47	37	45	17	---	2	1	1	2
c. Aptitude	11	6	5	18	24	1	---	---	2	---
d, Interest	2	0	2	2	7	1	---	2	2	---
e. Attitude	6	6	5	1	0	---	1	1	---	---
f. Other	15	16	24	22	7	---	---	---	---	1
Other Tests										
a. Locally Devised Tests	5	22	15	16	6	3	6	4	1	0
b. Teacher-made Tests	26	107	83	89	41	10	14	12	7	13
c, Other	3	20	27	14	3	---	---	---	---	---
Other Measures										
a. Teacher Ratings	4	32	22	19	14	6	33	35	33	23
b. Anecdotal Records	13	22	21	26	6	10	38	37	33	12
c. Observer Reports	32	44	64	32	27	29	66	68	81	41
d. Other	0	4	4	4	2	1	2	2	2	1

Table 16a

Use of Standardised Tests and Other Measures: SMSA A (1)

Measures	Skill Development Activities					Attitudinal and Behavioural Development Activities				
	Grade Levels									
	Pre-Kg. & Kg.	1-3	4-6	7-9	10-12	Pre-Kg. & Kg.	1-3	4-6	7-9	10-12
Standardised Tests & Inventories										
a. Achievement	---	1	1	1	1	---	---	---	---	---
b. Intelligence	---	1	1	1	1	---	---	---	---	---
c. Aptitude	---	---	---	---	---	---	---	---	---	---
d. Interest	---	---	---	---	---	---	---	---	---	---
e. Attitude	---	---	---	---	---	---	---	---	---	---
f. Other	---	1	1	1	---	---	---	---	---	---
Other Tests										
a. Locally Devised Tests	---	---	---	---	---	---	---	---	---	---
b. Teacher - made tests	---	1	1	1	1	---	---	---	---	---
c. Other	---	---	---	---	---	---	---	---	---	---
Other Measures										
a. Teacher ratings	---	---	---	---	---	---	1	1	1	1
b. Anecdotal records	---	---	---	---	---	---	---	---	---	---
c. Observer reports	---	---	---	---	---	---	---	---	---	---
d. Other	---	---	---	---	---	---	---	---	---	---

Table 16b

Use of Standardised Tests and Other Measures: SMSA B (2)

Measures	Skill Development Activities					Attitudinal and Behavioural Development Activities				
	Grade Levels									
	Pre-Kg. -Kg.	1-3	4-6	7-9	10-12	Pre-Kg. -Kg.	1-3	4-6	7-9	10-12
Standardised Tests & Inventories										
a. Achievement	1	---	---	---	---	---	---	---	---	---
b. Intelligence	1	---	---	---	---	---	---	---	---	---
c. Aptitude	1	---	---	---	---	---	---	---	---	---
d. Interest	---	---	---	---	---	---	---	---	---	---
e. Attitude	---	---	---	---	---	---	---	---	---	---
f. Other	---	---	---	---	---	---	---	---	---	---
Other Tests										
a. Locally Devised Tests	1	---	---	---	---	---	---	---	---	---
b. Teacher made Tests	---	---	---	---	---	---	---	---	---	---
c. Other	---	---	---	---	---	---	---	---	---	---
Other Measures										
a. Teacher Ratings	---	---	---	---	---	1	---	---	---	---
b. Andcdotal Records	---	---	---	---	---	---	---	---	---	---
c. Observer Reports	---	---	---	---	---	1	---	---	---	---
d. Other	---	---	---	---	---	---	---	---	---	---

Table 16c

Use of Standardised Tests and Other Measures: SMSA C (3)

Measures	Skill Development Activities					Attitudinal and Behavioural Development Activities				
	Grade Levels									
	Pre-Kg. -Kg.	1-3	4-6	7-9	10-12	Pre-Kg. -Kg.	1-3	4-6	7-9	10-12
Standardised Tests & Inventories										
a. Achievement	---	22	24	18	10	---	---	---	---	---
b. Intelligence	---	4	4	4	---	---	---	---	---	---
c. Aptitude	---	---	---	2	4	---	---	---	---	---
d. Interest	---	---	---	---	2	---	---	---	---	---
e. Attitude	---	---	---	---	---	---	1	1	---	---
f. Other	2	---	4	4	4	---	---	---	---	---
Other Tests										
a. Locally Devised Tests	---	4	4	2	---	---	2	1	---	---
b. Teacher-made Tests	2	14	12	12	6	---	2	2	---	---
c. Other	1	2	4	4	1	---	---	---	---	---
Other Measures										
a. Teacher Ratings	2	6	8	4	4	4	18	20	20	12
b. Anecdotal Records	---	6	6	2	---	---	2	2	2	---
c. Observer Reports	2	2	4	4	1	---	10	14	14	10
d. Other	---	---	2	3	2	1	---	1	2	1

Table 16d

Use of Standardised Tests and Other Measures: SMSA D (4)

Measures	Skill Development Activities					Attitudinal and Behavioural Development Activities				
	Grade Levels									
	Pre-Kg. -Kg	1-3	4-6	7-9	10-12	Pre-Kg. -Kg,	1-3	4-6	7-9	10-12
Standardised Tests & Inventories										
a. Achievement	---	18	16	16	6	---	---	---	---	---
b. Intelligence	2	6	2	2	---	---	---	---	---	---
c. Aptitude	---	---	---	4	---	---	---	---	2	---
d. Interest	---	---	2	---	---	---	---	2	2	---
e. Attitude	---	4	4	1	---	---	---	---	---	---
f. Other	---	2	4	5	1	---	---	---	---	---
Other Tests										
a. Locally Devised Tests	---	10	4	4	---	---	---	---	---	---
b. Teacher-made Tests	---	12	10	11	6	---	---	2	---	---
c. Other	---	4	3	6	2	---	---	---	---	---
Other Measures										
a. Teacher Ratings	2	16	14	15	10	1	14	14	12	10
b. Anecdotal Records	1	6	9	7	3	---	6	5	3	2
c. Observer Reports	2	12	10	14	8	1	6	9	7	6
d. Others	---	4	2	1	---	---	2	1	---	---

Table 16e

Use of Standardised Tests and Other Measures: SMSA E (5)

Measures	Skill Development Activities					Attitudinal and Behavioural Development Activities				
	Grade Levels									
	Pre-Kg. -Kg.	1-3	4-6	7-9	10-12	Pre-Kg. -Kg.	1-3	4-6	7-9	10-12
Standardised Tests & Inventories										
Achievement	14	110	118	116	42	---	2	3	1	2
b. Intelligence	14	36	30	38	16	---	2	1	1	2
c. Aptitude	10	6	5	12	16	1	---	---	---	---
d. Interest	2	6	5	12	16	1	---	---	---	---
e. Attitude	6	2	1	---	---	---	---	---	---	---
f. Other	12	13	15	12	2	---	---	---	---	---
Other Tests										
a. Locally Devised Tests	4	8	7	10	6	1	4	3	1	---
b. Teacher made Tests	24	80	60	65	28	10	12	8	7	5
c. Other	7	12	20	4	---	---	---	---	---	---
Other Measures										
a. Teacher Ratings	30	40	40	36	20	25	40	60	60	30
b. Anecdotal Records	12	10	6	17	3	10	30	30	28	10
c. Observer Reports	28	30	50	14	18	28	50	45	60	25

Title I projects in the area of general personal adjustment than for skill development. Since the effect of personality functioning upon learning ability is fairly obvious, one might search for some reason for the differences in test usage. There could have been, for example/insuffieient staff tbat project administrators were reluctant to assign responsibility for administration, scoring, and interpretation of any of the many suitable personality inventories available.

Effectiveness for Types of Projects. Two Project activites were selected for study here. Projects were classified as having achieved substantial or some progress in the course of their operation. These data are shown in Tables 15 and 15a. It may be seen that the majority of LEAs indicated that their projects were substantially effective. Differences in totals for Reading, vs. Arithmetic are the result of there being more Reading than any other type of instructional area project operated.

Average Daily Attendance and Average Daily Membership Rates. The average daily attendance and average daily membership rates were compared for Title I and non-Title I schools. These data may be seen in Table 18. While there does not appear to be much variability between Title I and non-Title I schools for the years 1963-1966, it is suggested that such records might in future be used as predictors of attendance (via, e.g., a regression equation). It would appear that this variable, like those for the three succeeding Subsections, could not be used to discriminate the effectiveness of various types of projects

Table 15

Effectiveness for Types of Projects: Reading--General

School Level	Primary Objective[a] Substantial Progress Achieved	Primary Objective[a] Some Progress	Secondary Objective[b] Substantial Progress Achieved	Secondary Objective[b] Some Progress
Preschool	----	----	----	----
Grades 1 - 3	20	5	20	5
Grades 4 - 6	49	20	49	20
Grades 7 - 9	53	10	53	10
Grades 10 - 12	15	6	15	6
Totals	137	41	137	41

[a]To increase performance on standardised tests.

[b]To improve classroom performance in reading.

Table 15a

Effectiveness for Types of Projects: Arithmetic--General

School Level	Primary Objective[a]		Secondary Objective[b]	
	Substantial Progress Achieved	Some Progress	Substantial Progress Achieved	Some Progress
Preschool	----	----	----	----
Grades 1 - 3	2	3	2	3
Grades 4 - 6	14	10	14	10
Grades 7 - 9	16	11	16	11
Grades 10 - 12	4	6	4	6
Totals	36	30	36	30

[a] To increase performance in standardised tests.

[b] To improve classroom performance in reading.

Table 18

Comparison of Title I Project Schools to Non-Title I Schools for Average Daily Attendance and Average Daily Membership

	1963 - 1964				1964 - 1965				1965 - 1966			
	Title I Schools		Non-Title I Schools		Title I Schools		Non-Title I Schools		Title I Schools		Non-Title I Schools	
Grade	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM
12	68.9	75.7	69.0	70.0	88.5	94.6	63.3	81.5	80.1	87.2	52.5	56.7
11	74.2	79.5	71.0	72.0	86.7	92.6	77.0	79.0	84.7	91.2	40.8	44.0
10	73.7	78.8	74.0	76.0	91.4	97.9	86.5	90.0	86.1	90.4	37.3	40.6
9	73.5	78.4	88.1	91.3	87.7	93.0	71.3	74.1	81.7	90.3	91.1	96.7
8	64.3	69.2	79.1	82.3	82.4	88.2	93.3	98.4	73.2	79.0	56.2	64.9
7	64.2	69.8	63.9	66.2	77.7	123.9	87.9	92.9	69.8	80.1	107.2	119.7
6	61.4	66.7	63.0	65.6	67.6	72.8	133.8	139.5	61.8	67.1	140.9	152.2
5	63.1	70.0	61.2	64.3	69.1	75.6	130.6	136.2	62.6	68.6	139.3	146.3
4	67.7	73.7	65.2	70.7	73.8	79.8	130.0	136.1	68.3	74.4	162.4	171.1
3	72.4	78.1	50.8	53.3	76.2	82.7	145.0	160.7	71.0	76.9	199.1	213.5
2	72.2	77.8	58.8	61.8	77.9	83.5	166.4	174.4	73.9	79.9	202.9	214.0
1	77.9	83.9	56.5	59.2	83.4	88.8	183.2	191.2	81.6	92.7	232.5	247.4
Average	69.5	75.1	66.7	69.4	80.2	89.5	97.4	121.6	74.6	81.5	121.9	130.6
Per Cent: ADA of ADM	92.0		96.0		89.7		80.3		91.5		93.3	

since the variability is so small.

Dropout Rates. In Table 19, Title I and non-Title I schools are compared for dropout rates (holding power). For the years 1963-1966, Title I schools have consistently a greater rate of dropouts than do non-Title I schools. The discrepancies between numbers of schools for which LEAs made reports must be noted (i.e., a ratio of 15: 1 in favour of Title I schols); this factor alone may account for the variance observed between the two groups.

Students Continuing Education Beyond High School. Table 20 gives a comparison for Title I and non-Title I schools in percentage of students continuing their education beyond high school. It would appear that, in the cells where comparisons are possible (i.e., where both Title I and non-Title I schools are reported), a fairly large number of schools that operated Title I projects also had students who continued their education. There appears a slight increas in the number of students continuing their education for the years 1965-1966, as opposed to the earlier years. Since, however, the students in question had Title I projects available to them for only the space of one school year, and since it is likely that their decisions whether or not to continue education wase dependent upon several factors other than their participation in a Title I project, it would be inadvisable to establish continuing education and participation in a Title I project in a one-to-one relation until much more concrete evidence can be adduced.

Results for Frequently used Tests in Skill Subject Areas. The LEAs were requested to report the results of standardised tests scores by showing the number of cases falling within selected percentile bands. A percentile is a point on a 100-point scale which indicates the percentage of scores falling below that point.

While the method of reporting achievement scores in terms of percentiles is widely used, it has certain disadvantages. Percentiles are not equivalent units

Table 19

Comparison of Title I Project Schools to Non-Title I Schools in Dropout Rates (Holding Power)

Grade	1963 - 1964		1964 - 1965		1965 - 1966	
	Title I Schools	Non-Title I Schools	Title I Schools	Non-Title I Schools	Title I Schools	Non-Title I Schools
12	5.43	----	5.07	----	4.33	1.00
11	4.92	1.00	4.53	1.00	5.46	2.00
10	4.53	----	3.92	----	4.86	1.00
9	3.71	----	3.21	----	3.66	2.00
8	2.18	----	2.72	----	3.33	----
7	2.14	----	2.75	----	2.15	1.00
Number of Schools	15	1	15	1	15	4
Total Number of Students	27,985	229	33,766	----	108,722	4,137
Number of Droupouts	855	3	1,172	2	3,227	52

Table 20

Comparison of Title I Project High Schools to Non-Title I High Schools in Percentage of Students Continuing Education beyond High School

Graduates and Schools	1963 - 1964		1964 - 1965		1965 - 1966	
	Title I Schools	Non-Title I Schools	Title I Schools	Non-Title I Schools	Title I Schools	Non-Title I Schools
Total Number of Graduates	8847	353	11,384	402	16,977	204
Mean Size of Graduating Class	75.62	58.83	81.90	67.00	82.81	102.00
Number of Schools Having Continuing Graduates: Per Cent						
0 - 10%	8	-----	7	-----	6	-----
11 - 20%	11	-----	11	-----	14	-----
21 - 30%	23	1	28	-----	38	1
31 - 40%	18	2	25	-----	46	1
41 - 50%	35	2	42	3	53	-----
51 - 60%	12	-----	16	2	27	-----
61 - 99%	10	1	10	1	21	-----
Number of Schools	117	6	139	6	205	2

and tend to exaggerate differences at the center of the distribution (Wert, et al., 1950). For example, it takes a wide range of scores to move from one percentile rank to another at the ends of the distribution, but the change of a single score point may change the percentile rank values in the middle of the distribution by several points. Percentiles do, however, reveal something about the position held by an individual, a class, or school with respect to a specified group.

The specified groups with which the Title I projects were compared are the Standardization Groups used by the test constructors in establishing norms for their respective achievement tests. A frequent procedure for test constructors is to transform the scores of the Standardization Groups so that they approximate the distribution of a normal curve (Ferguson, 1959; Lindquist, 1959; Chronback, 1960).

Since the scores of the Title I groups were compared with the scores of the Standardization groups, it might be well to present briefly the relation that exists between percentile points and a normal distribution.

Every percentile point corresponds to a point on the base line of a normal curve (Ferguson, 1959). The area covered by $\pm$ 3 standard deviation units from the mid-point of the normal distribution contains approximately 100 per cent of the cases. The 50th percentile point corresponds to the mid-point (measure of central tendency) of the distribution. Approximately 50 per cent of the scores fall above this point and 50 per cent fall below. The 16th and 84th percentile points closely approximate the points which make off 1 standard deviation unit above and below the measure of central tendency. Approximately 34 per cent of the scores fall within the area covered. Thus, in the area covered by $\pm$ 1 standard deviation unit from the midpoint, there may be found approximately 68 percent of the cases. The remaining areas of the distribution enclosed by the 1st and 15th percentile points on the lower end of the distribution and the 85th and 99th percentile points on the upper

end contains approximately 15 per cent of the cases at either end of the distribution. These and other points are readily obtained from any table or areas under the normal curve.

Two types of comparison were made with the scores of the Title I students.

1. Where pre-and posttest scores were available, the distriubtions were compared to determine the extent and direction of change. These data were drawn from Subsample B, and may be seen in Tables 21 and 21a.

2. The distributions of the scores made by the Title I groups on the posttest were compared with a normal distribution composed of the scores obtained by the Standardisation Groups. It must be noted that conclusions which may be drawn from such comparison are valid only to the extent that the distribution for the Standardisation Group approximates a normal distribution. These data were drawn from Subsample A, and may be seen in Figures 4 through 9.. The expected distribution for all standardised tests and their subtests is at 50 per cent above and 50 per cent below the midpoint of the distribution.

Table 21

Objective Measures of Educational Attainment: Pre-and Posttest results for Subsample B; California Achievement Test

Subtest	Grade	Length of Time Between Tests	N	(A) Pretest Below 50th Percentile n	(A) Pretest Below 50th Percentile Per Cent	(B) Pretest Above 50th Percentile n	(B) Pretest Above 50th Percentile Per Cent	(C) Posttest Below 50th Percentile n	(C) Posttest Below 50th Percentile Per Cent	(D) Posttest Above 50th Percentile n	(D) Posttest Above 50th Percentile Per Cent	Per Cent Gain or Loss, Cols D - B
Reading	1 - 3	6 - 10	71	35	49.29	36	50.70	25	35.21	46	64.78	14.08
	4 - 6	6 - 10	54	40	74.07	14	25.93	30	55.56	24	44.44	23.51
	7 - 9	6 - 10	39	25	65.79	14	36.84	20	52.63	19	50.00	13.16
	10 - 12	6 - 10	16	8	50.00	8	50.00	7	43.75	9	56.25	6.25
Arithmetic	1 - 3	6 - 10	71	37	52.11	34	47.89	24	33.80	47	66.20	18.31
	4 - 6	6 - 10	54	23	42.59	31	57.41	20	37.04	34	62.96	5.55
	7 - 9	6 - 10	39	20	52.63	19	47.37	19	47.37	20	52.63	5.26
	10 - 12	6 - 10	16	10	62.50	6	37.50	6	37.50	10	62.50	25.00
Language	1 - 3	6 - 10	71	30	42.25	41	57.75	20	28.17	51	71.83	14.08
	4 - 6	6 - 10	54	37	68.52	17	31.48	30	55.56	24	44.44	12.96
	7 - 9	6 - 10	39	21	55.26	18	47.37	21	55.26	18	47.37	0
	10 - 12	6 - 10	16	7	43.75	9	56.25	5	31.25	11	68.75	12.50
Spelling	1 - 3	6 - 10	71	34	47.89	37	52.11	22	30.99	49	69.01	16.90
	4 - 6	6 - 10	54	27	50.00	27	50.00	22	40.74	32	59.26	9.26
	7 - 9	6 - 10	39	22	57.89	17	44.74	27	7k,05	12	28.95	-15.79
	10 - 12	6 - 10	16	7	43.75	9	56.25	8	50.00	8	50.00	- 6.25

Table 21a

Objective Measures of Educational Attainment: Pre- and Posttest results for Subsample B; Metropolitan Achievement Test

Subtest	Grade	Weeks Length of Time Between Tests	N	Pretest (A) Below 50th Percentile n	Pretest (A) Below 50th Percentile Per Cent	Pretest (B) Above 50th Percentile n	Pretest (B) Above 50th Percentile Per Cent	Postest (C) Below 50th Percentile n	Postest (C) Below 50th Percentile Per Cent	Postest (D) Above 50th Percentile n	Postest (D) Above 50th Percentile Per Cent	Per Cent Gain or Loss, Cols D - B
Total Arithmetic	1 - 3	16 - 20	76	48	63.15	28	36.84	40	52.63	36	47.37	10.43
	4 - 6	16 - 20	110	71	62.83	38	33.63	60	53,10	50	46.90	13.27
	7 - 9	16 - 20	89	61	68.54	28	31.46	58	65.17	31	34.83	3.37
	10 - 12	16 - 20	49	37	75.51	12	24.49	35	71.43	20	28.43	16.33
Total Reading	1 - 3	16 - 20	76	44	57.89	32	42.11	32	40.79	45	59.21	17.10
	4 - 6	16 - 20	109	63	58.33	46	42.59	59	54.63	50	46.30	3.71
	7 - 9	16 - 20	89	61	68.54	28	31.46	57	64.04	32	35.96	9.50
	10 - 12	16 - 20	50	36	72.00	14	28.00	35	70.00	15	30.00	2.00
Science	4 - 6	16 - 20	69	30	43.47	39	56.52	30	43.47	39	56.52	0
	7 - 9	16 - 20	89	72	80.89	17	19.39	57	64.04	32	35.95	16.58
	10 - 12	16 - 20	49	40	81.63	9	18.37	35	71.43	14	28.57	10.20
Social Studies	4 - 6	16 - 20	69	34	49.27	35	50.72	30	43.48	39	56.52	5.80
	7 - 9	16 - 20	89	67	76.00	22	25.00	61	69.31	28	31.82	6.82
	10 - 12	16 - 20	49	44	89.79	5	10.20	41	83.67	8	16.33	6.13
Spelling	1 - 3	16 - 20	76	43	56.58	33	43.42	28	36.84	48	63.16	19.74
	4 - 6	16 - 20	110	74	67.27	36	32.72	61	55.45	49	44.55	11.83
	7 - 9	16 - 20	89	56	63.64	33	37.50	50	56.81	39	44.32	6.82
	10 - 12	16 - 20	50	42	84.00	7	14.00	38	76.00	12	24.00	10.00

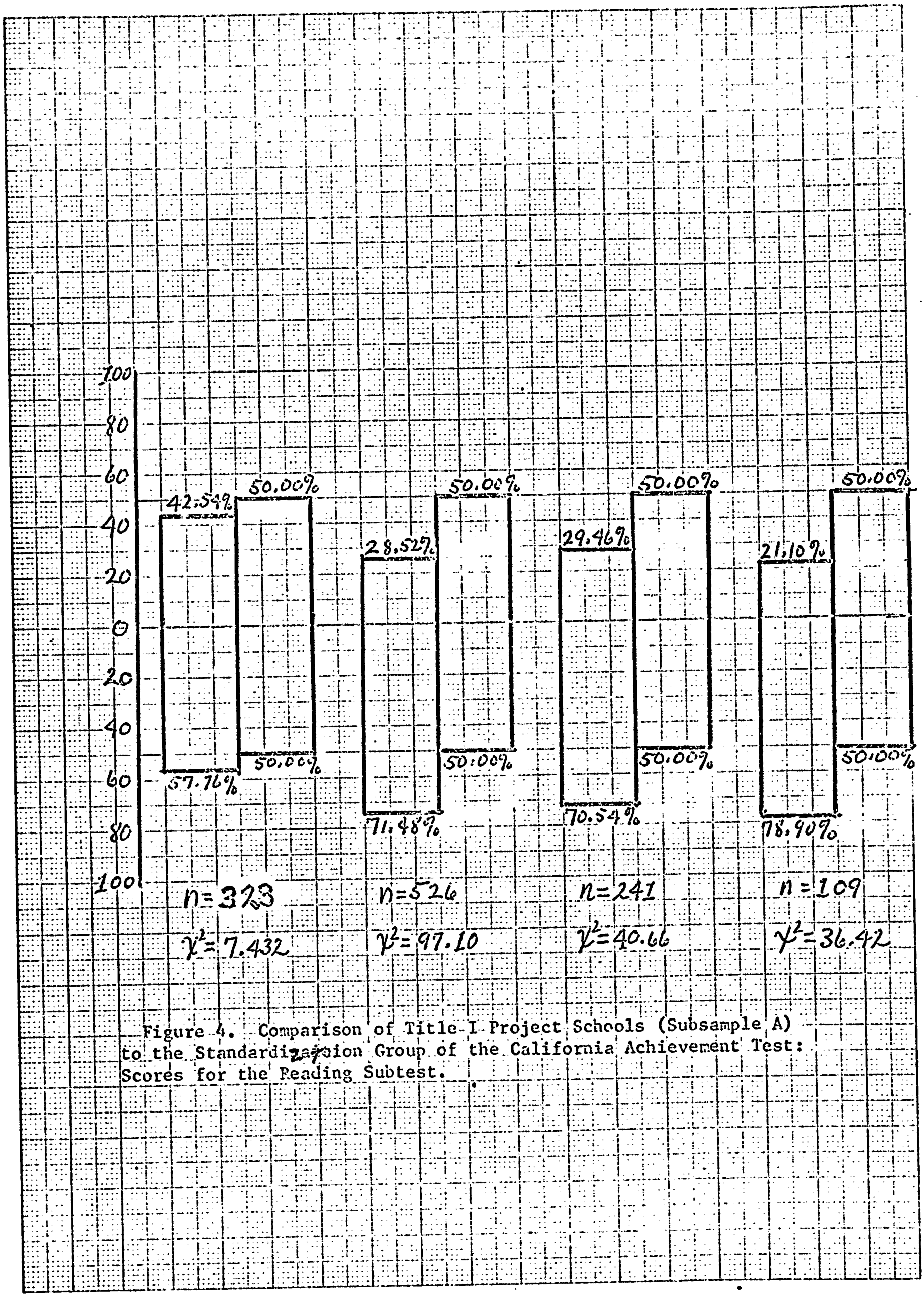


Figure 4. Comparison of Title I Project Schools (Subsample A) to the Standardization Group of the California Achievement Test: Scores for the Reading Subtest.

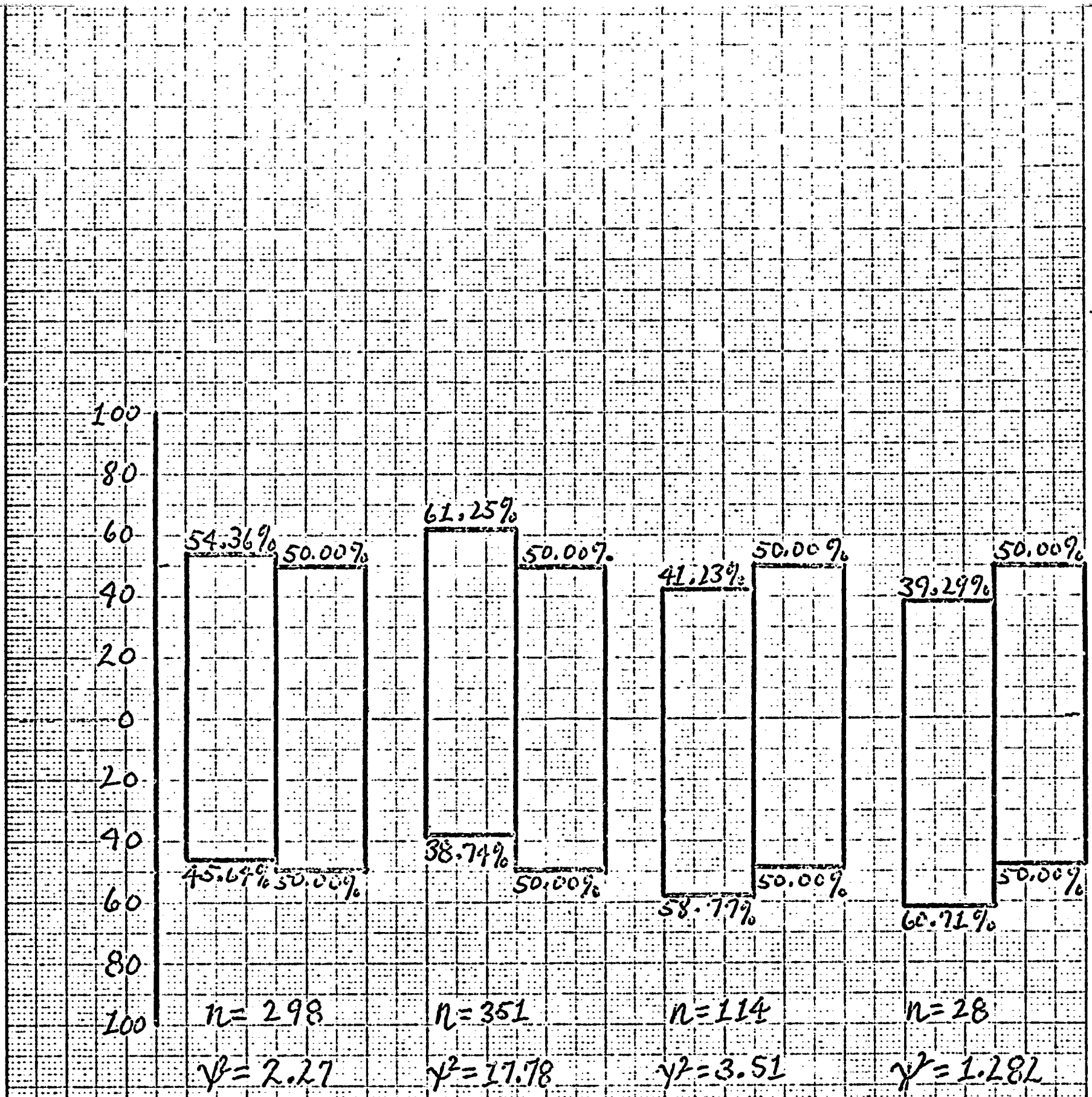


Figure 5. Comparison of Title I Project Schools (Subsample A) to the Standardisation Group of the California Achievement Test Scores for the Arithmetic Subtest.

10 Millimeters to the Centimeter

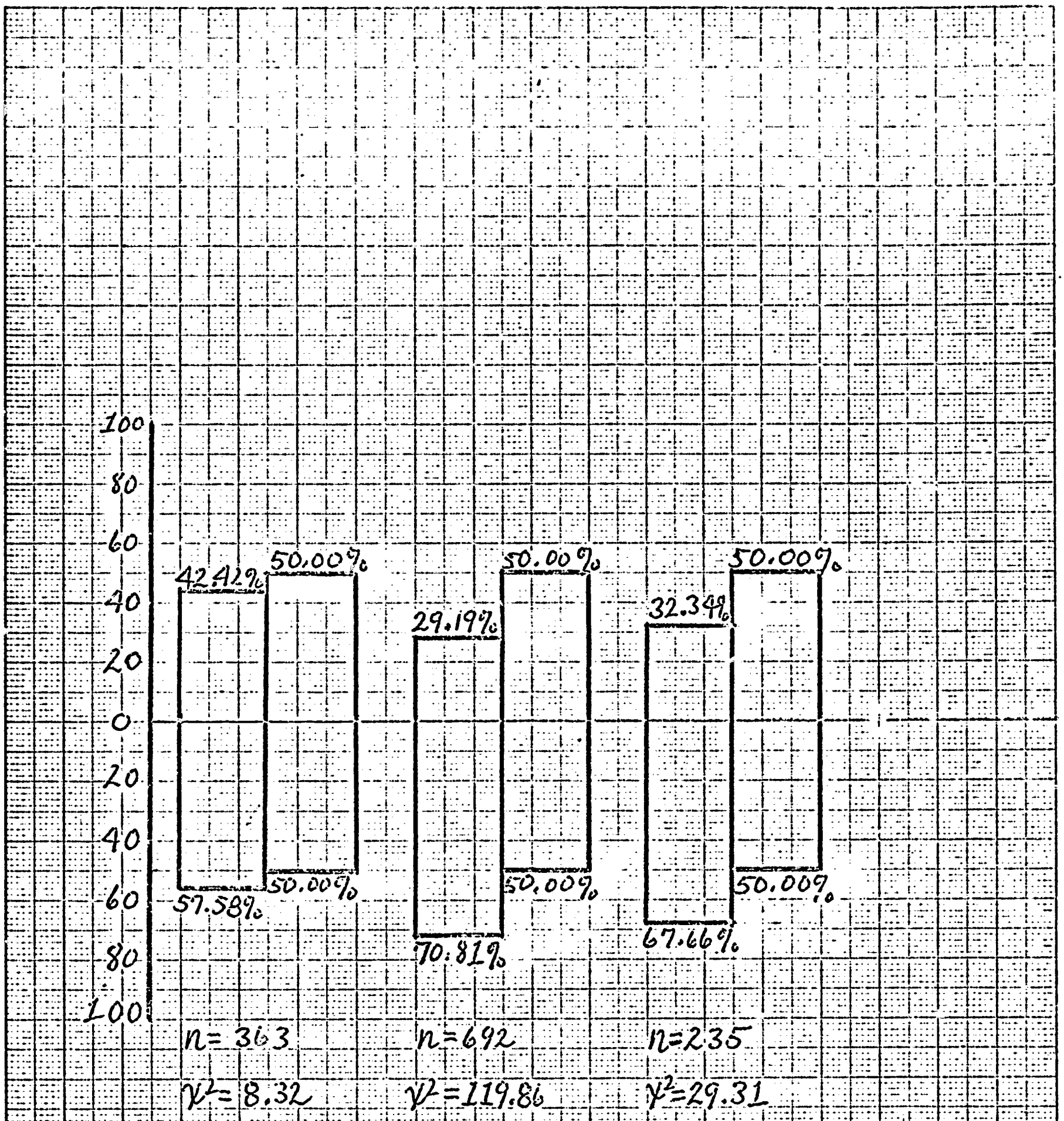


Figure 6. Comparison of Title I Project Schools (Subsample A) to the Standardisation Group of the Iowa Test of Basic Skills, Scores for the Reading Subtest.

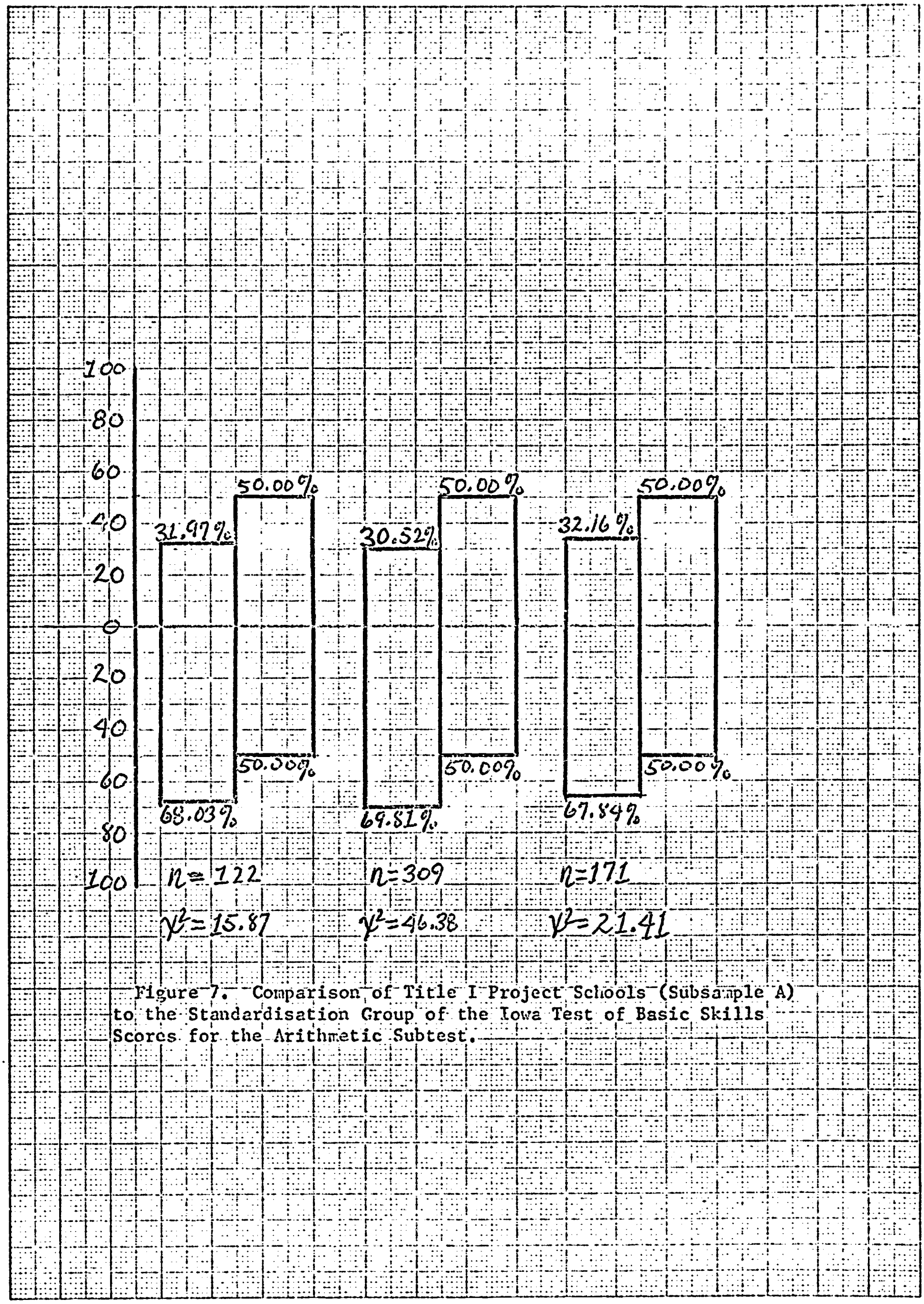


Figure 7. Comparison of Title I Project Schools (Subsample A) to the Standardisation Group of the Iowa Test of Basic Skills Scores for the Arithmetic Subtest.

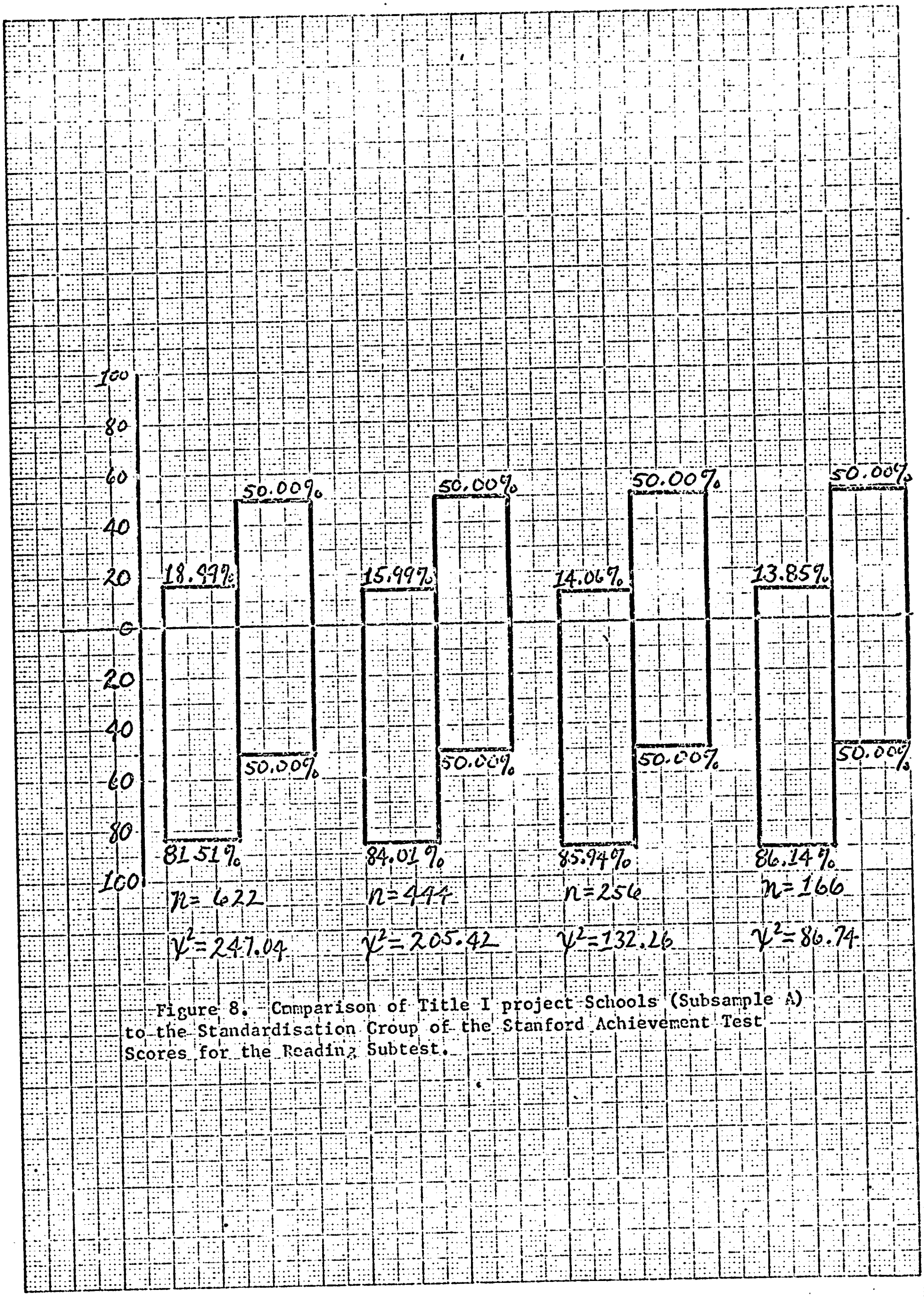


Figure 8. Comparison of Title I project Schools (Subsample A) to the Standardisation Croup of the Stanford Achievement Test Scores for the Reading Subtest.

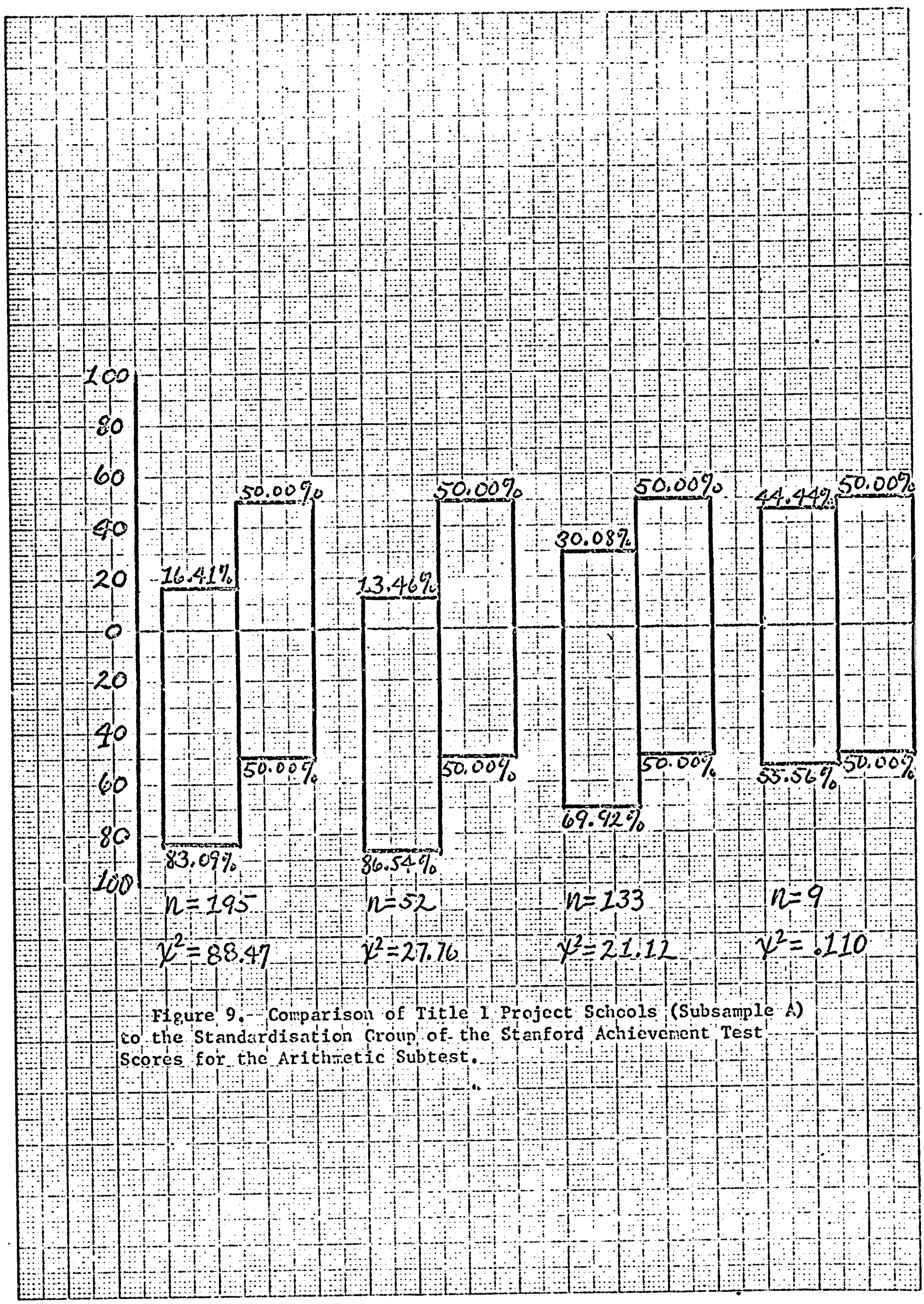


Figure 9.-- Comparison of Title 1 Project Schools (Subsample A) to the Standardisation Group of the Stanford Achievement Test Scores for the Arithmetic Subtest.

A P P E N D I X B

Supplementary Forms to Part I, Basic Data

1966 – 67

SUPPLEMENTARY FORMS

TO

PART I, BASE DATA

Title I, PL 89-10

Name of School District _____

County _____

Code No. _____

Name of Authorized Representative _____

Address _____
STREET CITY

Telephone Number _____

Signature of Authorized Representative _____

Date Supplementary Forms submitted _____

Identification of School Attendance Areas in Which Projects May Be Located. (See page 23 of the U.S. Guidelines.)

A. Totals for the LEA – Use 1966 data –

1. Number of Children – Total . . . . . _____
   Check One: ☐ total resident
   ☐ total enrolled

2. Number of Children from Low-Income Families . . . . . _____
   Check One: ☐ total low-income resident
   ☐ total low-income enrolled

3. Total Number of School Attendance Areas . . . . . _____

4. Average Percentage Concentration . . . . . _____

5. Average Numerical Concentration . . . . . _____

B. School Attendance Areas With High Concentrations of Children from Low-Income Families:

Public School (1)	NUMBER OF CHILDREN		Numerical Rank (4)	Percentage Low-Income Children (5)	Percentage Rank (6)
	Total (2)	Low-Income (3)			
Elementary School					
Junior High School					
High School					

C. Sources and Types of Data Used in Determining the Number of Children from Low-income Families.

The information used in determining the estimated number of children from low-income families used in items A and B above was as follows:

TITLE I PROGRAM DESIGN
Step 1

Diagnosis

1. Testing

Use standardized achievement test(s) with national norms. Tests must be administered within the last six months. The school district should retain these records in the school files

Name of Test	Form	Date Administered

2. Educational Deprivation

A. List below the number of educationally deprived children in all eligible attendance areas with achievement test scores lower than that normally expected for children of their age. See page 21 of the U.S. Guidelines. The district should have the data available on each individual eligible attendance area to substantiate proposed projects.

	Primary	Intermediate	Jr. High	Sr. High	Total
Reading					
Language Arts					
Arithmetic					
Social Studies					
Science					
_____					
_____					
_____					
_____					

B. List below the number of educationally deprived children in eligible attendance areas who are handicapped and in need of special educational assistance.

Type of handicap	Primary	Intermediate	Jr. High	Sr. High	Total
_____					
_____					
_____					
_____					

TITLE I PROGRAM DESIGN
Step 2

Special Educational Needs

List in column 2 the basic instructional needs of the educationally deprived children as determined by a study of the "Diagnosis" in Step 1. List in column 3 the supplemental needs and in column 4 the supportive needs necessary to accomplish the basic instructional needs. In column 1 rank the needs in priority order (1, 2, 3,) in accordance with the greatest need of the educationally deprived children. See page 22 of the U.S. Guidelines.

School Level	Priority by Number *Col. 1*	Basic Instructional Needs *Col. 2*	Supplemental Needs (Guidance, Health, Social, Cultural, etc.) *Col. 3*	Supportive Needs (Transportation, Food, Clothing, etc.) *Col. 4*
School				
imary				
rmediate				
r. High				
High				
ol				

TITLE I PROGRAM DESIGN
Step 3

Overall Title I Activities

After completion of Steps 1 and 2, carefully review the information recorded and design a total program of eligible Title I activities to meet the most pressing of the indicated educational needs of the educationally deprived children in eligible attendance areas.

A local educational agency may submit as many projects as seems appropriate to its particular circumstances. A project may provide many activities for one school or one activity for many schools. Some projects will by their very nature tend to benefit all children in a school, whether they are educationally deprived or not. Examples would be projects which devote substantial resources to reduction in class size; to the addition of guidance counselors, teacher aides, and librarians; to the acquisition of classroom equipment; or to the inservice training of elementary school teachers. Projects of this type are approvable only in attendance areas that are overwhelmingly impacted by educationally deprived children. See pages 29 and 30 of the U.S. Guidelines.

Main Activities	Brief Description of Activity	No. of Edu. Dept. Children to be Involved	Grade Span	Additional Prof. Staff Needed	Additional Non-Prof. Staff Needed	Total Estimated Cost
I						
II						
III						
IV						
PROGRAM TOTALS						

COMMUNITY ACTION PROGRAMS OPERATING WITHIN APPLICANTS DISTRICT

A. Responsible Community Action Agency _____

B. Applicant's Relationship to Above Agency _____

C. Description of C.A.A. Projects

Brief Description of C.A.A. Project	Sponsoring Organization	Number of Children Involved	Grade Span	Certificated Staff Involved	Other Staff Involved
TOTALS					

DISSEMINATION OF SIGNIFICANT INFORMATION

Following are the specific procedures and activities to be undertaken for dissemination to all teachers and administrators significant information derived from educational research and demonstration projects and for the adoption of promising practices.

A P P E N D I X C

Listing of regional CAA agencies

State of Missouri
OFFICE OF URBAN AFFAIRS
801 Jefferson Building
Jefferson City, Missouri

Warren E. Hearnes
Governor

Philip V. Maher
Director

MISSOURI COMMUNITY ACTION AGENCIES

BOLLINGER, CAPE AND PERRY COUNTIES HUMAN RESOURCES CORPORATION

Counties : Bollinger, Cape Girardeau, Perry

President : Paul Hutchings, Leopold, Missouri
Program Director :
Telephone :

CENTRAL MISSOURI COUNTIES HUMAN DEVELOPMENT CORPORATION

Counties : Audrain, Callaway, Cooper, Cole, Howard, Moniteau, Osage, Randolph, Boone

President : Rabbi Abraham Pimontel, 1107 University Ave., Columbia, Mo.
Executive Director: Gerry Westwood, 617 E. Walnut, Columbia, Missouri
Telephone : (314) 443-8706

CENTRAL OZARK ECONOMIC OPPORTUNITY CORPORATION

Counties : Howell, Oregon, Texas

President : Harold Henry, Court House, West Plains, Missouri
Program Director :
Telephone :

DANIEL BOONE HUMAN DEVELOPMENT CORPORATION

Counties : Lincoln, Montgomery, St. Charles, Warren

President : Reverend Paul R. Stock, 3041 Flamingo Dr., St. Charles, Mo.
Program Director : William D. Angel, 1031 West College, Troy, Missouri
Telephone : (314) 528-7670

DELTA AREA ECONOMIC OPPORTUNITY CORPORATION

Counties : Dunklin, Mississippi, New Madrid, Pemiscot, Scott Stoddard

President : James Dement, Holcomb, Missouri
Program Director : Earl Williams, 308 E. Main, Portageville, Missouri
Telephone : (314) 379-3018

DOW TRI COUNTY CORPORATION

Counties : Douglas, Ozark, Wright

President : Fred. O. Lethco, Ava, Missouri
Program Director: Charles Williams, Court House, Ava, Missouri
Telephone : (417) 683-2884

ECONOMIC OPPORTUNITY CORPORATION OF GREATER ST. JOSEPH

Counties : Andrew, Buchanan, Clinton, DeKalb

President : Rev. Kermyt Roebuck, 304 N. 8th Street
Executive Director: George Ashworth, 613 Corby Building, St. Joseph, Missouri
Telephone : (816) 279-1649

GREEN HILLS AREA HUMAN RESOURCES DEVELOPMENT CORPORATION

Counties : Grundy, Mercer, Putnam, Sullivan

President : Konrad Heid, Princeton, Missouri
Program Director: Bill Carter, Court House, Milan, Missouri
Telephone : (816) 265-4737

HUMAN RESOURCES DEVELOPMENT CORPORATION

Counties : Caldwell, Daviess, Linn, Livingston

President : Oliver V. Shields, 205 Second, Chillicothe, Missouri
Program Director: Eugene Williams, Court House, Chillicothe, Missouri
Telephone : (816) 646-5640

JEFFERSON COUNTY COMMUNITY OPPORTUNITY CORPORATION

Counties : Jefferson

President : Joseph S. Withington, Hillsboro, Missouri
General Manager: John Buren, Box 273, Hillsboro, Missouri
Telephone : (314) 789-2180

KANSAS CITY HUMAN RESOURCES CORPORATION

Counties : Clay, Jackson, Platte

President : Mayor Ilus Davis, 408 E. 12th Street, Kansas City, Missouri
Executive Director: Chester Stovall, 408 E. 11th Street, Kansas City, Missouri
Telephone : (816) 421-3280

MERAMEC BASIN ECONOMIC DEVELOPMENT CORPORATION

Counties : Crawford, Franklin, Gasconade

President : Louis W. Hausmann, 1327 W. Fifth, Washington, Missouri.
Program Director:
Telephone :

MID-MISSOURI COMMUNITY ACTION CORPORATION

Counties : Benton, Johnson, Morgan, Pettis

President : Richard Hutchinson, Route 2, Versailles, Missouri
Program Director :
Telephone :

MINERAL AREA COORDINATING CORPORATION

Counties : Iron, Madison, St. Francois, Ste. Genevieve, Washington

President : V. E. Lewis, Annapolis, Missouri
Program Director : Richard Simpson, Court House, Ironton, Missouri
Telephone : (314) 546-2126

MISSOURI OZARKS ECONOMIC OPPORTUNITY CORPORATION

Counties : Camden, Laclede, Maries, Miller, Phelps, Pulaski

President : Travis John, Vienna, Missouri
Program Director : Tom Saunders, Richland, Missouri
Telephone : (314) 765-3273

MISSOURI VALLEY HUMAN RESOURCES DEVELOPMENT CORPORATION

Counties : Carroll, Chariton, Lafayette, Ray, Saline

President : James Wheeler, Keytesville, Missouri
Program Director : Arthur Summers, Court House, Carrollton, Missouri
Telephone : (816) 542-3020

NORTHEAST MISSOURI REGIONAL ECONOMIC OPPORTUNITIES, INC.

Counties : Adair, Clark, Knox, Lewis, Macon, Scotland, Schuyler

President : Rev. Marvin Fortell, First Methodist Church, Kirksville, Mo.
Program Director : Glenn Frenzen, 113 E. Washington, Kirksville, Missouri
Telephone : (816) 665-7655

NORTHWEST MISSOURI ECONOMIC OPPORTUNITY CORPORATION

Counties : Atchison, Gentry, Harrison, Holt, Nodaway, Worth

President : Everett W. Brown, 1405 N. Mulberry, Maryville, Missouri
Program Director : E. C. Walker, 2 Michan Building, Maryville, Missouri
Telephone : (816) 582-4522

OZARKS AREA COMMUNITY ACTION CORPORATION

Counties : Barry, Christian, Dade, Dallas, Greene, Hickory, Lawrence
Polk, Stone, Taney, Webster

President : Judge W. Fred Schaeffer, Court House, Springfield, Missouri
Program Director : Sam Francis, 309 N. Jefferson, Springfield, Missouri
Telephone : (417) 862-4315

QUINCO ECONOMIC OPPORTUNITY CORPORATION

Counties : Marion, Monroe, Pike, Ralls, Shelby

President : Kenneth A. Scott, Court House, Bowling Green, Missouri
Program Director: Errol Gann, Box 455, New London, Missouri
Telephone : (314) 985-7141

ST. LOUIS HUMAN DEVELOPMENT CORPORATION

Counties : St. Louis City and County

President : Judge Theodore McMillian, Civil Court Building, St. Louis, Mo.
General Manager: Samuel Bernstein, 1301 Clark Street, St. Louis, Mo.
Telephone : (314) 231-3474

SOUTH CENTRAL MISSOURI ECONOMIC OPPORTUNITIES CORPORATION

Counties : Butler, Carter, Dent, Reynolds, Ripley, Shannon, Wayne

President : V. M. Baltz, Eminence, Missouri
Executive Director: Joseph Smith, City Hall, Winona, Missouri
Telephone : (314) 325-4418

SOUTHWEST ECONOMIC SECURITY CORPORATION

Counties : Barton, Jasper, McDonald, Newton

President : Judge Edison Kaderly, Court House, Lamar, Missouri
Program Director: Jack McCracken, Welfare Office, E. 7th Street, Joplin, Mo.
Telephone : (417) 781-0352

WEST CENTRAL MISSOURI RURAL DEVELOPMENT CORPORATION

Counties : Bates, Cass, Cedar, Henry, St. Clair, Vernon

President : John Newell, Route 2, Box 85, Butler, Missouri
Program Director: Charles Braithwait, ~~Box 6 Urich, Missouri~~ BOX 125
Telephone : (816) 638-4722 Appleton City, Mo. 64724

A P P E N D I X D

Example of Title I abstract

(14)

STATE DEPARTMENT OF EDUCATION
Jefferson City, Missouri

Date January 19, 1966

TO: Mr. L. E. Lewis, Superintendent
Fulton School District 58
207 E. 5th
Fulton, Missouri 65251

Project No. 1

FROM: John W. Alberty, Director
Title I, P. L. 89-10

SUBJECT: Report of Review of Title I, P. L. 89-10 Application

The review of your project application entitled A program for building positive individual attitudes within the educationally deprived child for the purpose of developing better human relationships in the school, home, and community through increased specialized personnel services. has been completed. As a result of this review it is found that this application is:

(a) XXX Approved

(b) ___ Approved in part

Approved projects may be started immediately.

(c) ___ Substantially Approvable

(d) ___ Substantially Approvable in part

Substantially Approvable projects may be started immediately with the understanding that funds will not be made available until such time as requirements are met and/or necessary revisions have been made and submitted for approval.

(e) ___ Not Approvable

Not Approvable projects must be revised as recommended below to be further considered for approval.

Comments: Please complete the enclosed three forms of "Request for Federal Funds" and return to us. Project approved for the amount $11,125.00 on January 19, 1966.

Signed John W. Alberty
John W. Alberty, Director, Title I

January 19, 1966

Project No. 1

Fulton School District 58 — Callaway County

Title of Project - A program for building positive individual attitudes within the educationally deprived child for the purpose of developing better human relationships in the school, home, and community through increased specialized personnel services.

Description - To provide preventive measures and a follow-up program to assist educationally deprived children in grades K-12 to adjust better to the school situation through individual counseling, home visitation, and increased health education and services.

Number of children involved - 225
Number of additional persons - 2½

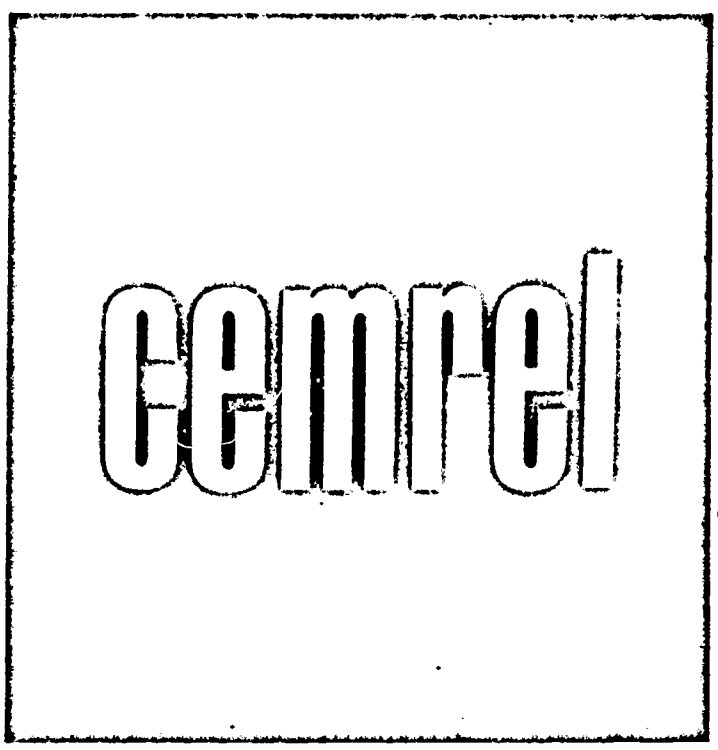
Amount of funds requested $11,125.00

Salaries	$7,475.00
Equipment	2,500.00
Fixed Charges	450.00
Community Services	500.00
Other	200.00
TOTAL	$11,125.00

Approved January 19, 1966.

A P P E N D I X E

CEMREL (an overview)



CENTRAL MIDWESTERN REGIONAL EDUCATIONAL LABORATORY.

FOR EDUCATIONAL

RESEARCH

INNOVATION

DIFFUSION

IMPLEMENTATION

CONTENTS

CONTENTS

MAPS AND CHARTS

CHAPTER I

THE REGION: ITS PEOPLE, RESOURCES, SCHOOLS, AND EDUCATIONAL NEEDS

The Laboratory

The Central Midwestern Regional Educational Laboratory, Inc. (CEMREL) is chartered in Missouri as a private, not-for-profit corporation. The passage of the 1965 Elementary and Secondary Education Act (PL 89-10) provided the impetus for the development of the laboratory which exists for the purpose of helping to bridge the gap between research and discovery on one hand and diffusion and improvement in the classroom, on the other.

CEMREL has been founded on the premise that the laboratory is the public and private school classrooms, the institutions of higher education, the state departments of education, the cultural and educational organizations of the region, and the teachers, administrators, researchers, and scholars who work in them.

There are nearly ten million inhabitants in the region - in Kentucky, central and western Tennessee, eastern Missouri, and southern Illinois. A central office is maintained in St. Louis with area offices in Carbondale, Illinois; Bowling Green, Kentucky; Nashville and Memphis, Tennessee.

Land Area Description

The region's land mass contains 126,500 square miles and extends from the Appalachian Highlands on the east to the Ozarks on the west. Most of it lies within the Interior Lowlands. The region is both a north-south and east-west transition zone, extending from the corn belt in the north to cotton farming areas in the south. Its northern edge touches the American Manufacturing Region, whereas the diversification associated with urban growth and industrial development has only recently become a major part of the economy of its southern-most areas.

Population

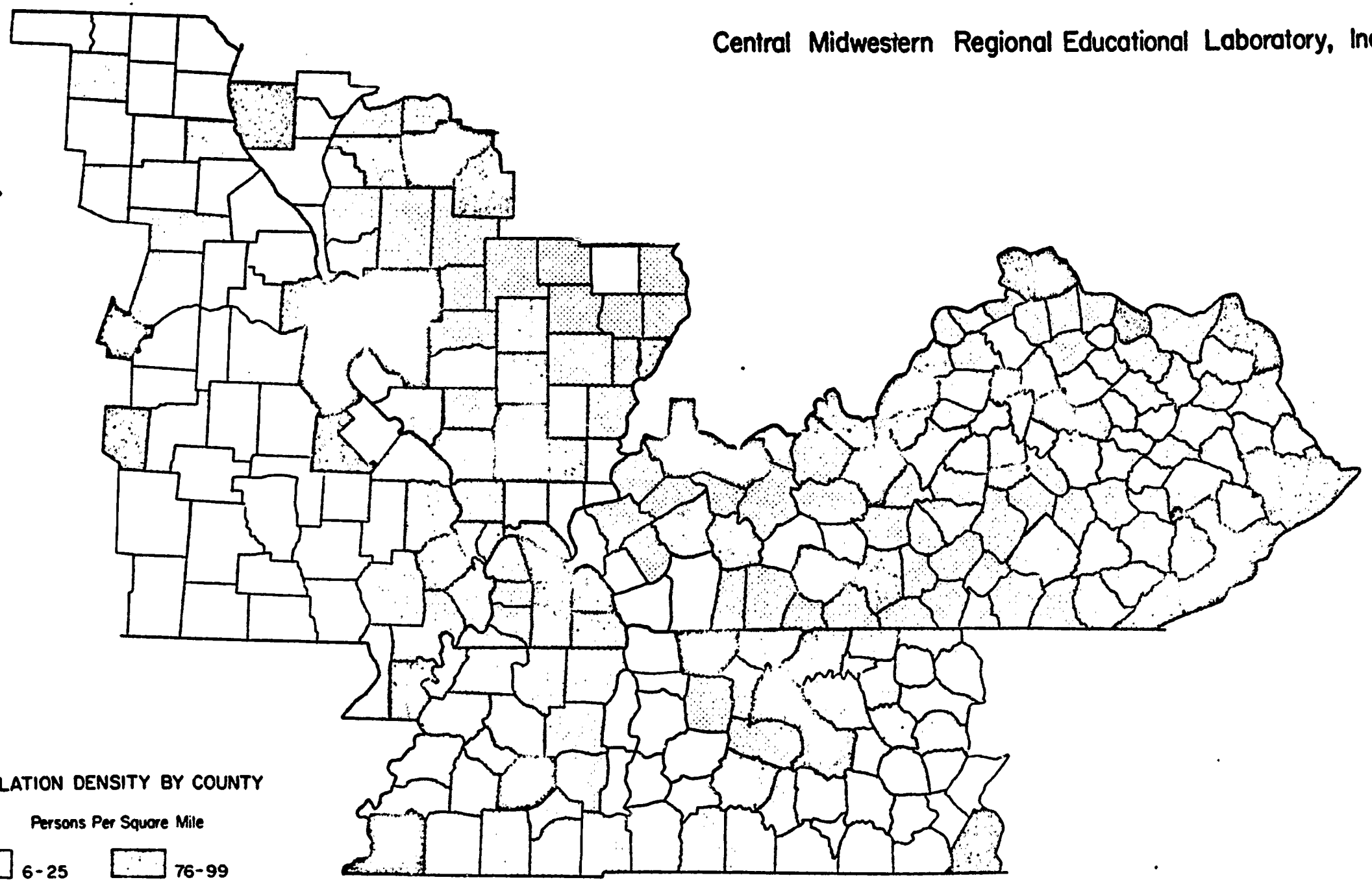
Nearly half of the population of the region live in the five metropolitan areas of St. Louis, Louisville, Memphis, Nashville, and Chattanooga. The remaining 5 million people are unevenly scattered, with one sparsely populated area, for example, in Missouri in which 30 of 57 counties have fewer than 25 inhabitants per square mile. Another rather large sparsely populated area is in southern Illinois and extends across the western part of Kentucky into Tennessee. (See the map on the following page.)

Population Movement

About two-thirds of the 288 counties experienced a decline in population in recent years while the continued movement to the cities resulted in phenomenal growth for a few metropolitan counties. The magnetism of

POPULATION DENSITY

Central Midwestern Regional Educational Laboratory, Inc.



POPULATION DENSITY BY COUNTY

Persons Per Square Mile

- 6-25
- 26-50
- 51-75
- 76-99
- 100-1000
- over 1000

cities and the declining population of rural areas strongly suggest that the mobility of the population within the region continues to be a persistent problem to education.

The areas of greatest population decline include the coal counties of eastern Kentucky and a smaller area of southeastern Illinois which extends southward into Kentucky.

Non-White Population

Within the region, Negroes constitute about 97 percent of the non-white population. Five areas of non-white population concentration are to be found in St. Louis-East St. Louis, Nashville, Louisville, Memphis, and an area of southern Illinois-southeastern Missouri-western Tennessee, which has been associated historically with cotton farming.

Median Family Income

The region's median family income is well below the national average of $5,600 (1960 census) but family income varies a great deal from one part of the region to another. It is higher, of course, in the cities than in rural areas and higher among northern city families (St. Louis, Louisville) than among city families in the south (Chattanooga, Memphis, Nashville).

A number of Missouri and Illinois counties reported an annual median family income of about $3,600 but in Kentucky 106 of 120 counties reported income below $3,500, and in Tennessee, 54 of the 63 counties reported median family income below $3,500. In the entire region, only ten counties reported median family income above the national average, indicating that low income is not restricted to Appalachia alone.

The acuteness of the problem of obtaining adequate revenue for schools from local resources is suggested by the fact that almost one-third of the 183 counties of Kentucky and Tennessee reported median family income of less than $2,500, less than half of the $5,600 median family income reported for the whole nation. (See the map on the following page.)

School Age Population

There are over 2.4 million children of school age in the region, about half of whom reside in the ten counties making up the five metropolitan clusters mentioned earlier. An additional twenty-two counties (13 in Kentucky) each contain more than 10,000 children of school age.

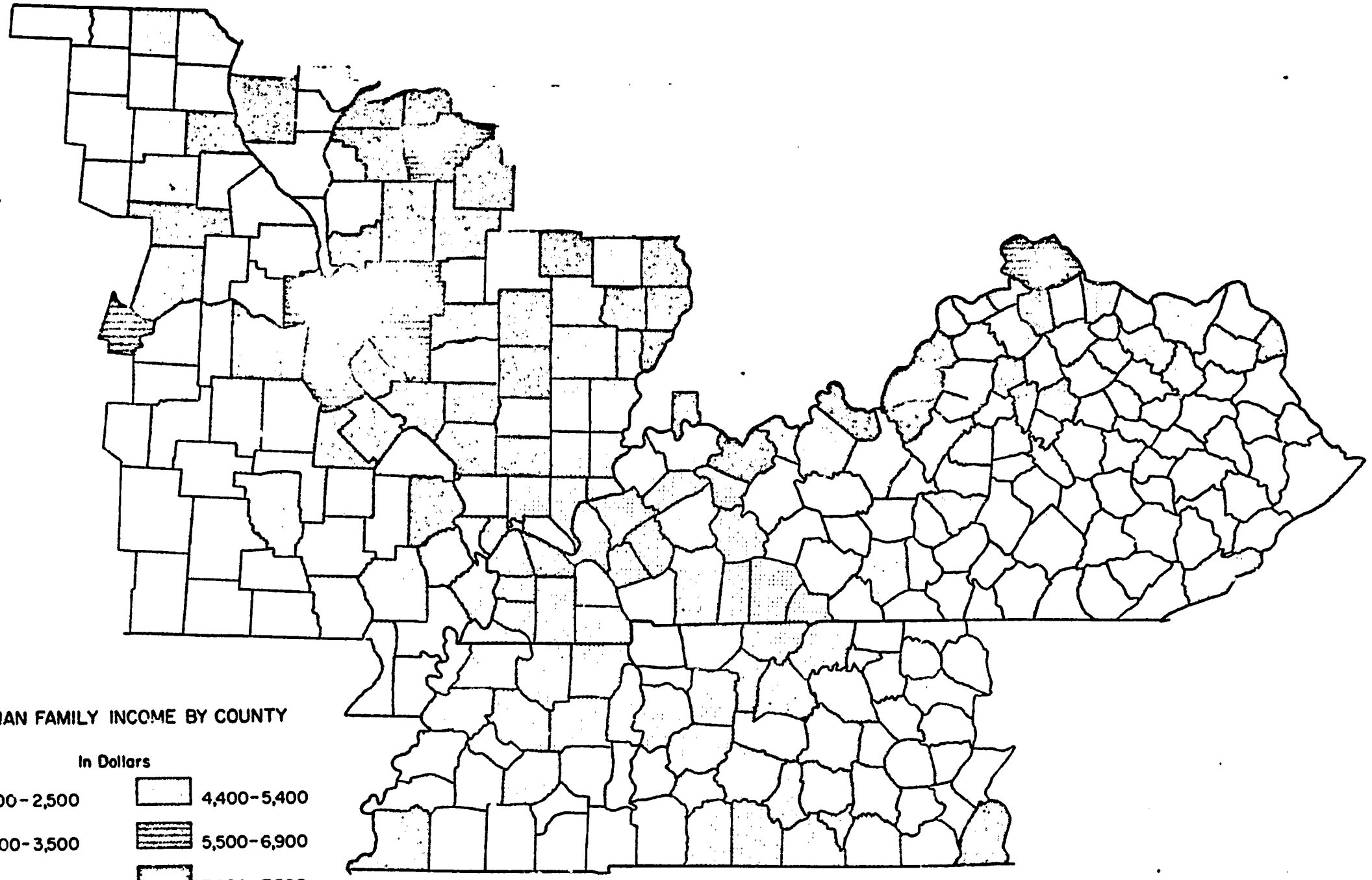
In contrast with the heavily populated counties, 92 of the region's 288 counties reported fewer than 2,500 children of school age in 1960. These counties tend to occur in clusters of three or four rather than singly, a fact which may facilitate multi-county cooperation toward the improvement of education.

The Schools of the Region

About 2.1 million pupils are enrolled in public schools and about 320,000 are enrolled in private or parochial schools. There are nearly 80,000

MEDIAN FAMILY INCOME

Central Midwestern Regional Educational Laboratory, Inc.



MEDIAN FAMILY INCOME BY COUNTY

In Dollars

- 1,300 - 2,500
- 2,600 - 3,500
- 3,600 - 4,300
- 4,400 - 5,400
- 5,500 - 6,900
- 7,000 - 7,500

Source 1960 Census of Population

Geography Department: George Peabody College for Teachers 3/66

public school teachers and about 10,000 teachers in the private and parochial schools.

In size, the schools of the region range from 968* one-teacher schools to the larger inner city systems of the five metropolitan areas. The region contains a total of 986 public school districts and numerous private and parochial schools. Striking differences in school district mapping are found within the region with Illinois having 416 school districts (population 1.6 million) and Tennessee having but 108 school districts (population 2.5 million).

Median School Years Completed

Only 6 of the 288 counties reported median school years completed for adults which were equal to or surpassed the national average of 10.6 in 1960. The pattern of school years completed appears to follow patterns of urbanization and family income. Children tend to remain in school longer in urban areas where the median family income is higher. The number of school years completed is three to four years below the national average in several counties of eastern and southern Kentucky, nearby counties of Tennessee, and in extreme western Tennessee. For most of the remainder of Tennessee and Kentucky, southeastern Missouri, and southern Illinois, the median is two to three years below the national average for school years completed. (See the map on the following page.)

Higher Education in the Region

The CEMREL region contains 107 accredited private and public institutions of higher education which range in size from very small schools with enrollments below 100 to large universities with enrollments greater than 15,000. For the Fall, 1965 term, a total of 260,420 students were enrolled in the institutions of higher learning within the region. To date 32 institutions with a combined enrollment of 184,315 students have requested affiliation with CEMREL. About 90 percent of the new teachers produced annually within the region receive degrees from CEMREL affiliates.

ADDITIONAL EDUCATIONAL FACILITIES

In addition to the usual facilities to be found in schools and colleges which provide for the education of almost 3 million persons, an abundance of additional facilities are available for educational purposes within the region.

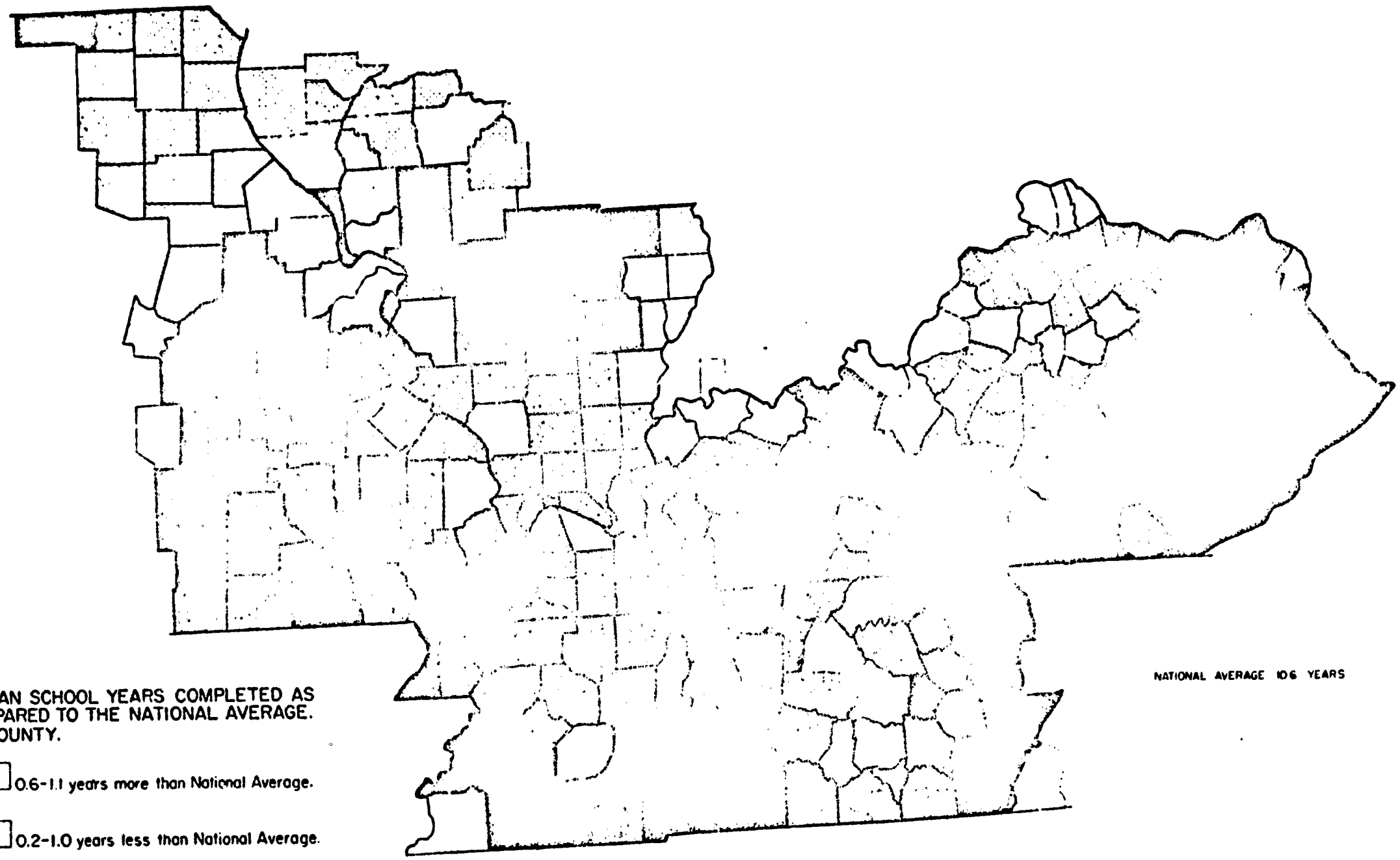
Educational Television

At the present time, five educational television stations are transmitting programs in the CEMREL region: KETC-TV in St. Louis; KSIU-TV owned and operated by Southern Illinois University at Carbondale; WDCN-TV in

* Digest of Educational Statistics OE-10024-65 Bulletin 1965 No. 4 U.S. Office of Education

MEDIAN SCHOOL YEARS COMPLETED

Central Midwestern Regional Educational Laboratory, Inc.



NATIONAL AVERAGE 10.6 YEARS

MEDIAN SCHOOL YEARS COMPLETED AS COMPARED TO THE NATIONAL AVERAGE. BY COUNTY.

- 0.6-1.1 years more than National Average.
- 0.2-1.0 years less than National Average.
- 1.1-1.7 " " " " " .
- 1.8-2.3 " " " " " .
- 2.4-3.0 " " " " " .
- 3.1-4.0 " " " " " .

Source: 1960 Census of Population

Geography Department. George Peabody College for Teachers 3/66

Nashville; WKNO-TV, operating from the campus of Memphis State University in Memphis; and WFPK-TV in Louisville.

The future for educational TV within the region is promising. By 1968, Southern Illinois University will have added an UHF station near Olney and another near the Edwardsville campus. Eventually, a microwave hookup will permit closed circuitry between the Edwardsville and Carbondale campuses. In Tennessee, an educational TV station is scheduled to begin televising by early 1967 from Henderson county, about midway between Memphis and Nashville. An educational TV network blanketing the entire state of Kentucky is due to become operational by 1968. In addition, several schools of the region will soon have closed circuit TV, some of which will be funded by the 1965 Elementary and Secondary Education Act (PL 89-10). (See the map onthe following page.)

Computer Facilities

Educational computer facilities are not numerous in the CEMREL region but those which have been in operation for some time are having an impact both regionally and nationally. What many have described as the finest school data processing center in the nation is located in the Memphis City Schools. The staff of the Memphis data center have recently developed a computer program for modular scheduling in secondary schools which the users consider to be the most efficient to be found.

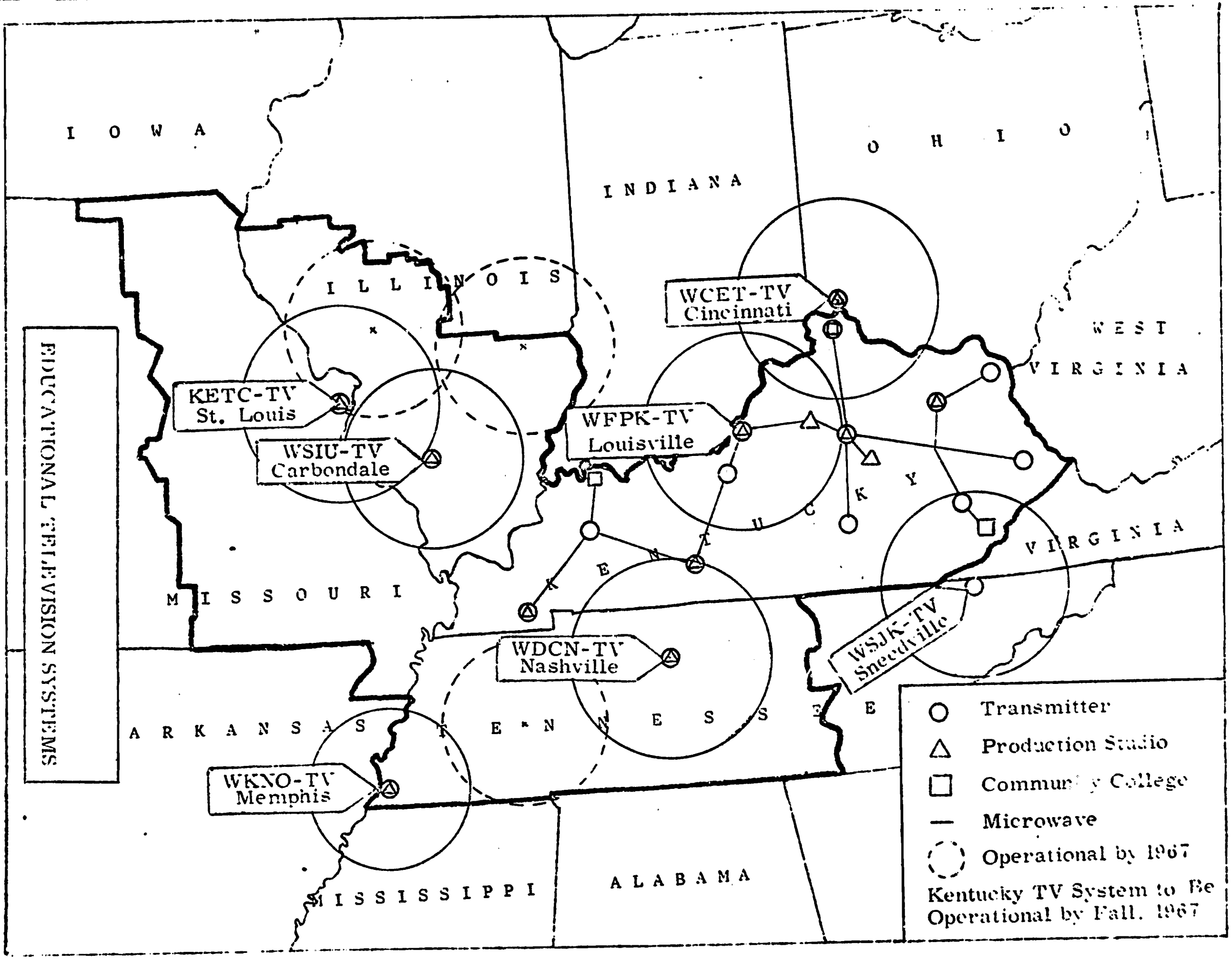
As might be expected in any region of the nation, the greatest data processing capabilities of schools, colleges, and universities are to be found at the larger universities. Several scientific computers of the IBM 1620 class are to be found in educational institutions within the region along with high speed computers of much greater capability. A number of institutions are trying to determine whether to develop their own computer facilities or to purchase computer time.

A major computer facility is that of the McDonnell Automation Center, a division of the McDonnell Aircraft Corporation in St. Louis. The center has numbered schools among its clients since 1961 and now provides student scheduling grade reporting and other student accounting services, system design and consultant services to more than 100 school systems representing more than 200,000 pupils. The data processing equipment facility includes 8 IBM 360 systems. By 1968, the computer installation will be completely convereted to third generation equipment and will include 28 IBM 360 systems.

Cultural Facilities and Activities

The greatest concentration of cultural wealth is to be found in the urban areas. Many of the better known cultural activities - symphony orchestras, art and science museums, and the theatre, are available primarily in St. Louis, Memphis, Nashville, Chattanooga, and Louisville. A variety of urban concert series, lecture series, guided museum tours, science courses and projects in connection with science museums, and special library collections are available in the cities and on the campuses of the colleges and universities.

Many of the cultural resources are organized into cooperative resources


IOWA
INDIANA
OHIO
ILLINOIS
WEST VIRGINIA
KETC-TV St. Louis
WSIU-TV Carbondale
WCET-TV Cincinnati
WFPK-TV Louisville
WDCN-TV Nashville
WKNO-TV Memphis
WSJK-TV Sneedville
MISSOURI
ARKANSAS
TENNESSEE
MISSISSIPPI
ALABAMA
KENTUCKY
VIRGINIA
SMSU EDUCATIONAL TELEVISION SYSTEMS
Transmitter
Production Studio
Community College
Microwave
Operational by 1967
Kentucky TV System to Be Operational by Fall, 1967

for maximum service to communities. The Arts and Educational Council of St. Louis undertakes a federated campaign for the support of nine major cultural activities to outstate areas of Missouri where there has been little or no such cultural experiences previously available. In 1959, the Southern Illinois Arts and Crafts Guild was established by the Educational Council of 100, an organization brought into being by Southern Illinois University for the purpose of aiding all types of educational and cultural endeavors. The Crafts Guild sponsors a variety of activities such as workshops, symposia in drama, creativ. writing, and poetry.

The rich cultural activities of the region are still greatly limited in the ways in which they reach out into the rural areas of the region. Hopefully, talented persons will continue to direct their energies toward the further enrichment of the cultural lives of school children so that the accident of geographical residence will not alone dictate the range and availability of cultural exposure.

Educational Needs of the Region

The task of making an assessment of the educational needs and problems of the region has been accomplished with the help of persons representing a wide variety of occupations and interests. The concerns expressed by these people are considered representative of the view of parents, teachers, administrators, researchers, scholars, cultural groups, labor business, and industry. Included are economists, psychologists, sociologists, and a host of others too numerous to mention. These associates have been instrumental in providing information leading to the selection of priorities for the laboratory's program.

When we ask ourselves, "How can the laboratory alleviate the many educational needs and problems of the region?", we find a partial answer in the words of Ralph Tyler:

> Only by the fullest utilization of the potential educational efforts of home, church, recreational agencies, youth serving organizations, the library, press, movies, radio, television, and other formal and informal activities can this nation meet its educational needs. The . . . task is a tremendous one which can only be met by the enlistment of all relevant resources. . . Few, if any, communities adequately utilize the educational potential outside the school . . . We need to organize a wide attack upon the total educational job, and we must clearly differentiate the educational responsibilities of the school from those of other agencies.
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> (Tyler, 1960) *

Tyler has appropriately identified the task to which the laboratory's

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* Tyler, R. W. "Educational Objectives of American Democracy", The Nation's Children, Eli Ginsberg (ed.), White House Conference Golden Anniversary, Vol. 2, 1960, pp. 70-92.

efforts are to be directed, coupled together with the development of new knowledge and the application of the finest intellectual resources of the region to its problems.

Problems and Suggestions Related to Classroom Teaching and Learning

Probably the most conspicuous set of problems encountered in the CEMREL region is that of up-dating the curriculum, of making use of curriculum materials developed elsewhere, and of developing local material and techniques for the individual and special groups of pupils such as the environmentally handicapped, the slow learner, and the gifted.

Functional programs are needed which will provide rural and urban youth with the type of vocational education needed to equip them for the working world while providing for the college bound student as well. Special programs need to be developed for rural schools, perhaps videotaped correspondence courses, to provide the rural pupil access to subject matter not now available.

School people are particularly aware of those problems connected with developing curriculum materials that are well sequenced through the grades and which will help bridge the unfortunate gaps that exist between the various levels of educations. There is great concern about the low reading levels of children in the region, particularly of the disadvantaged children of the region. A need has been expressed for curriculum demonstration centers which would develop and field test curriculum materials in specific situations within the region.

All segments of the education community express a need for finding better ways to motivate students and to make teaching more effective. Scholars and researchers express a need for studies which might suggest ways of improving the instructional process, which will lead to better understanding of the behaviors of successful teachers, and which will lead to appropriate ways of teaching those whose backgrounds seem deficient. School people in particular are aware that relatively little is know about the effects of various elements in the teaching process. Comparatively little progress has been made in identifying those characteristics which contribute to teacher effectiveness and in developing ways in which they may be transmitted to others.

People of the region look to the laboratory for the development of knowledge about the processes of learning and the translation of such knowledge into programs which can be implemented in the schools. Researchers seem to capture the concern of school people in particular by suggesting research of the effects of several variables upon the learning and development of the pupil: teacher ridicule or rejection; low-income family background, preschool experiences, out-of-school and recreational activities, fatigue, the effect of academic failure, and teacher personality and training.

Throughout the region, school people have emphasized the need for the development of a strong focus in all of the laboratory's work on studies of the learner and the effect of regular and special programs instituted on his behalf. They have also indicated a strong desire to see research studies relating to the development of cognitive structures (thought processes) in

elementary children and have urged the development of ways to foster and develop intellectual curiosity, creativity, and to improve techniques by which pupil achievement is evaluated.

Problems and Suggestions Related to School Planning and Organization

Also of central importance are those problems connected with the obtaining of adequate finances for better teacher salaries, improvement of transportation, buildings, materials and equipment, and research. Here are problems which not only affect the acquisition and operation of regular programs but which are of serious concern to any effort to implement new programs. School administrators have asked if ways can be discovered which will encourage the pooling of resources and facilities so that they may be shared in an equitable manner.

Closely related to the above problems of school planning are those which center around a concern for developing ways of organizing the school and its programs to provide for flexibility and responsiveness to the many diverse and changing needs of the population. School people are particularly desirous of improving communication between the local school system and the rest of the community including parents, state departments of education, local and state government, university scholars and researchers, industry and others. Specifically a need has been expressed for the establishment of an educational planning information center (EPIC) which will concentrate upon the collection of data useful for various types of educational decision making: administrative, instructional, and research. The center will not restrict itself to original data but will also collect secondary data such as detailed demographic data (by census tract), school enrollment data for all public schools of the region (by grade and sex), and financial and economic data (by school districts).

Problems and Suggestions Related to Innovation, Diffusion, and Personnel Development

We are much more familiar with the demands for change in the American educational system that we are with the processes involved in change. In fact, until recently, little attention has been given to the dynamics of the change process, the identification of those elements which facilitate or impede change efforts. Ways will have to be sought whereby desirable changes in school practices will result from the efforts of the laboratory.

Those most concerned with change and improvement in educational practices have asked several questions pertaining to change such as: "Why is it that some communities are more receptive and responsive to educational change than others? What are the characteristics of "change-minded" communities which set them apart from less resilient communities? What are the characteristics of "change-minded" teachers and administrators which distinquish them from those who might be less receptive to change?"

Since education itself brings about change, and since we believe in the recent words of the President of the United States who said, "Consultation, not isolation, is the pathway to progress", we propose to locate and bring together into close collaboration the researchers, scholars, and the school

people of the region. Here, as elsewhere, for too long these skilled people have operated in relative isolation from one another - in the "ivory tower" and the schoolroom with the closed door.

Finally, we have a serious problem of a manpower shortage in specially trained personnel, especially in reading, speech therapy, special education, elementary guidance, special education--the handicapped, emotionally disturbed, and mentally retarded, social work and curriculum planning. The shortage of reading specialists is particularly acute and greatly magnified by the sudden influx of funds from Title I of the 1965 Elementary and Secondary Education Act (PL 89-10), to which the overwhelming response of school people has been to use augmented reading programs as a way of aiding the disadvantaged child.

Educators of the CEMREL region, like their colleagues in the rest of the nation, are greatly concerned about teacher preparation, both preservice and inservice. Their concerns are expressed in questions such as: "Why can't we provide more realistic preservice preparation for teachers? How can we provide inservice activities which will retrain and update experienced teachers?"

Although the laboratory should not attempt to be all things to all people, it must, nevertheless, address itself to the task of remaining sensitive to the very real and very pressing educational needs and problems of the region as it endeavors to lessen the gap between research and discovery on the one hand and educational improvement on the other.

CHAPTER II

PROGRAM PRIORITIES, CATEGORIES, AND ACTIVITIES

CEMREL's program priorities were decided upon by the analysis of regional needs and resources. The priorities represent the combined recommendations of it's program advisory committees, made up of researchers, scholars, and school men, and the laboratory staff. They rest, in turn, upon an analysis made of the region's resources, its needs and an estimate of the laboratory's ability to mount a quality program of research, development, dissemination, and training working in concert with its affiliated institutions.

Program Priorities

The first priority for 1966-67 has been given to those program activities directed toward increasing the laboratory's efficiency and capability. For example, particular emphasis will be given to the design and initiation of those systems which will permit efficient and speedy collection, processing, storage, retrieval, and dissemination of information considered to be of great importance to education.

The second priority has been given to program activities which show high potential for the alleviation of important problems of the region or the nation and which have the potential for early payoff. These activities are typified by those projects already in existence which have already produced results and which may only require laboratory support for appropriate field testing to validate the research findings. Few, if any, projects will be lifted from the shelf, but if it is possible that " .... the cure for cancer may be in the literature", the laboratory should remain alert to supporting any educational discovery with "early payoff possibilities," even if it has become momentarily lost in the literature.

The third priority has been given to program activities which show promise as first steps in a long-range program designed to bring about needed changes (pilot studies).

Program suggestions are classified into one of three program categories where they are evaluated and the priorities are applied as a part of the decision making process. A description of the program categories follows.

Program Categories and Activities

The laboratory's initial program activities fall into three categories representing areas of greatest potential and greatest need in the region while providing for efficient and economical program administration. Also, the three categories, as focal points for the laboratory's program activities, represent an effort to find a way of so collecting strength that each potential contributor will have his best efforts blended in with those of others, rather than to operate in isolation from the other specialists of the region. Finally,

the three program categories are considered of sufficient importance to justify their designation as research and development areas of the laboratory. A brief description of the program categories follows:

A. Classroom Teaching and Learning

Three program advisory committees are attached to the classroom teaching and learning category: The Learner, Instructional Processes, and The Curriculum. The committees work independently or collectively, as the situation demands, toward the end that the laboratory will be able to increase the general knowledge and understanding of the teaching and learning processes. Here, attention will be given to the study of language development and to the relationship between spoken language and reading as basic tools of communication.

Studies will also be undertaken of concept development in the subject areas of science, mathematics, and social studies, and or curriculum development, evaluation, and revision. Teachers not only need to know how or what to teach, but how to determine the worth of that being taught, and how to revise their materials to do a better job of securing the desired outcomes.

Hopefully, the outcomes of the program activities in the classroom teaching and learning category will permit teachers to know more about how and in what ways motivation can be provided for maximum pupil progress and to make better use of available information about the pupil's background and ability.

During the first year of operation, most of the research and development activities will be conducted by individual scholars or researchers currently serving as faculty members of educational institutions of the region. Most of the research activity will be handled on a shared-time basis. In some cases, project teams will be selected which will consist of a group of scholars and researchers from several institutions who will share their skills while working together on a common problem such as the analysis of classroom teaching and learning.

The specific research and development topics on which teams will work, and the types of problems the teams will focus their attention upon are as follows:

1. Cognitive Processes
   a. Language Development and Beginning Reading
   b. Concept development in Science, Mathematics, and Social Studies

2. Curriculum evaluation and development

3. Affective processes

B. Innovation, Diffusion, and Personnel Development

Two program advisory committees are assigned to the innovation, diffusion, and training category of program activities: Innovation and Diffusion, and Personnel Development.

Most activities in the area of innovation and diffusion will be developmental in character during the first year and will center around the study and development of knowledge of the process of change, the examination and development of models and strategies for implementation and dissemination, and the study of the "climates" which either foster and accelerate change, or which seems to resist and impede the change process.

During this first year, however, as in the category of classroom teaching and learning presented earlier, some activities will involve project teams comprised of scholars and researchers from a number of institutions who will be engaged in research on the innovation process and the diffusion process.

Although limited knowledge exists concerning the change process, nevertheless agents of change have been identified, particularly the school principal and, to a lesser degree, the teacher. Guba recently asserted that therewas "increased hostility" between practitioners and scholars in spite of the general expansion of educational research in the past few years. He also said that " . . . the practitioners insist the blame rests with the theoreticians in their ivory towers. Researchers defend themselves by blaming the short-sighted, pencil pushing practitioners who do not keep up with the findings of research and do not translate them into practical applications." *

CEMREL will undertake the task of translating research findings into practical applications and will seek to establish a network of change agents in the region. The Personnel Development research advisory committee will be concerned initially with seeking ways to alleviate critical manpower shortages, particularly in areas of specialization, and will begin the training and development of change agents in an emerging network for school improvement. A description of a few program activities follows.

Annotated Bibliography: The Innovation and Diffusion Processes

In order to stimulate and foster greater interest and research in the change process, the laboratory will assemble, publish, and distribute an annotated bibliography of existing knowledge regarding innovation and diffusion processes.

Directory of Innovations

A directory of promising school-based innovations now in existence in the CEMREL region will be maintained along with a selected sample of innovations of national prominence. The directory will contain information on

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* Guba, E.D. quoted in S.E.C. Newsletter. Columbus: The Ohio State University, Vol. 1, No. 2, October, 1965

the type of program, the methodology used, the type of students served, staff requirements, duration of the program, and the name of the director or designated contact person. The directory will be made available to all affiliates of the laboratory.

Change Agent of the Laboratory: The Area Coordinator

The area coordinator is viewed as the principal change agent of the laboratory, created by CEMREL to lower the practitioner-theoretician level of hostility mentioned by Guba, on the preceeding page. He is best described, perhaps, as one who is able to speak, understand, and translate the language of the theoretician into the language of the practitioner, and vice versa.

The area coordinator will establish and maintain contact with schools and colleges of his area and is expected to function as the eyes, ears, and arms of CEMREL in the real laboratory of the institutions of the region. He will both give and receive information from the people of his area and will conduct, among other things, semi-annual area council meetings with representatives of CEMREL affiliates in attendance. He will gather data about his area, provide administrative assistance to CEMREL project directors, and will provide the laboratory with information from the field relative to the effectiveness of the laboratory's program of activities.

Seminar on Instructional Leadership in the Elementary School

In recognition of the role ascribed to principals as the chief change agent of the school, thirty elementary school principals within the CEMREL region have been invited to participate in a year-long seminar on instructional leadership in the elementary school. The seminar has been designed to achieve the following purposes:

A. To provide CEMREL with an opportunity to learn from the participants what the conditions are under which school administrators and teachers would be willing to become involved in research and development activities aimed at improving the quality of education in the region;

B. to provide participants with an opportunity to become informed about and to establish criteria for the evaluation of the educational practices in the elementary school; and

C. to provide participants with an opportunity to gain insight into ways of dealing with problems of instructional leadership and curriculum development in the elementary school.

Participants in the seminar will be invited to become part of CEMREL's network for school improvement. The laboratory plans to maintain close contact with the principals and to provide assistance to those who desire to undertake a systematic program of curriculum improvement in their schools.

Specialist Training Program: Reading

One of the most pressing problems within the CEMREL region is the acute shortage of reading specialists, whether classroom teachers, consultants, or supervisors. The shortage has become even more acute with approximately 70 per cent of Title I (PL 89-10) funds having been directed into reading programs.

Therefore, a series of reading specialist training programs have been initiated in several colleges and universities dispersed throughout the region. In the selection of the more than 150 teachers sponsored this summer by CEMREL, preference has been given to those from school districts with Title I projects. Follow-up activities will be continued through the 1966-67 school year in the form of consultant visits to the school systems where each of the reading specialists are employed. Saturday conferences are planned where the participants will assemble for further training. Where economically feasible, participants sponsored at one university will assemble with those from another for the one day workshop sessions. The instructional team in such cases will be drawn from both institutions, assisted by other CEMREL consultants.

Regional conferences are planned which will draw together those persons charged with the responsibility of training reading personnel. The participants, largely drawn from colleges and universities, will be given the charge to map out ways to alleviate the shortage of reading specialists and upgrade reading instruction in the region.

C. Systems Design and Application

Two program advisory committees provide guidance and make recommendations for the program category of systems design and application: Urban and Regional Educational Planning, and School Organization and Use of Personnel.

Educational planners and others responsible for the organization and operation of the schools seem to think that CEMREL can be of greatest value in helping them find answers to such question as "How can we organize the school to be more efficient, to use time, staff, and space wisely" and to more distant yet important questions of "How can we plan wisely for the school system twenty years from now? How many new buildingswill be required of what type, and where should they be located? What will the school population be twenty years from now?"

Therefore, CEMREL will try to develop the capability to provide school planners with the most complete relevant information it is possible to provide at any one given time. First year activities will focus upon the development of an information system which will be compatible with other CEMREL activities, compatible with regional or national systems already in existence, and compatible with systems which may emerge in other regional laboratories which are related to the CEMREL activities. A description of the first year's program follows:

A System of Educational Planning Information Centers (EPIC)

Educational planners are often faced with the task of making decisions in the absence of needed information. The information lacking may be dispersed and difficult to assemble, or may not even be in existence. Few planners have the time necessary for the collection of such data.

CEMREL will examine the information requirements of educational planners and will determine ways in which existing information can be made more accessible. At present, the information requirements seem to center around areas covered by other program advisory committees (e.g., curriculum, learning, innovation, etc.); information regarding the district, area, or region; and information regarding persons or agencies to be contacted for special information which is already is routinely gathered and stored.

The educational planning information center will continuously assemble data considered useful in making educational decision. Initially, at least, information will be assembled from scattered sources. For example, data about the region will be obtained from census tracts whereas school enrollment, financial and economic data will be obtained by school district. The system will permit rapid analysis of data, will be useful in basic research, and helpful in the training of school personnel.

Stratification Study of School Characteristics

A stratification study will be undertaken in connection with the EPIC system described above, which involves a comprehensive assessment of the region. The project will collect information in depth about all public schools in the region: about pupils, about school organization, teacher and administrative personnel, and about community characteristics.

One objective of such an assessment will be to provide a baseline of information about present educational practices against which educational change can be measured over a period of time. In addition, school systems in the region will be provided with a means for collecting educational information for their own immediate purposes.

If school and community characteristics can be classified into certain categories, and if schools with particular characteristics can be distinguished from other schools, then research products can be evaluated for a given type of school. Field testing in this manner should overcome a common weakness of evaluation studies in which little if any attention is given to the characteristics of the schools in which the study occurs.

Educational Materials Center (EMC)

A major activity now underway at CEMREL is the development of an educational materials center to serve as a major resource to the research and development activities of the laboratory and to provide an economical and convenient access to collections of materials and equipment needed by scholars, researchers, curriculum developers, and others.

As has been mentioned earlier, there is an acute shortage of reading specialists in the CEMREL region. In order to plan and conduct training

activities to alleviate the shortage of trained personnel, the instructional staff and teachers in training will need ready access to exemplary teaching materials in reading. Therefore, high priority has been given to the early acquisition of a reading materials collection along with curriculum guides, programmed instruction materials, and audio-visual materials. Other needs will be determined by interviewswith educators of the region.

The CEMREL staff will attempt to locate and assess present resources and their accessibility. In some instances, a collection may be partly or wholly duplicated. In all cases an effort will be made to maintain a useful center with guaranteed easy access to potential users but without unnecessary duplication of materials already available.

Arrangements have been made whereby Project ERIC (Educational Research Information Center) information from the USOE will be made available to scholars and researchers of the region. Microfilm sets will be maintained at the central office and at each CEMREL area office.

Talent File

A study is now underway to design and develop a system for the classification and identification of educational talent in the CEMREL region. The study is designed to assure compatibility with the classification system now used by the National Registry of Scientific and Technical Personnel but will be extended to include elementary and secondary school personnel.

Continuing Conference Series on Problems of Metropolitan and Non-Urban Education

One shortcoming in public school policy making is the absence of a means to cope with educational problems which cut across school district boundaries. The very nature of local control in public education almost assures that governing officials will confine their attention to the local district. As a result, broad issues tend to be approached in an uncoordinated manner and actions may be taken in one place without awareness of the actions or intentions of neighboring schools.

During its first year CEMREL will initiate a continuing series of conferences involving administrators of the largest cities of the region, city and county government officials, members of the legislatures, and other key figures. The purpose of the conference is to identify and define common educational problems, entertain plans for joint attack on the problems, and to test, through interchange among the participants, the similarity or lack of similarity in the manner of formulating problems and evaluating information.

A similar series of conferences will involve appropriate persons who are especially concerned about non-urban areas of the region. The first conferences of the urban and non-urban groups should provide CEMREL with information to determine whether or not it is also necessary to conduct conferences for middlesized suburban schools as distinguished from urban and non-urban schools.

The conferences will serve as a forum through which information from CEMREL and other sources may be disseminated. In addition, they will provide

the laboratory with problem identification for its continuing program of research, development, dissemination, and training.

Historical Study of CEMREL

All too often, emerging educational organizations have been remiss in keeping accurate records of significant events. When historians subsequently attempt to analyze the organizations, early documentary information is fragmentary and inconclusive.

CEMREL will establish an historical file and a system for recording significant events in its development. The system will be designed and maintained by a Committee of Historians.

CHAPTER III

THE ORGANIZATION OF THE LABORATORY

The Central Midwestern Regional Educational Laboratory, Incorporated, received a charter as a not-for-profit corporation from the state of Missouri on November 17, 1965. The stated purposes of the Corporation are:

A. To engage in such cooperative educational research, development, training, service, and dissemination activities as are deemed appropriate to the improvement of private and public elementary, secondary, and higher education in the region served.

B. To implement all aspects of Public Law 89-10, Title IV, and such other titles, as are appropriate for the planning and operation of an education laboratory operating as part of the National Program of Educational Laboratories authorized by Public Law 89-10, Title IV.

C. To implement any and all appropriate aspects of any subsequent legislation related to, complementing, extending, or in any way modifying the National Program of Educational Laboratories authorized by Public Law 89-10, Title IV.

D. To take whatever other action is deemed appropriate and necessary to further the purpose of improving public and private elementary, secondary, and higher education, both in the region served and in the nation.

Three major concerns guided the planning, the design, and the development of the organizational framework of the laboratory. First, it was felt the organization should be so designed as to make it possible to bring the intellectual, scientific, educational, and cultural resources of the region to bear on the wide range of educational problems the public and private elementary and secondary schools face. The organization was designed, therefore, so that common forums could be established in which a continued dialogue between scholars, school men, researchers, and innovators could lead to problem identification, to common planning, and to concerted action for developing programs of quality education and for putting them in action.

The organization contains seven Program Advisory Committees, each of which is composed of leading researchers, school men and scholars with expertise in the general area of the committee's focus. The seven committees are:

1. The Curriculum
2. The Learner
3. Instructional Processes
4. Regional and Urban Educational Planning
5. School Organization
6. Innovation and Diffusion
7. Personnel Development

As the organization chart shows, (see the following page) each committee is attached to the appropriate research and development division of the laboratory. A member of the laboratory staff serves each committee as its secretary and helps to provide liaison and coordination with other elements of the laboratory. Each committee is responsible for helping to plan and oversee such baseline studies and surveys as are required to assess the current status of affairs within their area of concern, and for planning, developing, and recommending the required long-range programs of research, development, training, and dissemination they think the laboratory should conduct.

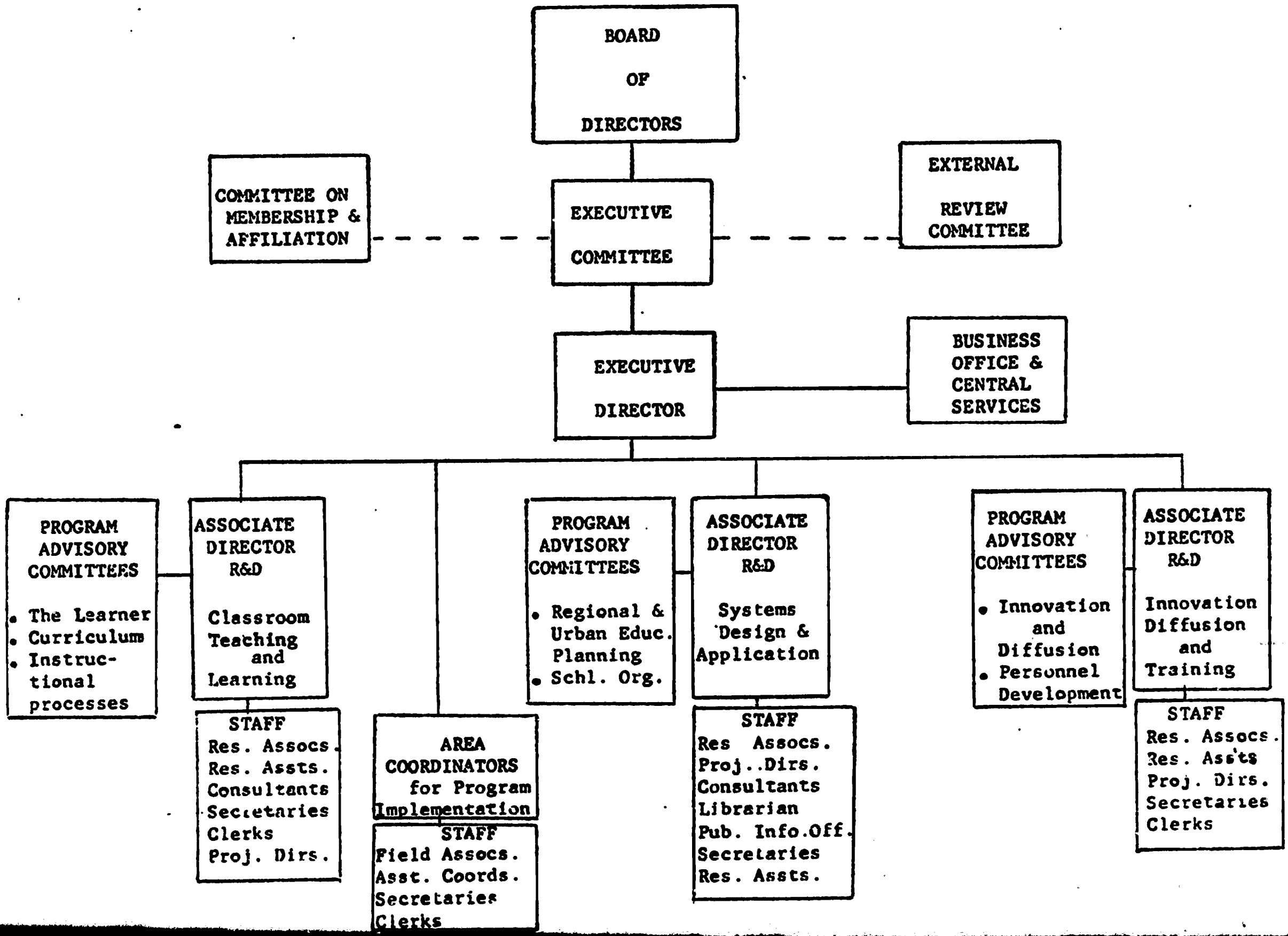
The second factor guiding the planning of the organizational framework of the laboratory was concern over how to bring the widely divergent, relevant organizations and institutions of the region into a strong and stable working relationship with the laboratory and with one another. This concern resulted in the decision to have the Board of Directors of the laboratory be broadly representative of those individuals of the region that not only have a continuing interest in education but also have the responsibility for providing leadership in its development and the power to bring about desired changes.

The third factor concerned alternate ways of designing the laboratory so that (a) it would be flexible, responsive, and adaptable to changing requirements and needs; (b) its programs would be complementary to the best that exist in the region; (c) it could bring strength to the region and its institutions without having to set up a heavily centralized bureaucracy.

Hence the organization calls for a relatively small staff for a central office and dispersed area offices, with ready access to the intellectual, research, and institutional resources of the region and it calls for a de-centralized mode of operation. Thus, though all of the research, development, and training activities of the laboratory will be centrally planned, budgeted, coordinated, and evaluated by the laboratory staff, the majority of the work will be carried on by staff members of affiliated institutions in the schools and classrooms of the region. A system of joint appointment has been worked out between the laboratory and some of its relevant affiliated institutions for sharing personnel.

To sum the foregoing, the basic tenet of the planning of the organization was that the laboratory must be "owned" mutually by the researchers, the developers, the scholars, the innovators, the teachers, the administrators, and the other school people of the region if it were to be successful in bringing about changes in school practices, in producing new knowledge, and in stimulating innovation. This tenet further argued, of course, not only for a mutuality of concern, interest, and activity, but also for the development of a network of people and institutions which would provide for commonality of language, joining of purpose, and the creation of realistic "market places of ideas" in which the ideas will be tested in the crucible of practice.

CHART OF ORGANIZATION



The Board of Directors

The Corporation's Board of Directors serves as the policy-making body of the Corporation and has the ultimate responsibility and authority for all its operational, legal, and business affairs. Members of the Board are selected from the laboratory's affiliated institutions and organizations but serve as individuals, not as institutional representatives:

public and private colleges and universities,
state department of education,
public and private school administrators,
public and private school teachers,
public and private school boards,
cultural organizations,
industry and labor,
and the general public interested in and concerned
about solving problems in education.

The officers of the Board are a Chairman, Vice-Chairman, Secretary-Treasurer, and non-voting Executive Director, who serves as the paid executive officer of the Corporation.

Executive Committee of the Board

The Executive Committee of the Board is composed of the officers of the Corporation plus four other Board members and is charged with the responsibility for acting on the Board's behalf on all policy and executive matters pertaining to the Corporation and its operational, legal, and business affairs.

External Review Committee

The External Review Committee is appointed by the Board from a recommended list of distinguished scholars, researchers, and educators from outside the region. Their responsibility is to conduct visits to the laboratory and its activities and make appraisal reports to the Executive Committee at least once annually on the conduct and operation of the laboratory, its staff, and its programs.

Committee on Affiliation and Membership

The Committee on Affiliation and Membership is drawn from affiliated institutions and organizations of the laboratory. No member of the Board of Directors may serve on this committee, with the exception of the Chairman, who is an ex-officio member. The committee acts as a standing nominating committee for membership on the Board, considers and makes recommendations on all applications for affiliation, and draws up the recommended list of distinguished persons to serve on the External Review Committee.

Affiliation with the Laboratory and its Activities

Those public and private non-profit educational institutions wishing to affiliate with the laboratory and its activities may do so upon the favorable approval of their letter of application by the Executive Committee of the Board. A second type of affiliation is invitational, and is for those

non-educational institutions and organizations that are interested in helping to solve educational problems and in putting those solutions into practice.

The Laboratory and its Staff

As an independent, not-for-profit Corporation, the laboratory should serve to complement, re-inforce, and extend the best work of the existing educational institutions in its region, as well as to initiate a comprehensive program of its own. It will work with these institutions to provide a multi-institutional and multi-disciplinary means to the identification and solution of the pressing educational research, development, training, and dissemination needs of the region.

Each Associate Director, with his staff and related Program Advisory Committees, is responsible for the effective conduct of quality programs of research and development in coordination with his fellow directors. Mutually they are responsible for devising and seeing to the conduct of related programs of training and dissemination.

The Area Coordinators, who man area offices, are coordinators for program implementation. It is they, working directly for the Executive Director and with the Associate Directors, who bring the skills, the talents, and the problems of the laboratory and the schools together, and who, in the final analysis, see to it that the laboratory's program not only has direct relevance to the school rooms of the region but actually eventuate in improved practices. For the ultimate test of the laboratory's performance rests in the classroom — with teachers and with students.

A P P E N D I X F

CEMREL (progress report June 15, 1966 - September 1, 1966)

CENTRAL MIDWESTERN REGIONAL EDUCATIONAL LABORATORY.

PROGRESS REPORT

June 15, 1966 — September 1, 1966

FOR EDUCATIONAL

RESEARCH
INNOVATION
DIFFUSION
IMPLEMENTATION

Both this Progress Report and the accompanying report on Program Activities for the period of December 1, 1966 - December 1, 1967 are intentionally brief and non-technical in nature. The majority of the technical material which provided the basis for the reports is available for those interested in pursuing a particular program of research and development in greater detail. This report is organized into six sections:

Organization and Administration

Program Area: Classroom Teaching and Learning

Program Area: Systems Design and Application

Program Area: Innovation, Diffusion, and Training

Financial Statement

Appendix

ORGANIZATION AND ADMINISTRATION

The Board and Committees

At the time of writing, the Corporation is in a transition state. The interim Board of Directors, responsible for the operation of the Corporation during its development period, have elected their successor Board and will meet with them to transfer their duties and install the new Board on October 5, 1966. Until that time, the interim Board and its Executive Committee continue to act.

The new Board will number fifty in size when complete. We are pleased and gratified that forty-five of those elected to the Board this summer have agreed to serve. (See the appendix for the list of Board and committee members).

All the Program Advisory Committees but one, on School Organization, have been newly appointed and are operating. The new Committee on Membership and Affiliation has been appointed and has begun its term of office. The External Review Committee of Distinguished Visitors has not yet been appointed.

Policies and Procedures

Copies of the Corporation's charter, revised by-laws, statement of policies and procedures, systems for purchasing, for payroll, for accounting, and for property inventory have already been sent to our project coordinator in the Bureau of Research, USOE, and, therefore, are not included nor discussed further in this report.

Staffing

A quick comparison between the staffing summary of June 15 and September 15 shows that some progress has been made in the difficult area of acquiring staff. On June 15, there were six Central Staff members on board; on September 15, there were 23, exclusive of Program Staff members--those involved solely in research and development work. Their numbers have increased from 10 to some 70 odd in the three-month period.

Staffing still remains the most pressing immediate problem, however, despite the foregoing. The two most critical positions to fill are the two Associate Director positions--Classroom Teaching and Learning, and Systems Design and Application. We are considering two well-qualified persons for each of these positions. Hopefully, we will be able to fill them by mid October.

Thomas J. Johnson, who has been Associate Director for Classroom Teaching and Learning for the past three months, has decided to return to his University position but will continue as Acting Director, part-time, until his replacement can be found.

Andrew J. McCormick, Senior Systems Analyst, whom we were fortunate to have been able to hire on September 1, will be able to fill in for the Systems Design and Application area until that directorship is filled.

We have been fortunate in finding an excellent Public Information Officer, Mrs. Verna G. Smith, who also reported for work on September 1.

We have competent people available for the two remaining area coordinator positions and should have them filled by October 1. The remaining critical positions as yet unfilled are those of the Research Associates. If continued diligent search during the next quarter fails to yield results, we may have to delay filling those positions until late spring.

Facilities

We have moved our central headquarters from a temporary site to more adequate leased quarters. Our new location (10646 St. Charles Rock Road, St. Ann) is within three to five minutes of the airport and a complex of motels and restaurants, with easy highway access to Illinois and outstate Missouri. The quarters are pleasant and should suffice for the next year though the building has the major drawback of having little utility and no remaining space for the provision of research facilities.

A consultant-architect has been employed to draw up specifications, design requirements, and to work on site selection for program facilities, both in the St. Louis area and in the region, as well.

Relationship with other Institutions and Agencies

Excellent relationships have been established with the institutions of higher education, the state departments of education, and many of the public schools of the region. Little attempt to "drum up" enthusiasm in the schools has been made, largely because of CEMREL's reluctance to arouse expectations it cannot reasonably meet. We have not done as well as we should have, however, in establishing relationships with the private and parochial schools of the region, as yet. Much work remains to be done on this problem.

We have held discussions with the majority of the Title III, E.S.E.A. projects in the region* but the whole area of possible relationships between CEMREL and Title III remains unresolved. We provided for reading-specialist training for 105 Title I, E.S.E.A., teachers of the region this last quarter and will continue that relationship through visitations to their classrooms and by providing follow-up seminars this fall and winter, as well as continuing the work next summer. (See the Innovation, Diffusion, and Training section of the accompanying report for fuller details).

Discussions were begun this last quarter with two of the major new educational-publishing-cum-technology corporations on the possibilities of their affiliating with CEMREL and sponsoring major research and development programs. Those discussions are continuing.

Problems Affecting Performance

As has been mentioned earlier, perhaps the single most important problem that has affected our performance to date is our inability to staff as rapidly as we would like. There are a number of problems which we could state very generally at this time which undoubtedly will affect future performance to some presently unknown degree. Rather than spend time in a general discussion of these vague, anticipatory anxieties, we have reserved those comments for oral discussion with the appropriate review committee. All things considered, the senior staff members and the present Board of Directors are quite pleased at our progress to date.

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* The Executive Director serves on the Board of one in Southern Illinois.

Program Area: Classroom Teaching and Learning

Early in the Spring of 1966, CEMREL began a major assessment of the problems, needs, talents, and resources of the four state region that it serves. In the course of this assessment we sought the opinions of administrators, teachers, scholars, and researchers concerning the most pressing educational problems of the region and we solicited their ideas and suggestions for solving these problems.

The information obtained from this assessment was given to the members of our three Program Advisory Committees in the area of Classroom Teaching and Learning to assist them in arriving at a set of research and development priorities which would be related to the urgent needs and problems of the region. As a result of their deliberations, the Advisory Committees recommended that a program of activities begin in three basic areas: 1) cognitive processes, especially language development and beginning reading, and cognitive development in science, math, and social studies; 2) curriculum evaluation and curriculum development in these same substantive areas; and 3) affective processes in classroom learning. *

In determining the specific research and development activities to be pursued, the laboratory staff placed heavy emphasis on trying to capitalize upon current research developments in the region that were nearing fruition and could thus offer promise for early problem solutions. Equal emphases were placed also upon activities that would be programmatic or sequential in nature, and where the sequencing of activities was feasible in terms of the talents and resources of the region.

Cognitive Processes

During this first year, The Classroom Teaching and Learning section of CEMREL is concentrating its efforts on two major programs: a) an extensive and systematic analysis of a wide range of instructional procedures

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* The three committees are The Learner, The Curriculum, and The Instructional Process. It is apparent that the concerns of each committee have elements in common with those of the others. The resulting recommendations tend to cut across the major concerns and foci of any one group and concentrate on the essential processes involved in learning and teaching, and the concomitant development of related curriculum materials.

and cognitive outcomes, and b) the diagnosis and development of curricula in language, reading, social studies, science and mathematics.

Systematic Analysis of Instructional Procedures and Cognitive Outcomes

The goals of the work in this first program are 1) to survey and to disseminate the relevant knowledge and instructional technology that is currently available about the teaching and learning of cognitive skills, and 2) to broaden and expand this pool of information by thoughtful experimentation and study in critical or neglected areas of concern.

We are fortunate in that we have been able to get a substantial number of researchers and scholars from the schools, colleges, and universities of the region to head up research teams to work in this program. Work is now progressing in twenty-five different schools throughout the region. Typically a research team will consist of one or two researchers and one or two senior Graduate Research Assistants plus teaching personnel from the schools and institutions where the work is going on.

The senior research personnel engaged in this area of investigation include: Bryce Hudgins, who is heading up a research team developing methods of assessing cognitive activities ideational changes in children as they are related to particular modes of presentation; Robert Kibler, who heads a team investigating message characteristics and retention of curriculum material; Robert Hamblin, and Don Bushell, who have a team working on the feasibility of providing teachers with immediate instructive feedback (via wireless) during the teaching act; Jimmie Fortune, who heads a group investigating the "generality" of presenting behaviors at the pre-school and elementary levels; Gerald Blumenfeld, who has begun work on methods to be used in the learning of relations; Louis M. Smith, and Marcia Zweir, who are heading teams investigating the ecology of the classroom and the social-psychological factors that influence teacher strategies.

Beginning this semester, two additional scholars have been added; Carl Pitts, and Edward Ernhart, who will head a team of researchers attempting to develop more precise indicators of cognitive functioning during the learning process.

* These research activities are not only related to each other in terms of their general problem focus, but our plans for continued interaction between the research teams will further help bring their concepts, methodologies and interest more closely together. These conferences and research and development seminars will add substantially to the further development of this particular program of research, and, additionally, will be useful in developing strategies for future development and application work in this program area.

Diagnosis and Development of Curricula in Language and Reading

The goal of the work in language and reading is A) to develop better methods for assessing existing language or reading skills; and B) to begin to develop language, reading curriculum "packets". Each "packet" is to consist of carefully planned experiences and materials to enable the learner to develop a given skill or skill level in language or in reading.

Our initial set of activities in this program began this summer when we were able to secure the services of Dorothy Higginbotham, who is heading a team concentrating on the development of efficient designs for sampling linguistic behaviors. During the summer, the staff also visited a number of different schools, colleges and universities and we have been able to get these additional researchers to form research groups who will work in this program area beginning this semester:

Bruce Amble, who heads a team that is field testing the effectiveness of a phrase reading training program on reading comprehension and reading rate. Thomas Jordan, who has a team conducting a longitudinal study investigating early developmental data as it relates to language and reading disability. William Page, who heads a team of teachers and researchers that is establishing a comprehensive developmental program in language and reading for junior high school students with learning disabilities, and James Felling, who is beginning work on aspects of the training and development of certain kinds of cognitive outcomes (Bloom) through the careful use of reading materials and the selective assessment of reading outcomes.

We will add other research teams to this program during the next year to work on different aspects of the program as part of our continued efforts to make the program comprehensive.

Curriculum in Science, Math and Social Studies

In addition to the two major research programs outlined above, we have work in curriculum evaluation and development in science, math and social studies now underway. One team headed by Harold Berlak, is providing field testing, adaptation, and diffusion of the best exemplary curriculum materials in Social Science currently available through a network of schools and active teacher participation. This activity also entails the development of appropriate assessment instruments and the development of new curriculum materials for the learning of political concepts and political socialization. Another team headed by Paul Wendt, and Leslie Woelflin, is examining the feasibility of using computer-based instruction in the teaching of physics and the teaching of geography at the high school level.

Affective Processes

Here we are concentrating on motivation and personality in classroom learning. We now have one team headed by Jane Loevinger, working on aspects of ego development, and beginning this semester, another research team headed by Richard Peterson, will begin to explore determinants of achievement motivation in culturally deprived children.

Program Area: Systems Designs and Application

Educational Planning Information Center (EPIC)

Taking our lead from the primary recommendation of our program advisory committees, we have begun an examination of the information requirements of the educational decision-makers and planners of the region in an effort to determine ways in which existing education and education-related information could be made more accessible and more useful. A first planning conference to explore ways of attacking this problem was held in Memphis on July 18, with twenty-two representatives of the school systems and State Departments of Education.

As a major result of the conference, we now have begun a comprehensive study of the present information requirements, applications, and facilities of the region. The study is designed: a) to discover the information requirements of public and private school administrators, educational planners, and other educational decision makers have, b) to provide a thorough survey of existing data processing facilities and their present major uses, and c) to provide an assessment of the kinds and quality of educational and education-related data now routinely collected and processed and its accessibility.

This study, which we expect to complete by September, 1967, will be of use in helping CEMREL establish and develop our Educational Planning Information Centers (EPIC), since one of the major functions of the EPIC system will be to continuously assemble and make accessible data considered useful to the making of educational decisions. Initially, at least, this information is likely to come from a variety of scattered resources.

Another outcome of the study will be the provision of baseline information about present regional educational status and levels against which educational change can be measured over a period of time. In addition, the school systems in the region will be provided with a means for tapping existing educational information for their own immediate purposes and will have detailed knowledge of the variety of data that is now existent.

Stratification Study

As a part of the EPIC system study described earlier, we now have a stratification study underway in which we are gathering relevant information about the public and private schools of the region, including data on pupils, teachers, school organization and community characteristics. An initial major purpose of the study is to provide CEMREL with a rational basis for developing methods of classifying schools according to important school and community characteristics. In time, the results of the study will also allow CEMREL researchers to develop more efficient sampling procedures for select-

ing schools for diffusion studies and for field testing and evaluating curricula and other research products.

Talent File

The talent file study is now nearing completion. It has been directed at the design and development of a system for the classification and identification of educational talent in the CEMREL region. The study was designed to assure compatibility with the classification system now used by the National Registry of Scientific and Technical Personnel with an expansion of that system to include elementary and secondary school personnel, and personnel employed in the colleges and universities of our region. One most important aspect of the study has been the development of more efficient systems for the use of administrators in collecting and analyzing financial, manpower, and personnel information about their institutions.

Pilot Testing of Talent File and Personnel Data System

We have had a request from Dr. Richard Van Hoose, Superintendent of Jefferson County (Ky.) Schools, for assistance in planning the study, and evaluation of the operation of the Jefferson County school system. The projected plan is to begin with one high school and its cluster of elementary schools as the first phase in the total program. This project will give us an unusual opportunity to pilot test our talent file and personnel data system in a complex educational organization.

Continuing Conferences on Urban and Non-Urban Educational Problems

Ernest Campbell, Vanderbilt University, has begun to plan the continuing series of conferences on urban and non-urban educational problems which will involve school administrators of the region, city and county government officials, members of the legislatures, scholars in the relevant discipline, urban planners, and other key figures. The purposes of these conferences are to identify and define common educational problems, entertain plans for joint attack on the problems, and to test, through interchange among the participants, the similarity or lack of similarity in the manner of formulating problems and evaluating information. These conferences will provide the laboratory with problem identification for its continuing program of research, development, dissemination, and training, and, additionally will serve as a forum through which information from CEMREL and other sources may be disseminated.

Newsletter

A newsletter will be published by CEMREL starting October 1st, 1966. The purpose of this newsletter is to acquaint administrators, teachers, and researchers in this area of the activities and current programs of the laboratory.

The initial mailing of the newsletter will be to all schools, educational institutions and libraries within the CEMREL area. We intend at this time to issue the newsletter four times a year, with the publication dates being set for December, March, May, and September. We have obtained an initial address file for the region, and it is anticipated that through reader response, the address file can be quickly up-dated to contain addresses of all individuals interested.

Research in Urban and Regional Planning

Beginning this semester, Larry Wrightsman, George Peabody College, will head a team which is investigating the effects of system-wide desegregration on attitudes toward minority groups.

Directory of Consulting Services

The project to assemble a directory of consulting services to be distributed to the schools and universities of the region has been dropped from our set of program priorities in the systems design area.

Educational Materials Center

The following summarizes the major activities of the EMC during the last quarter.

Training

Visits to small curriculum and research libraries supplemented a week and a half trip to Washington D. C. In Washington most of the time was spent in the Educational Materials Center of the U. S. Office of Education. Procedures for the basic cataloging were explained and subjects including classifying, typing and copying cards, standard procedures, and reference tools for the librarian were discussed in detail. Ninety-five books which were duplicate copies for the Washington EMC, were given to the Laboratory and copies of the books' catalog cards were included. This small collection formed the nucleus of our EMC and provided correct cards and call numbers to build from.

There are several curriculum libraries in the greater St. Louis vicinity, each of which is collected for the benefit of a particular school district. The technique used in these libraries were observed and this knowledge has proved to be most useful. Another source of information has been obtained from a list of suggested works provided by the director of the Educational Materials Center in Washington.

Personnel

We are building the staff of the EMC slowly to keep its size consonant with the work load. It is staffed by a librarian, who has been working since the first of July, and a typist has been hired and trained to take over the task of typing cards and cataloging the collection.

Equipment

Library shelving has been ordered for the St. Louis office and for two of the area offices. Other library equipment, such as book carts and the like, has also been ordered and is expected to arrive in early October.

Audio-visual equipment has also been ordered. This includes a motion picture projector, overhead projectors, tape recorders, and the like. These machines will be used by researchers in the field as required and will be stored in the EMC. Microfiche readers are now being evaluated and one will be purchased for each area office, as will a reader-printer for the main office.

Resource Location

Continuing search is being made in the region for little known research collections which might be valuable to educational researchers. After the collection is located, arrangements to make the collection available will be worked out as in the case of the small research library of Dr. Harold Berlak at Washington University. We have permission to copy his catalog cards and keep the duplicate set in the EMC. This will enable easy cross reference into his collection from a central location.

There are a number of people throughout the country who are doing work which would be useful to our researchers. A number of these people have been identified and some have been contracted and agreements reached. One of these is Douglas Porter, head of the Programmed Instructional Center at Harvard University. He has agreed to send us lists of programmed instructional materials which his staff has assessed, rated, cross-indexed, and judged to be useful in teaching reading, mathematics, and science in elementary and secondary schools.

Selection

A questionnaire is now being prepared and will be sent out in late September. It is designed chiefly to pinpoint the area of collection of technical material, by establishing the need priorities for various kinds of research material in different subject areas held by researchers, teachers, and administrators of the region. It will also help establish their preference for collection types and dissemination modes. In addition, it should help us discover the resources in the region which we might want to build from, but which we would like to avoid duplicating if access is open to researchers.

Selection of instructional material is made with the aid of publishers catalogs, Textbooks in Print, upon recommendations from specialists, and with an eye to the nature of the programs in which they will be used. Also, the EMC in Washington sends us a copy of their catalog card for every new addition to their collection in the fields of CEMREL-EMC concentration. In this way, we are alert to every new textbook and teaching-aid in reading, elementary science, and mathematics.

Collection

Our catalog system is much like the one used in the USOE-EMC. It is basically a modification of the Dewey Decimal System and is easily applied to specialized collections. Our system differs slightly from that used in Washington because our collection includes a much larger proportion of research-oriented material.

The collection of cataloged material now includes 600 pieces, and with the recent addition of clerical help, will grow more rapidly.

Contact has been made with the American Textbook Publicher's Institute (ATPI) and they have sent a memorandum to each of their members informing them of the establishment of the EMC and suggesting that they send us their catalogs and respond to our requests for material. The response to the memorandum has been very satisfactory and the publishers very helpful.

Instructional Materials

The areas of concentration in this field are reading, elementary mathematics, and elementary science. The collection includes textbooks, study kits, filmstrips, and teacher's manuals. The collection will be constantly updated as we are interested in maintaining only the most recent materials. The materials collected are coordinated with research programs, serve as demonstration material, and are intended primarily for use by researchers. They will, however, be available for their use by teachers and curriculum developers.

Technical Material

A general technical materials collection has already been started. This includes demographic data, such as census information and lists of school districts in the region. A small group of periodicals has been ordered as some have basic reference books in reading, innovation and diffusion, and computer-assisted instruction. Published and unpublished research and technical reports are collected as they become available, and a set of the Laboratories' reports and newsletter is kept for reference. Upon analysis of the questionnaire data, our collection will be more specifically tailored to the research and development staff's needs.

Educational Research Information Center (ERIC) Material

The first lot of ERIC material has been ordered and received and a list of these reports is being circulated to the area offices with copies of the ERIC Resume Volumes. Blanket orders for these Resume Volumes have been placed for all the area offices as well as for the EMC.

Because of the large quantity of the ERIC material and its wide variety of subject matter, only selected groups of the microfiche will be ordered. These will be available on request to the area offices and either microfiche or hard copy will be sent by mail. Duplicate copies of much used reports will be purchased as necessary.

PROGRAM AREA: Innovation, Diffusion, and Personnel Development

Program activities for the period of June 15, 1966 to September 1, 1966 are largely exploratory in nature and centered around (a) the first phase of a year long seminar on instructional leadership involving 24 elementary principals, and (b) a reading specialist training program involving 105 teachers who received graduate level instruction at 11 colleges and universities of the region. Other activities included a planning conference for the development of strategies leading toward the improvement of reading instruction, a compilation of research studies utilizing the Halpin and Croft Organizational Climate Description Questionnaire (OCDQ) and initial planning for gathering data for a directory of innovative practices within the CEMREL region.

Additional program activities were scheduled to begin September 1, 1966 and include studies which extend the inquiry into the role of the principal in the change process, inquiry into the reevaluation and refocus of research in counseling, and a study of different models for elementary guidance programs together with recommendations for appropriate training of personnel and standards for certification of elementary guidance personnel. A regionwide conference on Innovation and Diffusion is scheduled for late October and other conferences are planned as part of the exploration into educational diffusion. A description follows.

PROGRAM ACTIVITIES - INNOVATION AND DIFFUSION

Seminar on Instructional Leadership in the Elementary School

(The following has been abstracted from a 33 page interim report prepared by researcher Dr. Edwin M. Bridges.)

Twenty-four elementary principals of the four CEMREL states were selected from those principals recommended by CEMREL Area Coordinators following criteria established by staff members Edwin M. Bridges (administrative theory), Louis M. Smith (social psychology), and Paul Kline (educational psychology). The first activity took place in a two week seminar in an environment providing a high degree of physical and social isolation from activities which might detract from the seminar's purposes. The site chosen (Montgomery Bell State Park, Burns, Tennessee) was one recommended by an Area Coordinator and proved quite adequate.

The elementary principal was selected because of the role ascribed to him as an important agent of change in the school. Three broad objectives were established to provide a basis for evaluating and selecting materials, content, and seminar activities. The objectives also seemed relevant to research and development activities in schools. The objectives were

1. To provide participants with an opportunity to become informed about and to evaluate new educational practices in the elementary school:

2. To provide participants with an opportunity to gain increased insight into the strategies and tactics for dealing with problems of change and curriculum improvement in the elementary school; and

3. To provide CEMREL with an opportunity to learn from participants the conditions under which school personnel would be willing to become involved in research and development activities aimed at improving the quality of education.

A high level of participation and self-involvement was achieved (determined from self report indices) and participants indicated

1. greater awareness of innovations in the elementary school,

2. a more critical and analytical approach to innovation and change,

3. a new perspective on the role of the principal as a change agent, and

4. better understanding of the group processes and sources of resistance to change.

The staff decided during the course of the seminar that the third objective would more naturally grow out of discussions of CEMREL's purposes and activities during the follow-up phase of the seminar. Research activities which will now follow the first phase include the following:

1. An effort to determine the kinds of changes in behavior and in programs which develop as a consequence of involvement in the seminar and the kinds of problems encountered in implementing the changes.

2. Examination of the relationship changes among participants which can be attributed to the seminar.

3. Determine whether the participants approach to problems in the inbasket problems corresponds to the approach used on

the job (using an index of consistency between simulated and real situations).

4. Examination of relationships between participants responses to the inbasket problems and the various instruments completed during the two weeks.

Follow-up activities (August, 1966-June, 1967) include one day area workshops for six to ten participants at a time and one session involving all 24 participants. Topics for discussion will include more discussion of change strategies and participants will be given an opportunity to learn more of CEMREL and its activities.

Other Innovation and Diffusion Program Activities

The other members of the innovation and diffusion research team include the following:

Andrew Halpin is preparing a summary and critique of recent studies of the organizational climate of schools, particularly those which have utilized the Halpin-Croft OCDQ (previously mentioned).

Charles Faber is now using the OCDQ to analyze perceptions of the organizational climate of 30 elementary schools. More specifically, he hopes to determine the relationship between the perception of climate and certain characteristics of the respondents and to determine whether or not the study of leadership styles and other techniques will produce a change of climate in selected schools.

Edwin Bridges is also seeking to isolate a number of determinants of group functioning by means of experiments in a number of schools. Group functioning will be studied in problem solving sessions conducted by the research staff.

James Reynolds is particularly concerned with relationships thought to be significant in the development of a model of the innovation process by focusing upon an investigation of the relationship between the tenure, succession pattern, and reference group orientation of the principal and the rate of innovation in the school he administers.

Martin Garrison, Don Clemens, Jere Farley, and Martin McCullough are working with the foregoing and the staff in the planning of an October innovation and diffusion conference in cooperation with the University City, Missouri public schools, well known for its leadership in innovation. Other conferences are in the planning stage. Finally, the staff, with the help of the innovation and diffusion team and others, is preparing a regional directory of innovative practices to be distributed to schools throughout the region.

PROGRAM ACTIVITIES - PERSONNEL DEVELOPMENT

The Reading Specialist Training Program

The Reading Specialist Training Program provided CEMREL sponsorship to 105 teachers who received graduate training in reading. The training occurred in the regular summer sessions of 10 colleges and universities for 72 teachers and in a two week postsession for 33 others at another university. Modest weekly stipends and tuition costs were borne by CEMREL. Except for the two week session, no costs were incurred for instruction or supplies.

The initial assessment of needs and problems revealed a pressing need in the region for trained reading teachers. The shortage of reading specialists has become even more acute with the influx of Federal funds under Title I. Preference in the selection of participants was given to teachers involved in or about to become involved in Title I reading projects. Thus CEMREL undertook the activity as an organization responsive to the needs of the region. Several outcomes of the activity have accrued to the benefit of the region. Professors who prepare teachers to teach reading have been in comparative isolation. An invitational conference involving 12 professors has now led to a regionwide conference which will provide opportunity for all those involved in teaching reading teachers to help determine ways of improving reading instruction at the preservice, graduate, and inservice levels.

Few of the participants would have attended classes this summer without CEMREL sponsorship. Most of the participants have indicated new plans for further professional growth. One said she had already purchased more professional books on reading than she had ever dreamed possible. One of those without plans for formal training said she was too old for further course work but "I am going to read all I can about reading and will encourage younger teachers to become reading specialists."

Other outcomes of the program, when placed alongside data pertaining to innovation and diffusion, led to a change of program as indicated in the Activity Report for September 1, 1966 to December 1, 1967. In that report, the program may be found under the heading "An Exploration into Educational Diffusion".

Other Personnel Development Program Activities

Merrill Harmin is heading a team which is seeking to continue the development of an alternative design for teacher education, one based more on individual development of competencies and qualities associated with effective performance than on courses and credit accumulation.

John Whiteley, Frank Stallings, and others are at work seeking to (a) reevaluate the counselor's role and to establish a refocus which may have pronounced effects upon counselor training programs, and (b) to

develop alternative models for the preparation of elementary guidance personnel. Both activities will involve the development of theory, conferences, and the dissemination of position papers prior to pilot programs and field testing.

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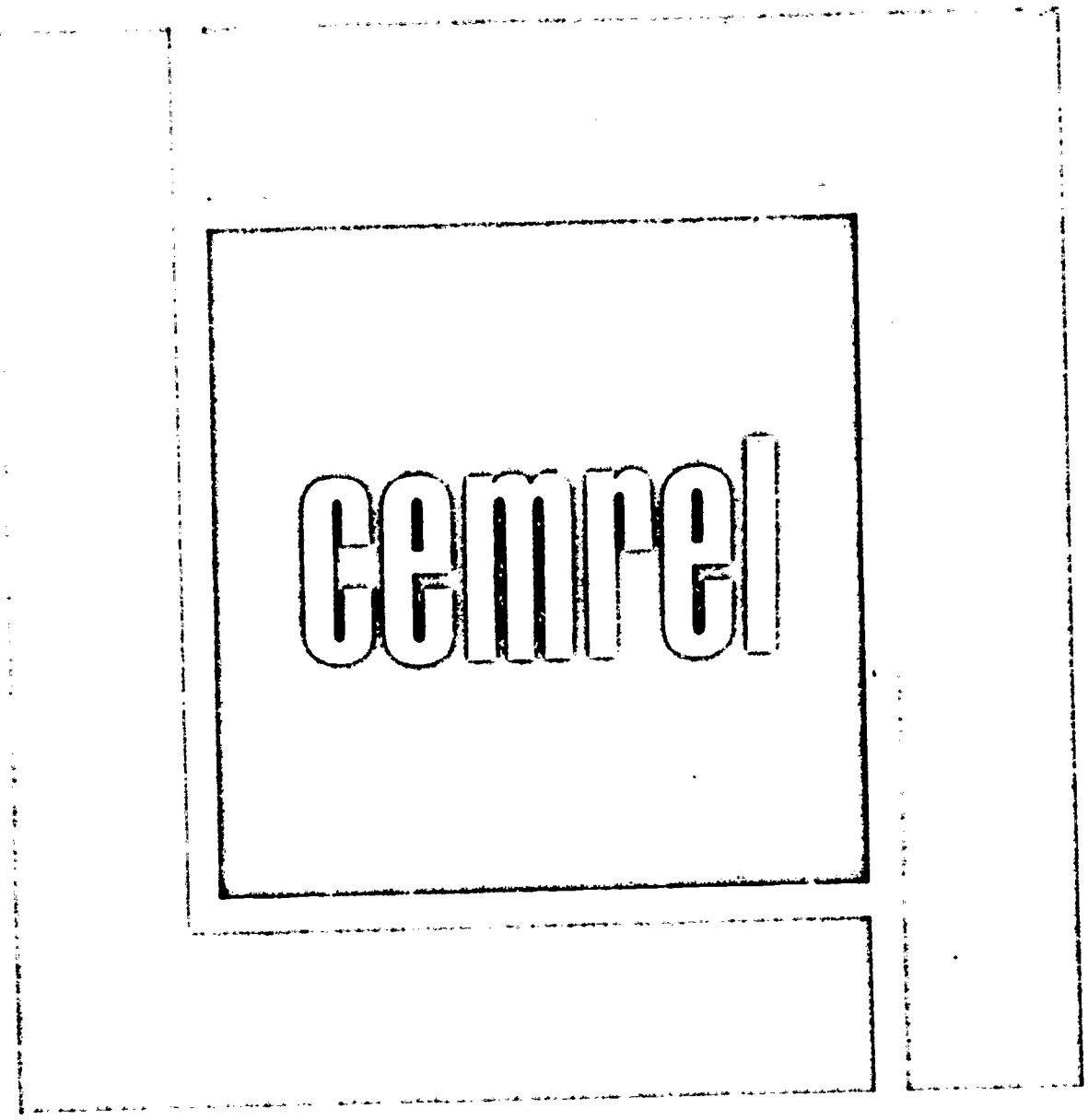
A P P E N D I X G

CEMREL (Program activities September 1, 1966 - December 1, 1967)



CENTRAL MIDWESTERN REGIONAL EDUCATIONAL LABORATORY.

PROGRAM ACTIVITIES

September 1, 1966 — December 1, 1967

FOR EDUCATIONAL

RESEARCH
INNOVATION
DIFFUSION
IMPLEMENTATION

This report, on Program Activities, is like the Progress Report it accompanies, intentionally brief and non-technical. Technical materials on all aspects of the program are available, should they be requested. The report has been prepared too hurriedly to suit its authors due to the unexpected USOE change of the due date from October 16 to September 16. Consequently, the staff has been unable to submit the written report to the Board of Directors of the Corporation and its Executive Committee for formal approval prior to its submission to the USOE, Bureau of Research. The report was discussed at some length with the Executive Committee on September 7. At that time the staff received approval to go forward with the preparation of the report describing all the programs described here at the budget level requested. That approval was tentative, however, and is subject to further, more formal approval based on fuller discussion and consideration of the written report. The next Board meeting will take place October 5, 1966.

The report is organized into the following sections:

Organization and Administration

Program Area: Classroom Teaching and Learning

Program Area: Systems Design and Application

Program Area: Innovation, Diffusion, and Training

Budget: Organization and Management Budget and Staffing Summary

Administrative Equipment and Facilities Budget

Program Budget

Program and Research Facilities Studies Budget

Budget Summary

ORGANIZATION AND ADMINISTRATION

The major activities of the September 1, 1966 - December 1, 1967 period with regard to organization and administration are briefly summarized as follows:

A. Further development and consolidation of the organization--

At the moment, the organizational scheme we have adopted seems to be working quite well. Nonetheless, we will be continuously alert to dysfunctions as they occur and are prepared to change the organization as we

see the desirability of that change. This will involve setting up internal staff and Executive Committee continuous review and evaluation process for making judgments about the efficiency and effectiveness of the organization as it operates.

The new members of the Board and the new Executive Committee will need some orientation to the concept of the Laboratory and to its workings and will during the course of the year, therefore, review all major policy decisions and procedures that have been set, not only to become better acquainted with them, but also with a view to changing those that are inappropriate.

The External Review Committee will be established and the staff and Executive Committee will work with them to develop a design for gathering data on the organization and its functioning and evaluating that data. The staff will have to work out appropriate reporting procedures and data handling methods, to insure certain aspects of confidentiality and to work out the proper relationships that will be required if the External Reporting Committee is to do its job.

Frequent planning and strategy sessions will be held with the central staff members and the area coordinators in order to work out better communication channels between the field and the organization. Our present plans call for expanding the size and areas of responsibility of the area offices as the Corporation matures. This will call for placing authority and responsibility in the area office and will require the careful development of plans for both procedural and substantive coordination among the arms of the Laboratory.

Regularly established conferences and seminars involving the central staff members, appropriate research staff, and Program Advisory Committee members will be held to review their decision-making process and to review and reconsider the research and development priorities that have been established. Seminars and conferences have been selected as a useful device for confronting people with the results of the continuing assessments problem and the surveys that are spoken of later in this report and for the development of alternate strategies for accomplishing the research and development goals of the Laboratory.

Undoubtedly, we will continue to need better coordination of the research teams and the research program as the Laboratory develops further, and will have to pay special attention to the serious problem of translating research and development efforts into application through training, demonstration, dissemination, and adequate field testing.

B. Staffing--

The major activity for the first three to four months of this period will be to acquire appropriate, competent staff members for those positions as yet unfilled. Parallel with this is a concomitant effort which will be undertaken to develop relevant orientation and training packages for new staff members.

Over the fifteen-month period, our ideas about the position of field coordinators and our expectations for his behavior undoubtedly will mature. The role is a new one in American education and like all new roles suffers now from ambiguous definition. In view of the very important function the area coordinators must serve if the Laboratory is to do its job effectively, major attention by the Executive Director, consultants, and the area coordinators themselves will be given to analyzing the position, developing strategy for its development, and in mutual training. The intent of this is for CEMREL to be prepared to expand the area offices through the addition of staff, facilities, and new responsibilities for area office personnel by late fall of 1967.

The resident senior research associate program we plan (see Program Area: Classroom Teaching and Learning) and its related summer curriculum evaluation institute will bring new vitality into the region and should be useful to some extent in upgrading the talents of the present researchers in the region, as well. This activity is not yet well planned nor organized, though our general intentions and strategies are reasonably well worked out. It remains for us to be much more precise in our planning and to make these arrangements firm.

Program Area: Classroom Teaching and Learning

Curriculum Surveys

As part of our continuing responsibility to assess the needs and problems of the region and to extend our beginning efforts in the curriculum area, we plan to undertake a comprehensive assessment of the variety of curricula that is currently in use in the schools of the CEMREL region. We intend to use this survey as the primary mechanism for providing us with baseline information about present curriculum practices, and it will also help us establish priorities for the expansion of our work into other curriculum areas.

Curriculum Evaluation Institute

This institute is intended as a corollary to the other curriculum work now in progress. The plan for this year is to invite eight emminent statisticians, psychometrists, psychologists, and educators, to attend a five week non-teaching summer research institute dealing with the problems of curriculum evaluation. During the course of the institute, each scientist would make a formal presentation relevant to the problem of curriculum evaluation, and discussion will center on the content of these presentations, or on other aspects of the general problem. One member of the institute will take responsibility for the planning and direction of the institute, and research assistants and secretarial help would be made available to the members as needed.

Resident Senior Researchers

This program is designed to bring to CEMREL scholars and researchers of exceptional promise who are at other institutions in the country. These could be scientists who are now working in our priority areas, or they could be individuals with rare skills and talents. They would be brought for the summer or the academic year so that they could contribute toward the solution of problems of our region through their own research efforts with us, and so that they could share their knowledge and methods with the research staff of the Laboratory, and the broader research community.

Additional Research Teams

During the coming year several new research teams will be formed to work primarily on lanuage and reading problems. These teams will be headed by the following researchers:

Pat Seelye, who is developing curriculum materials to be used with early language learning. Curtis Ramsey, who is planning the development and pilot testing of a system of multi-sensory stimulus materials for teaching beginning reading. Leon Lebovitz, who is concerned with the development of appropriate procedures and materials for teaching reading to children of varied learning "styles". C. W. McDonald, who is attempting to isolate and describe the key competencies needed in reading (and math) and to develop instructional procedures and materials to facilitate the acquisition of these skills. Bert Kaufman, who is engaged in the planning andpreparation of a K-12 modern mathematics curriculum program as an extension of his work in the NOVA Schools. David Miles, who is designing, developing, and field testing, multiple "problem" tasks to be used in eliciting creative problem solving behavior.

Program Area: Systems Design and Application

Data Processing Training

Although we have not yet made a complete assessment of the information and data processing needs of the region, it has already become apparent to us that the region is seriously lacking in the availability of the well-trained personnel that will be needed to accomodate the many school systems who need and desire to up-date and mechanize their present information systems. This problem will become even more acute as we begin to develop the EPIC systems discussed earlier. One element of the assistance we will offer to the schools in up-dating their information systems will be to make training in the basic elements of data processing available to the personnel who will be responsible for the operation of the school centers. We have made arrangements with the New England Educational Data System (NEEDS) to consult with us on the development of these information systems and training requirements.

Educational Materials Center

Generalized Collection Phase

This will be a continuation of the present collection techniques in which we obtain basic reference books, data about the region, demographic information, general education-oriented statistics and reports, as well as information on recent studies. We will also continue to collect the latest instructional materials in the fields of reading, elementary mathematics and science. Periodicals and reference books recommended by the staff and useful in their work will also be obtained.

Questionnaire

This instrument described in part I will be sent out on or near September 30th of this year. It will have been answered and analyzed by mid-November. The results will be in the form of a list of ranked priorities in several areas including preferred methods of collection and dissemination, preferred subject areas for concentration, and preferred typed of collection. These priority rankings will then be checked against the priority rankings of the Laboratory and a working list developed from the correlation of the two.

Specialized Collection Phase

This phase, based largely on the priority list developed from the questionnaire data, will begin between mid-November and December 1 of 1966. We will focus on certain subject areas in the collection of technical materials with an eye to forming as complete a collection as our resources permit. This will be accomplished through actual acquisition of the material that is

most valuable or that is unavailable to researchers in the region. Other material will be located in neary-by collections and access established through inter-Library Loan or some other arrangement.

The collection of instructional materials will be designed to complement the resources of the technical collection. It will also be coordinated with demonstration needs associated with programs of the Laboratory and will continue to emphasize the latest additions to aids in classroom teaching.

Widened Specialized Collection Phase

In February there will be a follow-up questionnaire to the one in September. By means of this instrument we will be able to make sure that the Educational Materials Center is still functioning in harmony with the needs of the region. The subject areas suggested on the questionnaire will be expanded to correlate with the growing interests of the Laboratory, and collection. The results of the questionnaire will have been analyzed by April 15 and a revised list of priorities established which has been based on the data from the questionnaire, Laboratory priorities, and staff recommendations.

Resource Location

Efforts to locate useful but little known research collections will continue, and systems for their use by researchers developed. Accumulation of copies of catalog cards from small, specialized libraries will become a major project. This will enable location of local resources and lead to their acquisition by the researcher. It will provide a centralized search method which will cut down a lot of the wasted time used in consulting many library collections. Eventually, this card collection will include copies of cards from collections outside the region.

Major libraries will be contacted and an inter-library loan agreement reached as is the case with Olin Library at Washington University where we have just initiated contact. In this way, articles in journals and the like are within easy reach.

DISSEMINATION

Newsletter

This small publication will be sent to the principals of each school in the region. It is hoped that they will inform the teachers of their school of the existance of the Educational Materials Center and urge them to use its services. The first newsletter will go out in January and will

be two pages long. It will explain the use and advantages of the Center and describe the instructional materials collection. It will also explain about the Educational Research Information Center (ERIC) material and describe the system by which it may be obtained through the EMC, and it will urge that the school obtain at least one copy of the ERIC index.

The second newsletter will also go to the principals of the region and will be four pages long. This one will be sent out in September of 1967 and will restate the purpose of the EMC. New types of instructional material received since January will be described, and the newsletter will probably contain one or two sample summaries of ERIC material with a repeated explanation of the acquisition system and suggestion that each school obtain at least one ERIC index.

Workshops

Workshops will be held at the EMC for about 20 people and will last for three days. The workshops will be held at times that do not conflict with the school year schedule and will be for teachers on textbook committees and those interested in curriculum selection. They will be exposed to the latest publications put out by the textbook industry, as well as the newest in audio visual equipment. Arrangements will be made to have experts demonstrate different types of material and explain different approaches.

The participants will also be exposed to the use of ERIC material and the Educational Materials Center.

Decentralization

The Educational Materials Center will display new instructional materials at all times as well as being a research and reference tool. When the need is felt, blocks of instructional material will be sent to the area offices. At first this will be in answer to requests of teachers or researchers only, and will be for the convenience of those who do not live close to St. Louis but who wish to examine new materials.

Later, probably in November of 1967, parts of the collection will be on permanent display at the area offices. This will enable visitors to see new material which they might not otherwise have known existed.

All of this material will be available for shipment to the site of a Laboratory program which might find it useful for display or demonstration.

Accessibility Phase

The major problems facing this phase of the EMC are ones of communication and transportation. These will be worked out and the plan in operation by June of 1967. It will be possible for a researcher working on a project outside of the St. Louis area to be supplied with a fairly complete set of materials related to his work. These would be available in any of the area offices on request. The EMC would serve as the control center for the location and dissemination of this material. By December, 1967, parts of the EMC technical collection should be in the area offices and part in the EMC. The EMC would have the largest collection because it has the larger amount of space. It would also have information on all pieces of the collection housed in the area offices. Through the EMC, material from any part of the region could be obtained in any other part of the region.

Demonstration

This will involve taking equipment to the schools and showing it to teachers. The material will include audio-visual aids as well as the latest worthwhile products of the textbook publishers.

Feasibility Studies

There will be a series of experimental studies to see what is needed and to try new approaches. These might include theuse of educational or or closed circuit television, and long distance video equipment for information retrieval between Laboratory offices.

Bibliography

A complete bibliography, in book form, will be completed in February. It will include all holdings of technical material with notes about the works where necessary. It will not include all instructional materials. It will be organized by subject and will include a subject index for easy reference. It will be made by copying a set of cards, the shelf list, which include all the relevant information about each piece. The bibliography will be followed-up by supplements in May, August, and November.

Several copies of each publication will be sent to each Laboratory. The Laboratories with organized reference collections will be urged to do the same thing. In this way an inter-Laboratory loan system can be easily organized. It is conceivable that a rotating system could be established whereby each year one of the Laboratory librarians puts together a composite bibliography based on the individual volumes and makes it available to all the Laboratories at a time when the main bibliographies and all the

supplements to it get to be too much of a burden to allow quick reference into other Laboratory resources.

Several copies of each publication will be sent to each area office in the region so that they will know what is available from the Educational Materials Center and so as to provide easy access into the collection.

Single copies will also be sent to small research libraries and terms of reciprocity set up.

Educational Research Information Center (ERIC) Material

Purchase of this material will increase with requests for certain items from researchers and with the specialized collection phase. Also, each laboratory office in the region, will be furnished with an index into the system as soon as they are available.

A system for use of the microfiche will be set up. This system will be initiated by a request for material on a certain subject or for documents identified by their acquisition number. We will then send summaries of the documents which we will obtain from the ERIC Resume Volumes. If the party is still interested in certain documents and would like to see all or a part of them, one of three avenues are open to him. He will be sent hard copy of the material if it is short enought. Arrangements will be made so that he can see the microfiche at the EMC or at any of the area offices, or he will be advised that he can purchase microfiche directly from Bell and Howell for 9 cents a sheet. We could do this for him, or perhaps he would prefer to order it himself. If someone knows what documents he would like to see before he contacts us, the summary step would, of course, be eliminated.

PROGRAM AREA: Innovation, Diffusion, and Personnel Development

With the exception of the summary and critique of recent studies of the Organizational Climate of Schools scheduled for completion October 15, 1966, activities described in the Progress Report are projected into the period covered here. Only those activities which are not discussed in the Progress Report (June 15, 1966 to September 1, 1966) are mentioned below.

Exploration into Educational Diffusion

The Reading Specialist Training Program mentioned in the Progress Report has been modified to permit a rather comprehensive study of educational diffusion. During the period of initial assessment of educational needs and problems in the CEMREL region, one of the most pressing problems centered around the improvement of reading instruction and a critical manpower shortage of teachers with special training in reading.

Early program activities of the laboratory confirmed our thinking that it is not economically feasible to provide 50,000 elementary teachers of the region with direct exposure to special training for each area of the curriculum in which change is sought. We must find some way of determining how positive intervention can be carried out within the schools at minimum cost. One way of accomplishing the goal is to examine the extent to which the social structure of the school inhibits or facilitates change. If such an exploration can provide information leading to the early identification of the leading change agent of the school (formal or informal leadership), then diffusion is likely to occur at a faster rate through the early training and commitment of the change agent to the innovative subject. Hence the study will also facilitate the establishment of a network of change agents.

The vehicle for analysis for the exploration into educational diffusion is change in the school reading program. The primary units of concern are teachers, curriculum directors, principals, size of school system, and pupils.

Principal and teacher nomination scales will be used with stimulus items relating to curriculum leadership together with a number of masking

items. Three levels of curriculum leadership will be assigned (high leadership, moderate leadership, and isolate nonleader). Various combinations of teachers will be selected for participation to provide data for analysis of such questions as "Is there a critical number of persons of a school who must receive initial, direct training to assure diffusion?"

Sixty teachers per grade level (N = 360) are to be identified and selected for eight weeks of special training in reading during the summer of 1967. A total of 180 principals and curriculum directors will receive one week of intensive training with two major objectives: (1) to pre-dispose the principal to change, and (2) to expose him to the materials and approaches which the reading instructors plan to present to his teachers in the teacher training sessions. Appropriate pre-post measures will be obtained for teachers and principals. All training activities are scheduled for the 1967 summer sessions in ten colleges and universities of the region. With a teacher N of 360, student contact of more than 100,000 pupils per year is assured.

Figure 1 indicates a tentative breakdown of activity. The definition of the problem and refinement of the model will occur between October, 1966 and April, 1967 through a series of conferences with college and university personnel engaged in preparing teachers to teach reading, educational researchers, and various school personnel. Other CEMREL activities are expected to provide some input with modifying effects. Within three years we should be able to generalize the treatment effects upon diffusion and make application to other areas of the curriculum.

ADDITIONAL PROGRAM ACTIVITIES

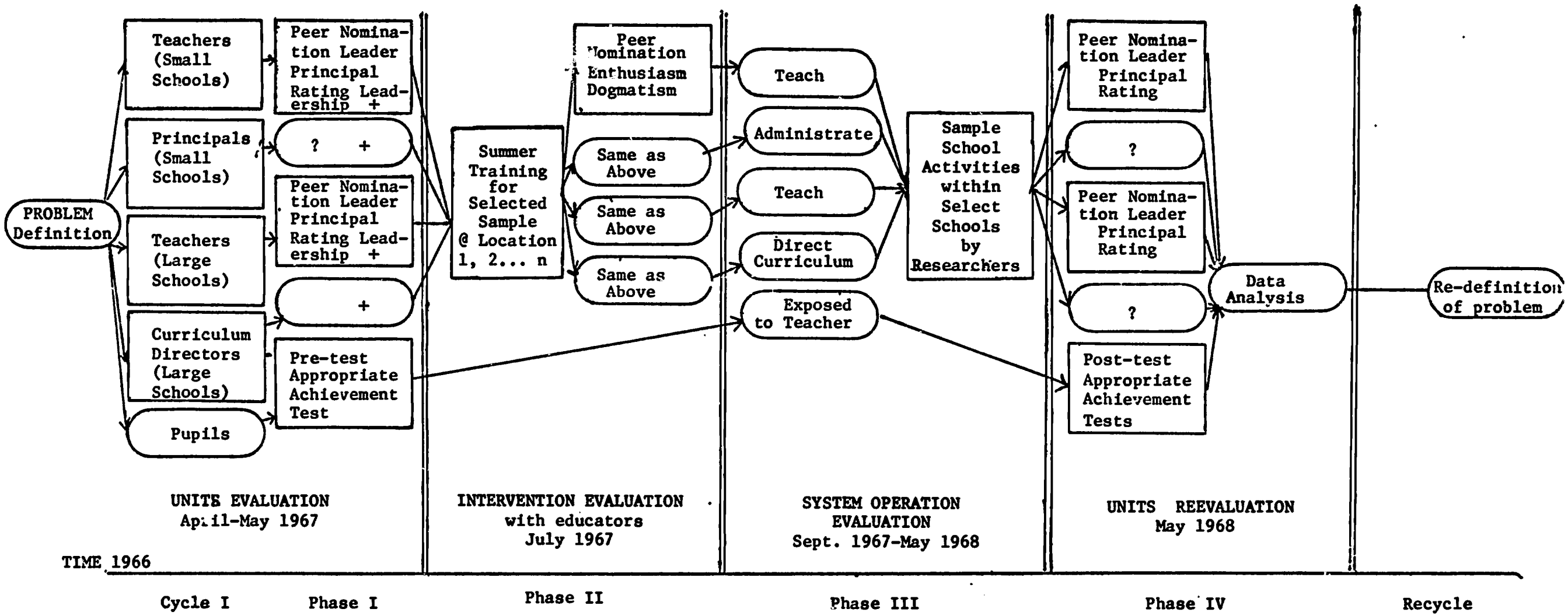
Innovation, Diffusion, and Personnel Development

Earlier CEMREL reports have indicated the pressing need for studies pertaining to innovation and change processes. Educators of the region continue to express concern about teacher preparation at all levels. We have begun to locate and bring together in close collaboration the researchers, scholars, and school people to mount these problems.

As indicated in the Progress Report (June 15, 1966 to September 1, 1966), a regional conference on Innovation and Diffusion is planned in collaboration with the University City, Missouri school system, nationally known for its leadership in the field of educational innovation. The conference will take place late in October, 1966. Teams of five persons will be invited from a number of schools throughout the region in recognition of the notion that the "team" exposure may preclude the possibility of an enthusiastic participant returning to his school only to have his ideas succumb to isolation starvation.

Although work has already begun toward the selection of research strategies it is premature to specify the activities in the absence of appropriate review and modification.

Figure 1. A MODEL for Investigation into Educational Diffusion



Regional Research Training

Recent Federal programs have placed heavy demands upon the schools to engage in research and evaluation activities. Here as elsewhere, many of the colleges and universities of the region are severely limited in highly trained research personnel who can provide research training for school personnel and guidance for other staff members of the institution.

In order to augment regional resources and to assist colleges, universities, and schools toward a greater realization of their research potential, CEMREL now proposes a sharing of expertise in the region through a series of conferences, seminars, and short term workshops.

Activities are proposed at two levels: (1) college and university, and (2) schools.

A P P E N D I X H

Listing of Art and Music Test

Standardized Music Tests

Many music teachers find the use of tests as valuable aids in administering the music program. Frequently teachers rely entirely on home-made tests. At times, however, teachers desire to use a standardized test for a better appraisal of the local music program. The use of standarized tests with established norms permits the teacher to better evaluate the teaching process by comparing the progress in a local situation with results obtained by extensive use of a measure.

Test results must be interpreted. Although music tests measure aptitude important in the study of music, no standardized test provides an analysis of a student's drive, initiative, and perseverance. These traits should be verified by other sources of information.

Although many music tests have been developed, the following list includes only those most generally known.

CONRAD INSTRUMENT-TALENT TEST, Jacques W. Conrad. For ages 7 and over. Five areas measured: pitch, tempo, rhythm, harmony, tone recognition. The test is mainly concerned with selecting the musical instruments which a given child might most profitably study. Test consists of three parts: (a) five listening tests of musical aptitude; (b) a questionnaire on scholastic and musical interests; (c) a consideration of the shape of the pupil's hand, lips, and jaw. Piano and electric metronome essential for administration. Manual and grading sheets available. Mills Music, Inc., 1619 Broadway, New York 19, N.Y., 1941.

DRAKE MUSICAL APTITUDE TESTS, Raleigh M. Drake. For ages 8 and over. Two tests: musical memory, rhythm. Recorded on 12-inch record. Manual, scoring key and test blanks available. Science Research Associates, 57 West Grand Avenue, Chicago 10, Illinois, 1957.

DIAGNOSTIC TESTS OF ACHIEVEMENT IN MUSIC, M. Lela Kotick and T. L. Torgerson. For grades 4 - 12. Ten areas: diatonic syllable names, chromatic syllable names, number names, time signatures, major and minor keys, note and rest values, letter names, signs and symbols, key names, song recognition. Sections may be omitted not appropriate to local curriculum. Answer sheets and scoring stencils available. California Test Bureau, 5916 Hollywood Boulevard, Los Angeles 28, California, 1950.

FARNUM MUSIC NOTATION TEST, Stephen E. Farnum. For grades 7-9. Provides a basis for predicting the likelihood that a student will profit from advanced musical training, by measuring the effects of the first semester of formal, informal, or classroom instruction. Recorded on 12-inch record. Manual, scoring key and test blanks available. Psychological Corporation, 304 East 45th Street, New York 17, N.Y., 1953.

GASTON TEST OF MUSICALITY, E. Thayer Gaston. Test covers interest, tonal movement, sight reading, changes in pitches and rhythm. Recorded on 12-inch LP records. Test blanks, scoring key and manual available. O'Dell's Instrument Service, 925 Massachusetts Street, Lawrence, Kansas, revised 1958.

KWALWASSER MUSIC TALENT TEST, Jacob Kwalwasser. Two forms: Form B, for grades 4 - 6; Form A, for older people. Series of three tones are repeated. On the second rendition there is a change in either the pitch, intensity, loudness, or the rhythmic pattern. Recorded on 78 RPM record. Manual and record blanks available. Mills Music, Inc., 1619 Broadway, New York 19, N. Y., 1953.

KWALWASSER-DYKEMA MUSIC TEST, Jacob Kwalwasser and Peter Dykema. Measures pitch, intensity, time, timbre, rhythm and tonal memory, melodic taste, tonal movement,

pitch, imagery, and rhythm imagery. For grades 4-16 and adults. Recordings required. Carl Fischer, Inc., 56 Cooper Square, New York 3, N. Y., 1930.

MUSICAL APTITUDE TEST: SERIES A, Harvey S. Whistler and Louis P. Thorpe. Grades 4 - 10. Four areas measured: rhythm, pitch, melody and pitch discrimination. Testing material and answer sheets needed. Piano essential for administration; 40 to 50 minutes needed for administering. California Test Bureau, 5916 Hollywood Boulevard, Los Angeles 28, California, 1950.

SEASHORE MEASURES OF MUSICAL TALENTS, Revised Edition, Carl E. Seashore, Don Lewis, and Joseph G. Saetveit. For grades 4 - 16 and adults. Six areas measured: pitch, loudness, time, timbre, rhythm, tonal memory. Recorded on three 12-inch records. Manual and answer sheets available. Requires 60 minutes to administer. Psychological Corporation, 304 East 45th Street, New York 17, N. Y., revised 1956.

STRONG VOCATIONAL INTEREST TEST, E. K. Strong, Jr. (Not an aptitude or achievement test). For ages 17 and over. Covers 47 occupations (including music teaching and music performance). Consulting Psychologists Press, 270 Town and Country Village. Palo Alto, California, 1954.

TILSON-GRETSCH TEST OF MUSICAL APTITUDE, Lowell M. Tilson. Similar to Seashore test. Covers pitch, loudness, time sensitivity and tonal memory. Fred M. Gretsch Manufacturing C., 218 South Wabash Avenue, Chicago, Illinois, 1941.

WATKINS-FARNUM PERFORMANCE SCALE, John G. Watkins and Stephen E. Farnum. A standardized achievement test for all band instruments. A series of musical exercises of increasing difficulty for sight reading, and the level of performance judged by checking the number of mistakes made in playing. Manual and score sheet available. Hal Leonard Music, Inc., 64 East Second Street, Winona, Minnesota, 1954.

WING STANDARIZED TESTS OF MUSICAL INTELLIGENCE, H. D. Wing and Cecilia Wing. A test of musical ability on 10 records. Widely used in England. For ages 10 and over. Seven areas measured: chord analysis, pitch change, memory, rhythmic accent, harmony, intensity, phrasing. Recorded on disc or tape. Manual, scoring key and answer sheets available. Available from National Foundation for Education Research in England and Wales, 79 Wimpole Street, London W 1, England, revised 1958.

ART TESTS

1. THE KLINE-CAREY MEASURING SCALE FOR FREEHAND DRAWING. For kindergarten through grade 8. This test consists of four separate scales--tree drawings, house drawings, rabbit drawings, and human figure drawings. Each scale has fourteen steps, ranging from very poor drawing to very good drawing. The Johns Hopkins University Studies in Education, No. 5a, 1923. Johns Hopkins Press.

2. THE LEWERENZ TEST, Alfred S. Lewerenz. An achievement test in making designs, drawing from memory, originality, and aesthetic recognition. The test is organized in terms of proportion, color, and other art principles. Grades 3 - 12; 1927; 1 form, 3 parts; 35¢ per manual; $5.00 per color chart; 50¢ per speciman set, without color chart; 30 - 35 minutes per part; (a) Part I - $2.00 per 100 (b) Part II - $2.00 per 100 (c) Part III - $3.50 per 100. California Test Bureau, Los Angeles.

3. THE MEIER ART JUDGMENT TEST, Norman Charles Meier. A revision of The Meier-Seashore Art Judgment Test. This test is comprised of 100 pairs of pictures printed in phototone and resembling etchings. The pupil chooses the correct print. This test is designed for use in Junior and Senior High Schools and in art schools. Grades 7 - 12; 1929-42; IBM; I form '40; manual ('42) $1 per test; 5-24, 90¢ each; 25 or more, 85¢ each; separate answer sheets must be used; 4¢ per IBM answer sheet; 30¢ per specimen set, postpaid; nontimed (45-60) minutes; Bureau of Educational Research and Service, State University of Iowa.

4. GOODENOUGH-HARRIS DRAWING TEST, Florence L. Goodenough and Dale B. Harris. A revision of the GOODENOUGH INTELLIGENCE TEST; ages 3 - 15: 1926-63, 1 form (4 pages); manual, (80 pages); quality scale cards, (24 cards); $3.00 per 35 tests; $2.50 per set of quality scale cards; $1.00 per manual; postage extra; 15-20 minutes; Harcourt, Brace and World, Inc.; New York, 1963. (This test has the highest validity and reliability according to most authorities.)

5. GRAVES DESIGN JUDGMENT THEST, Maitland Graves. Grades 7 - 16 and adults; 1948; IBM; 1 form; (revised) manual ('48); 1-9 copies, $1.75 each; 10-99, $1.50 each; separate answer sheets must be used; $1.85 per 50 IBM answer sheets; $1.85 per specimen set; postpaid; nontimed (20-30) minutes; Psychological Corporation.

6. KNAUBER ART ABILITY TEST, Alma Jordon Knauber. Grade 7 - 16; 1932-35; 1 form, '32, manual ('35); 12¢ per test, postage extra; $1.25 per manual; $1.30 per specimen set; postpaid; nontimed (180) minutes; the Author, 6988 Warder Drive, Cincinnati 24, Ohio.

7. KNAUBER ART VOCABULARY TEST, Alma Jordan Knauber. Grades 7 - 16; 1932-35; 1 form, '32; manual (35); 9¢ per test, postage extra; 30¢ per manual; 35¢ per specimen set; postpa nontimed (40) minutes; the Author, 6988 Warder Drive, Cincinnait 24, Ohio.

A P P E N D I X I

Physical Education Test

SUGGESTED FORMAT FOR TITLE I PROJECTS IN ELEMENTARY PHYSICAL EDUCATION

There should be a multiple phase evaluative program. This particular design incorporates testing in four areas:

(1) Fundamental skills

(2) Strength

(3) Knowledge of rythmic cultural activities

(4) Growth and development in social-emotional behavior

The evaluative portion of the project should not be of such a duration that it becomes a large portion of the proposed project.

Areas one and two can be administered by the physical education teacher or supervisor. The teachers should help score, record, and evaluate other classes than their own for area four (4). Area three can be administered by the special music teacher, classroom teacher, or the physical education teacher with the use of records.

The scoring on areas one and two are meaningful for this type of group project evaluation. The norms given in this format are from Wisconsin's Standards for Physical Education.

For example: if grade two boys are to be tested on the standing broad jump, mark a distance on the field, in the gym, or classroom 3'6" and those not jumping the prescribed distance. Convert your figures into percentages and compare these to the post testing next semester.

SUGGESTED FORMAT

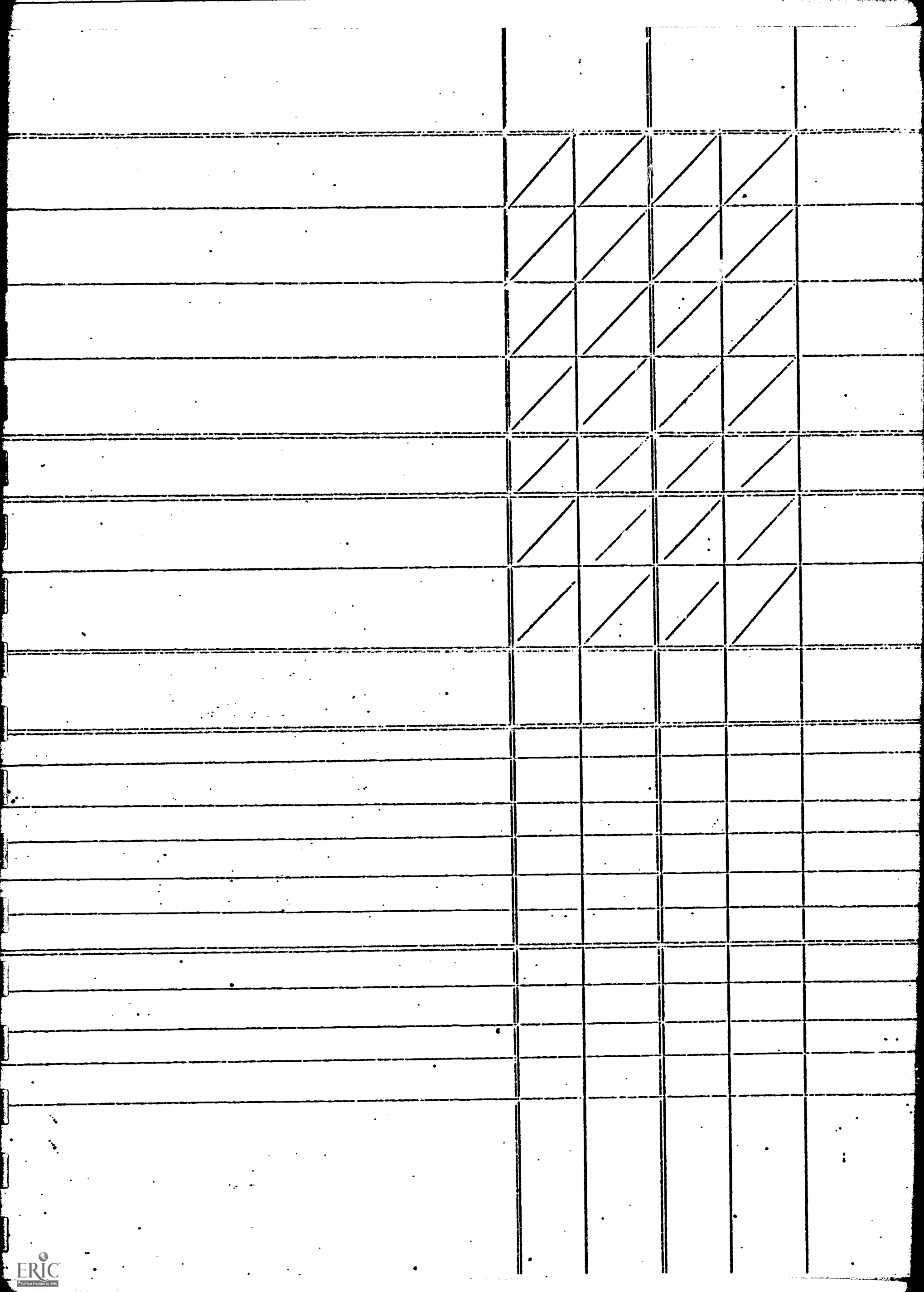
Grade: Check 1-( ) 2-( ) 3-( )

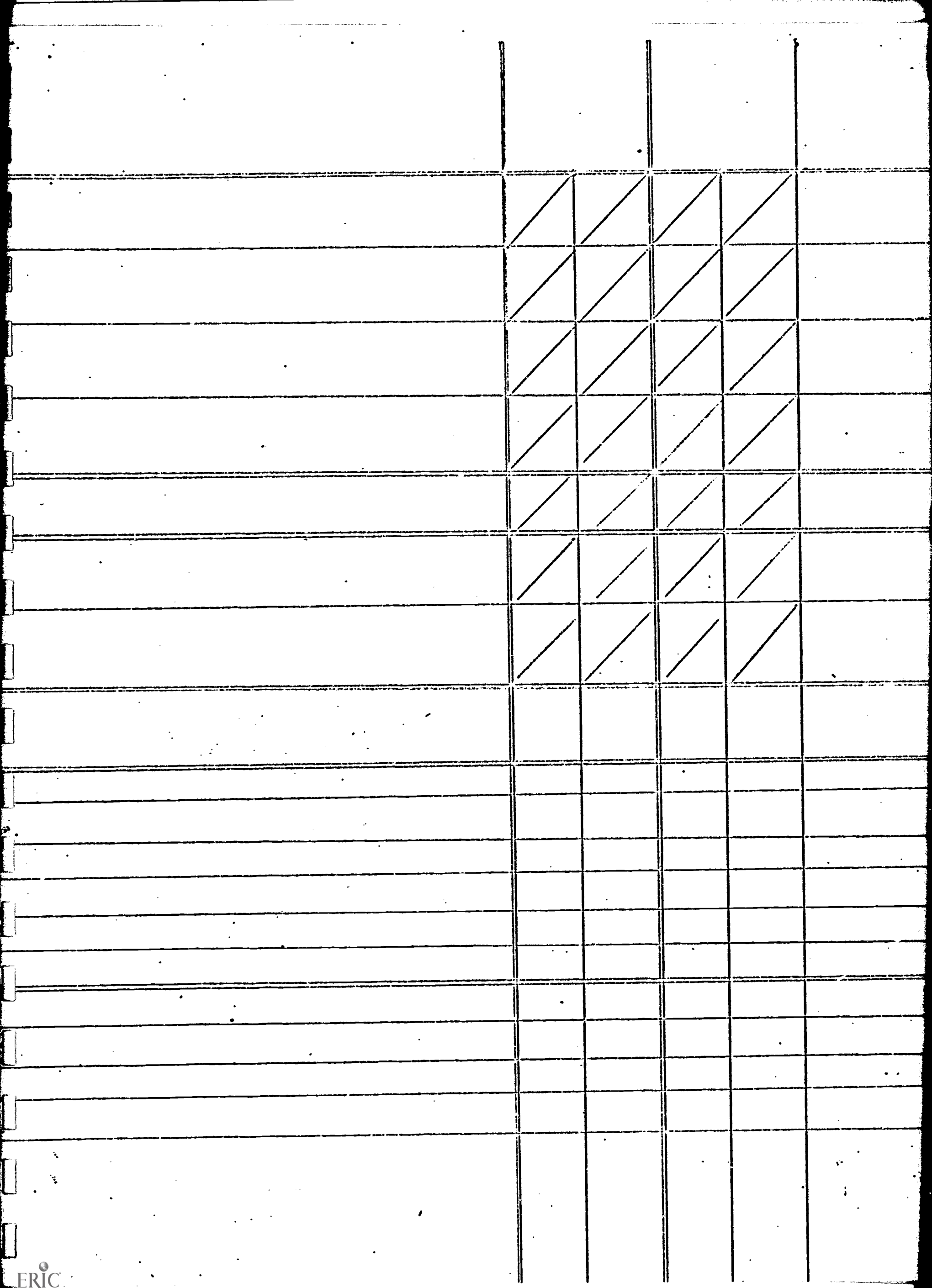
Fundamental Skills	Boys	Girls	PRETEST BELOW NORM # / %	PRETEST ABOVE NORM # / %	POST TEST BELOW NORM # / %	POST TEST ABOVE NORM # / %	IMPROVEMENT PERCENTAGE
a. 35 year run	7.6-7.3-6.9	7.9-7.6-7.3	5 / 25	20 / 75	0 / 0	25 / 100	25%
b. Bounce playground ball in 2' circle 30 sec.							
c. Clinch rope twice own height							
d. Standing broadjump	Boys: 3'9"-3'6"-3'9"	Girls: 2'8"-3'6"-3'7"					
Strength							
a. Chins	Boys: 1, 2, 3	Girls: 1, 1, 1					
b. Sit ups	15, 17, 20						

*Rhythmic and Cultural Activities	RETEST	POST TEST	
a. Respond to an underlying beat	2	3	+1
b. Recognize simple phrases of music and respond by changing direction of steps.	2	4	+2
c. Perform singing games and folk dances taught	1	3	+2
d. Invent new ways of moving to music	3	3	+0
e. Recognize and tell about basic symphonic music	1	5	+4
			av. +1.8
*Social-Emotional Behavior			
a. Take turns in activities	2	4	+2
b. Admit when tagged or caught and follow rules	3	3	0
c. Pay attention and follow directions quickly.	2	4	+2
d. Refrain from laughing at other's mistakes.	2	2	0
e. Play happily without pushing or quarreling	3	3	0
			av. +.8

* Rating scale: 1 - poor 4 - superior
2 - needs improvement
3 - average 5 - excellent

Have teachers observe and evaluate other classes, not their own.





Wisconsin

OUTCOME STANDARDS

Many human attributes such as intelligence, coordination, physical fitness, integrity, and honesty are intricately complex. These terms, indicative of concepts, are in essence abstractions. They cannot be measured directly. Since they elude direct measurement, other means have been used to assess the amount of these qualities in human beings. What has been done to determine the quantity of these attributes is to observe behavior. Certain types of behavior are believed to be representative of the more complex qualities.

Many of the attributes to which a good physical education program contributes are of this complex nature. Health, coordination, agility, and physical fitness are qualities we cannot measure directly. What is needed is a group of selected, measurable activities that we believe give evidence of the more complex qualities. We may then diagnose strengths and weaknesses, not only in the individual, but also in the programs that lead to the status of our pupils.

The outcomes listed below are types of behavior we believe to be indicative of the more complex qualities to which a good physical education program should contribute. In general, the checklist is intended to give evidence of the strengths and weaknesses of the physical education program. For this reason, it is set up in terms of *per cent* of pupils who achieve these standards. As one example, if 50 per cent of a class can attain the level stated, then the class is performing as one might expect. If, on the other hand, only 25 per cent of a class is able to perform the run tests at the level designated while 75 per cent attain the level required for the throwing tests, perhaps one should consider more emphasis on running. At any rate, such a profile should illicit an examination of possible reasons for the discrepancy.

A few statements of standards have not followed the general plan of a 50 per cent expectancy from classes. Such items as three and four on page 7, eight on page 8, and three on page 11, are statements that differ from the majority. One would normally expect 100 per cent of a class to pass these items. The Committee has, however, chosen to leave these statements since these are fundamental locomotor skills that should be constantly under observation.

In presenting these outcome standards, the Committee is aware of three things:

1. The outcome standards may not be, in all instances, the correct ones for the State of Wisconsin. At present, they are the best we can set from the aid of a few pilot schools and from other available sources. When data are available from many schools throughout the State, then we can more accurately determine norms for the State of Wisconsin.

2. A set of State-wide standards is not adequate for a particular school. Each school is encouraged to establish a set of local norms, eventually using the State norms to more effectively discover strengths and weaknesses in the local program.

3. There are more tests listed under certain categories in Part I of each grade range than any school could be expected to use. Each school is invited to select one of the items in each category and use this in developing a local system of tests.

Grades 1 – 3

I. Evidence of growth and development in physical skills	Per Cent of Pupils 25% Poor	50% Av.	75% Good
A. Fundamental Skills			
1. Run – 35 yard dash* (in sec.)			
Boys: 7.6", 7.3", 6.9"	_____	_____	_____
Girls: 7.9", 7.6", 7.3"	_____	_____	_____
2. Jump			
a. Rope thrown by self 10, 15, 20 times	_____	_____	_____
b. Jump rope thrown (turned) by two people for at least 10 times	_____	_____	_____
c. Run in, jump, and run out of rope thrown (turned) by two people	_____	_____	_____
d. Over rope or bar 1 ½', 2', 2 ¼' high	_____	_____	_____
e. Running broad – five feet	_____	_____	_____
f. Standing broad			
Boys: 2'9", 3'6", 3'9"	_____	_____	_____
Girls: 2'8", 3'6", 3'7"	_____	_____	_____
3. Other locomotor skills: Use good body mechanics to walk, skip, hop, leap, slide, and gallop in specified directions and in simple relays and games	_____	_____	_____
4. Swing and twist arms and trunk in stationary position and while moving	_____	_____	_____
5. Throw			
a. Softball (baseball size)			
(1) For distance	_____	_____	_____
Boys: 55'	_____	_____	_____
Girls: 28'	_____	_____	_____
(2) Accurately for 30' so it can be caught	_____	_____	_____
b. Playground ball with two-handed underhand, overhead, and chest pass	_____	_____	_____
6. Catch			
a. Ball or bean bag thrown from 15, 20, 25 feet	_____	_____	_____
b. Kicked ball from distance of 20, 25, and 30 feet	_____	_____	_____
c. Field a ground ball (5, 7, and 9 out of 10 times)	_____	_____	_____

* *Standards are given in order for Grades One, Two, and Three. In instances where a standard is not given for each grade, the outcome should be attained by the last specified grade.*

	Per Cent of Pupils		
	25% Poor	50% Av.	75% Good
7. Strike			
a. Batting			
(1) Softball thrown slowly (3, 5, and 7 out of 10)	____	____	____
(2) Softball from tee	____	____	____
(3) Bounce playground ball in 2' diameter circle for 30 seconds	____	____	____
b. Kicking			
(1) Soccer ball for 40, 45, and 50 feet (place kick)	____	____	____
(2) Soccer ball between two pins set 2½ feet apart from a distance of 5, 10, and 15 feet	____	____	____
(3) Accurately kick pass to a player 30 feet	____	____	____
(4) Punt a soccer ball	____	____	____
8. Climb: Rope, ladder, or jungle gym at least two times own height	____	____	____
B. Balancing Body			
1. Forward and sideways on low balance beam	____	____	____
2. Perform three-fourths of balance stunts for grade level	____	____	____
II C. Strength			
1. Chins – using reverse grip			
Boys: 1, 2, 3	____	____	____
Girls: 1, 1, 1	____	____	____
* 2. Sit-ups – 15, 17, 20	____	____	____
III D. Rhythmic Activities			
1. Respond to an underlying beat	____	____	____
2. Distinguish quality of music and respond correctly to it	____	____	____
3. Detect pitch of music and respond to it	____	____	____
4. Recognize simple phrases of music and respond by changing direction or steps	____	____	____
5. Recognize music best suited for locomotor skills	____	____	____

* *One minute duration*

	Per Cent of Pupils		
	25% Poor	50% Av.	75% Good
6. Perform all locomotor skills listed in 1, 2, and 3 under A above, with music of suitable meter and tempo,** alone and with partner (Leap excluded)	———	———	———
7. Perform the singing games and folk dances taught	———	———	———
8. Invent new ways of moving to music, using all parts of the body	———	———	———
9. Follow a musical form to creat own dance forms	———	———	———
E. Perform at least 8, 10, and 12 of the stunts and self-testing activities taught	———	———	———
II. Evidence of growth and development in social-emotional behavior.			
A. Take turns in activities	———	———	———
B. Wait for turn in activity	———	———	———
C. Share equipment	———	———	———
D. Pay attention and follow directions quickly	———	———	———
E. Play happily without pushing and quarrelling	———	———	———
F. Admit when tagged or caught	———	———	———
G. Refrain from crying when slightly hurt	———	———	———
H. Refrain from booing or laughing at others' mistakes	———	———	———
I. Help take care of equipment	———	———	———
J. Help others less skilled	———	———	———
K. Begin to be able to give directions for simple games	———	———	———
L. Give evidence of satisfaction from belonging to a group and being wanted	———	———	———
III. Evidence of growth and development in knowledge and understandings			
A. Know formations used in activities	———	———	———
B. Help form and maintain a reasonably good circle during activity	———	———	———
C. Know rules for activities taught in class	———	———	———
D. Know how to count off by two's and three's and to follow directions to get into formation	———	———	———
E. Score simple games	———	———	———

** *For walk, run, jump, and leap, 2/4 and 4/4 time.*
For skip, slide, gallop – 6/8 time. Tempo should be fast to accommodate short legs.

	Per Cent of Pupils		
	25% Poor	50% Av.	75% Good
F. Know safety rules for play space and equipment	———	———	———
G. Know how activities can be used in situations other than physical education class	———	———	———
H. Know and practice good health rules before, during, and following exercise such as			
1. Wearing proper clothing and the need for proper "cooling off", rest, and relaxation.	———	———	———
I. Know names of different kinds of equipment	———	———	———
J. Know why thrown or batted balls go high or low	———	———	———
K. Know how to get more distance on thrown and kicked balls	———	———	———
L. Know how one may keep balance better on balance beam such as bending knees, etc.	———	———	———
M. Invent ways of playing games more successfully	———	———	———

Grades 4 – 6

	Per Cent of Pupils		
	25% Poor	50% Av.	75% Good
I. Evidence of growth and development in physical skills*			
A. Fundamental Skills			
1. Run			
a. 50-yard dash (in sec.)			
Boys: 8.5'', 8.2'', 8.0''	____	____	____
Girls: 8.9'', 8.6'', 8.3''	____	____	____
b. Short potato race (5,10, 15 yards)(in sec.)			
Boys: 21.0'', 20.7'', 20.5''	____	____	____
Girls: 22.4'', 22.0'', 21.4''	____	____	____
c. Shuttle run (in sec.)			
Boys: 11.4'', 11.0'', 10.8''	____	____	____
Girls: 11.8'', 11.6'', 11.3''	____	____	____
d. 600 yard run walk (in min. & sec.)			
Boys: 2'36'', 2'26'', 2'19''	____	____	____
Girls: 2'53'', 2'50'', 2'42''	____	____	____
e. Stop quickly and pivot			
2. Jump			
a. Vertical jump and reach			
Boys: 11'', 12'', 13''	____	____	____
Girls: 9'', 10'', 11''	____	____	____
b. Standing broad jump			
Boys: 4'5'', 4'10'', 5.0''	____	____	____
Girls: 4', 4'4'', 4'7''	____	____	____
3. Continue to show improvement in other movement skills listed for Grades 1–3, IA, 3 and 4	____	____	____
4. Throw			
a. Basketball (overarm)			
Boys: 36', 40', 44.5'	____	____	____
Girls: 23', 27', 31'	____	____	____
b. Softball			
Boys: 90', 102', 116'	____	____	____
Girls: 42', 50', 60'	____	____	____
c. At target 17'' x 30'' – softball thrown from 20'			
Boys: 3 of 5	____	____	____
Girls: 2 of 5	____	____	____

* *Standards are given in order for grades four, five, and six.*

	Per Cent of Pupils		
	25% Poor	50% Av.	75% Good
5. Catch			
a. Softball from 30 feet			
Boys: 8 of 10	____	____	____
Girls: 6 of 10	____	____	____
b. Flyballs			
Boys: 3 of 5	____	____	____
Girls: 2 of 5	____	____	____
c. Grounders			
Boys: 3 of 5	____	____	____
Girls: 2 of 5			
6. Strike			
a. Bat pitched softball from 35'	____	____	____
b. Volleyball against wall 3, 5, 7 times from a distance of 5'	____	____	____
c. Kick			
(1) soccer ball (punt) – 45'	____	____	____
(2) goal kick from 40' – 2 of 5	____	____	____
(3) trap ball with either foot – 4 of 5	____	____	____
B. Balance body			
1. On balls of feet walk 10' sideways on balance beam	____	____	____
2. Walk 10' forward on balance beam	____	____	____
3. Walk backward 10' on balance beam.	____	____	____
4. Perform at least one-half balance stunts taught in class	____	____	____
C. Strength			
1. Pull-ups or modified pull-ups with reverse grip			
Boys: 1, 1, 1	____	____	____
Girls: (modified) 28, 33, 40	____	____	____
* 2. Sit-ups			
Boys: 22, 27, 29	____	____	____
Girls: 20, 22, 24	____	____	____
3. Push ups			
Boys: 9, 10, 11	____	____	____
Girls: (Knee) 4, 5, 6	____	____	____

* *One minute duration*

	Per Cent of Pupils		
	25% Poor	50% Av.	75% Good
D. Rhythmic Activities			
1. Perform the following step patterns accurately to rhythmic accompaniment, alone and with partner:	____	____	____
Polka — Step-hop			
Heel-and-toe polka — Balance step			
Two-step — Bleking step			
Schottische			
2. Perform, with accuracy and ease, the folk dance material presented in class.	____	____	____
3. Develop own patterns of movement to accompaniment demonstrating recognition of phrasing and dynamics.	____	____	____
E. Participation			
1. Use above basic skills in combination to successfully participate in 20 or more lead-up games.	____	____	____
2. Perform at least 12, 15, 18 stunts involving tumbling, rope jumping and playground apparatus	____	____	____
F. Aquatics			
1. Jump into deep water, level off, swim 15 yards. Without stopping or touching, swim back to starting point. Turn on back and rest, either motionless or with gentle paddling movements, for one minute.	____	____	____
2. Swim continuously			
a. elementary back stroke for 50 yards	____	____	____
b. breast stroke, side stroke, or hand-over-hand stroke for 100 yards	____	____	____
3. Float for at least one minute	____	____	____
4. Scull, moving backward for 10 yards	____	____	____
5. Tread water at least one-half minute	____	____	____
6. Perform a standing front dive in good form	____	____	____
II. Evidence of growth and development in Social-Emotional Behavior			
A. Win without boasting	____	____	____
B. Lose without becoming sullen or losing temper	____	____	____
C. Be considerate of the rights of others	____	____	____

	Per Cent of Pupils 25% Poor	50% Av.	75% Good
D. Accept decision of group or officials	____	____	____
E. Show concern for safety of others	____	____	____
F. Be courteous	____	____	____
G. Respond quickly and accurately to directions	____	____	____
H. Take criticism without giving an alibi	____	____	____
I. Be a cooperative team member, appreciating the fact that others have privilege and responsibility for their positions.	____	____	____
J. Accept and appreciate individual differences	____	____	____
K. Help others less skilled	____	____	____
L. Refrain from booing or jeering, or laughing at others' mistakes.	____	____	____
M. Assume responsibility for care of equipment	____	____	____
N. Help with choice of games and play these games in teacher's absence	____	____	____
O. Assume responsibility for improving	____	____	____
P. Assume role of group leader as well as role of group member	____	____	____
III. Evidence of growth and development in Knowledge and Understanding			
A. Know importance of such things as nutrition, rest, sleep, and exercise	____	____	____
B. Know fundamentals, rules, how to score, and strategy for 20 or more lead-up games	____	____	____
C. Begin to understand the importance of correcting remedial defects	____	____	____
D. Know more of the principles of good movement as indicated in III J, K, and L, Grades 1-3, and be able to relate these to outcomes	____	____	____
E. Understand that practice develops self improvement	____	____	____
F. Understand why the body floats in water	____	____	____

A P P E N D I X J

Regulation and Guidelines Title I

REGULATIONS and GUIDELINES

TITLE I
P. L. 89-10

"Programs for Educationally Deprived Children"

THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

OCTOBER 1965

STATE DEPARTMENT OF EDUCATION

JEFFERSON CITY, MISSOURI

INTRODUCTION

The American dream is to provide each citizen with an opportunity to develop in accordance with his potential. Our educational systems can provide this opportunity. However, many boys and girls have been denied this opportunity because of the debilitating effects of poverty. It is apparent there is a close correlation between poverty and educational deprivation. New programs, special programs, and expanded programs can be a basic factor in breaking this circular chain of poverty and educational deprivation. The purpose of this title is to provide increased educational opportunities to those children who need it most, those with educational deficiencies from low-income families.

Title I makes available federal funds to help local public school districts expand and improve their educational programs to meet the special needs of these educationally deprived children. This title gives an unprecedented challenge and responsibility to the educators of our state and our nation.

President Lyndon B. Johnson expressed well the national awareness of the importance of education in the following words: "If we are learning anything from our experiences, we are learning that it is time for us to go to work, and the first work of these times and the first work of our society is education."

This publication contains "Regulations" and "Guidelines" for the administration of Title I, P. L. 89-10 programs. The Regulations are mandatory and shall be followed carefully. The Guidelines are to help school officials understand the Regulations and provide procedures to be followed in planning, submitting, and administering projects utilizing Title I funds.

HUBERT WHEELER
Commissioner of Education
State of Missouri

PART I

REGULATIONS

TITLE I

"Programs for Educationally Deprived Children"

THE ELEMENTARY AND SECONDARY
EDUCATION ACT OF 1965

P.L. 89-10

October 1965

State Department of Education
Jefferson City, Missouri

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State Application

The Missouri State Department of Education submitted an application to the U. S Commissioner of Education to participate under the provisions of Title I of the Elementary and Secondary Education Act of 1965, P.L. 89-10. In accordance with Section 206 of the Act and the regulations of the U.S. Office of Education, the application gives assurance:

1. That payments to public school districts under this title will be used only for programs and projects which have been approved by the Missouri State Department of Education pursuant to Section 205(a) of the Act and regulations of the U. S. Office of Education.

2. That the Missouri State Department of Education will comply with the provisions of the title and the regulations thereunder, including the enforcement of any obligations imposed upon a local public school district under section 205(a).

3. That the Missouri State Department of Education will adopt such fiscal control and fund accounting procedures as may be necessary to assure proper disbursement of, and accounting for, federal funds paid to the State (including funds paid by the State to the local public school districts) under this title.

4. That the Missouri State Department of Education will make to the U. S. Commissioner:

   a. Periodic reports, including the results of objective measurements under section 205(a) (5), evaluating the effectiveness of Title I programs and payments in improving the educational attainment of educationally deprived children.

   b. Such other reports as may be reasonably necessary to enable the Commissioner to perform his duties under this title (including reports to determine the amounts which local public school districts of the State are eligible to receive for any fiscal year).

5. That the Missouri State Department of Education will keep such records and afford such access thereto as the U. S. Commissioner may find necessary to assure the correctness and verification of its reports to the U. S. Commissioner.

The Missouri State Department of Education will administer Title I for the State of Missouri in accordance with the Act, the regulations, and the laws of the State in such manner as to make the most effective use of the provisions of this Title. The local public school districts of the State will be provided with consultative and supervisory services from the Missouri State Department of Education to improve their educational programs to meet the special educational needs of educationally deprived children.

STATE ADMINISTRATION

The Missouri State Department of Education will perform the following services in the administration of Title I, P.L. 89-10:

1. Prepare and distribute official regulations, guidelines, application forms, and information to local public school districts.

2. Determine the allocations of public school districts within each county and notify each district concerning its allotment.

3. Prepare and distribute official project application forms.

4. Review project applications and approve projects in whole or part that conform with Title I, P.L. 89-10 and the regulations.

5. Provide consultation and assistance to local public school districts in formation and operation of project proposals.

6. Prepare and distribute payment forms for submitting claims for approved projects.

7. Process payment claims and distribute funds to local public school districts.

8. Disseminate information concerning some of the successful projects for educationally disadvantaged to local public school districts.

9. Receive annual reports and other necessary reports from local public school districts.

10. Review the evaluation of the projects of local public school districts and evaluate the effectiveness of the Title I, P.L. 89-10 program in the State.

11. Prepare annual and other reports for the State as a whole to be forwarded to the U. S. Office of Education.

Allocation of Funds

I. Basic Grants

The Act authorizes basic grants beginning July 1, 1965, and ending June 30, 1968. Allocations of basic grants to local public school districts will be determined as follows:

A. County

The U. S. Office of Education will advise the Missouri State Department of Education of the maximum amounts of funds available for basic grants in each county. Any county that has 100 or more children aged 5-17 from low-income families as established in section 203(c) of the Act will be eligible for a basic grant.

B. Local Public School Districts

The Missouri State Department of Education, in accordance with the regulations of the U. S. Office of Education, will allocate the county basic grant allotment among the public school districts by the following method:

1. The various allocations will be based on the total number of ADC children (children aged 5-17 from families under a program of aid to dependent children under a State plan approved pursuant to Title IV of the Social Security Act, regardless of the amount of such payments) resident in the county in public school districts who received ADC grants in the month of September, 1965.

2. Each public school district (whole or partial) in the county will be allocated a percentage of the county basic grant in accordance with the number of ADC children in their district, compared to the total number in the county, as described in (1) above.

3. The county director of welfare will submit a signed report to the State Division of Welfare by October 15, 1965, for the 1965-66 school year and in succeeding school years by July 15, with the following information to be presented to the Missouri State Department of Education:

   a. The total number of ADC children, as described in (1) above, resident in the county during September of 1965 and thereafter during a month in the latter part of the preceding school year.

   b. The number of such ADC children resident in each public school district (whole or partial) in the county.

I. Basic Grants (continued)

4. The Missouri State Department of Education will determine the allocation for each individual public school district on the basis of the reports submitted by the State Division of Welfare. The allocation for public school districts with territory in two or more counties will be a combined allocation consisting of their percentage of each county's allotment.

5. The basic grant to a local public school district for the 1965-66 school year cannot exceed 30% of the amount for current expenditures in the official school budget approved by the board of education.

   If a district does not have an officially approved budget, the limit will be 20% of the 1964-65 current expenditures shown on their secretary's annual report. The Missouri State Department of Education may revise the limitation when an official budget is authorized and current budget expenditures reported.

II. Special Incentive Grants

The Act authorizes special incentive grants beginning July 1, 1966, and ending June 30, 1968.

The special incentive grant will be administered by the Missouri State Department of Education and must be used for the same purposes as the basic grant: "to meet the special educational needs of educationally deprived children in school attendance areas having high concentrations of children from low-income families."

The special incentive grant is determined on an individual basis for each local public school district that is eligible for a basic grant. The maximum of the special incentive grant is the product of the total average daily attendance and part of the increase in average per pupil expenditures from year to year. This is explained in detail in Section 204 of the Act, and in summary below.

For the 1966-67 school year (fiscal year 1967) each public school district which is eligible to receive a basic grant for that school year shall be eligible to receive in addition a special incentive grant. The special incentive grant may not exceed the product of (a) the total A.D.A. for the 1964-65 school year, and (b) the amount by which the average per pupil expenditure for the 1964-65 school year exceeded 105 percent of such expenditure for the 1963-64 school year.

For the 1967-68 school year (fiscal year 1968) the special incentive grant of an eligible district may not exceed the product of (a) the total A.D.A. for the 1965-66 school year, and (b) the amount by which the average per pupil expenditure for the 1965-66 school year exceeded 110 percent of such expenditure for the 1963-64 school year.

Determination of Projects

The purpose of Title I, P.L. 89-10, is to provide for the expansion and improvement of the present educational programs to meet the special educational needs of educationally deprived children. Public school officials should proceed in a manner in accordance with the purpose of the Title to determine projects for the educationally deprived children in the school attendance areas with high concentrations of children from low-income families. School officials should keep in mind that this Title does not provide general aid to education. Do not try to justify or plan around some program desired for the school system for a number of years. This may or may not be a program that would meet the purposes of Title I.

Public school officials may not initiate any program or project under Title I, P.L. 89-10, until notification of approval of the school district's official application by the Missouri State Department of Education. The Missouri State Department of Education will check the application to see that the programs and projects meet the provisions of the Act as given in Title I, P.L. 89-10, the regulations of the U. S. Office of Education, and the regulations of the Missouri State Department of Education.

Proceed in the manner suggested below to make a determination of the projects which the local district feels would fit the purposes of the title and therefore would be eligible for approval by the State Department of Education.

1. Determine the attendance areas in the public school district with high concentrations of children from low-income families. Check item 2(a), page 7, for more specific information.

2. Determine the special educational needs of the educationally deprived children in the attendance areas selected in "1" above. Check items 2(b) and (d), pages 7 and 8, for more specific information.

3. Determine various ways to expand and improve the educational program which would meet the special educational needs of the educationally deprived children. The project should:

   (a) be consistent with what is known about learning theory and shall reflect such theory in the application, implementation and evaluation of the project.

   (b) project behavioral outcomes as well as academic achievement in its application, implementation, and evaluation.

4. Determine the programs and projects to submit to the State Department of Education for approval. Check the regulations concerning project applications and operations on the following pages to help in preparation of the official application for the programs and projects. Each program and its projects must be able to comply with the various regulations, and the school district must provide the assurance that each program and project will be carried out in accordance with the Act (Title I, P.L. 89-10) and the regulations herein.

REGULATIONS FOR PROJECTS

1. Applications by districts to the State

(a) Grants and eligibility

Grants under Title I, P.L. 89-10 will be made on the basis of applications therefor by a public school district of the State to the State Department of Education for programs or projects which are approved by the State Department of Education in an aggregate amount not in excess of the maximum eligibility of that public school district (eligibility may be ratably reduced if appropriations are less than the total maximum eligibility of all districts).

(b) Joint projects

No public school district may assign any part of its eligibility to another district or to the State Department of Education. This does not, however, prevent two or more eligible public school districts in the State from conducting a joint program or project through a combined use of the grants for which each of them is eligible.

(c) Ratable reductions

Any ratable reduction in eligibility for grants which are made in the light of available appropriations shall be final unless additional funds are appropriated.

(d) Conformity with State law

Title I, P.L. 89-10 programs and projects operated by public school districts must be in conformity with Missouri State laws. Section 167.031 RSMo Supp. 1963 states that: "Every parent, guardian or other person in this state having charge, control or custody of a child between the ages of seven and sixteen years shall cause the child to attend regularly some day school, public, private, parochial or parish, not less than the entire school term of the school which the child attends....." Therefore, shared time or dual enrollment between public and non-public schools would not be in conformity with state law. Programs operated in the public school for all children after regular school hours, on Saturday, and during the summer after close of the regular school term would be in conformity with state law.

A public school district has those powers (1) expressly granted by state statute (2) fairly and necessarily implied in the powers expressly granted, and (3) essential to the accomplishment of the objects of their establishment.

(e) Civil Rights Compliance

Title VI of the Civil Rights Act states: "No person in the United States shall, on the ground of race, color, or national origin,

be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance." Therefore, Title I of the Elementary and Secondary Education Act of 1965, like every program or activity receiving financial assistance from the Department of Health, Education, and Welfare, must be operated in compliance with this law.

2. Project covered by an application

(a) School attendance areas

An application by a public school district for a basic grant (or after June 30, 1966, either a basic grant or a special incentive grant) under Title I, P.L. 89-10 shall set forth a project for a project area composed of school attendance areas having high concentrations of children from low-income families, which project shall have been designed to meet the special educational needs of educationally deprived children in those attendance areas. Each application may cover one or more of such projects. (Part I "Basic Data").

List the attendance areas of the district with these concentrations in order of concentration. High concentration means high for the particular public school district.

The school administrators, counselors, school nurse, school lunch director, etc. may make this determination. The director of welfare for the area may be able to provide assistance. Information substantiating the classification of attendance areas must be submitted.

Section (b) Project requirements includes information concerning selection of attendance areas for establishment of projects.

(b) Project requirements

The application by a public school district for a grant shall designate for each project the project area, which may include one or more school attendance areas with high concentrations of children from low-income families. The project area should, however, be sufficiently restricted in size in relation to the nature of the applicable project as to avoid jeopardizing its effectiveness in relation to the aims and objectives of the project. Each public school district shall design its projects in such a manner, and apply them to such school attendance areas, as will best meet the special educational needs of educationally deprived children in school attendance areas having high concentrations of children from low-income families. Emphasis shall be placed on meeting such special educational needs in those school attendance areas in the school district which have the highest concentrations of children from low-income families; in no event may a school attendance area be designated as a project area if the degree of concentration of such children in the area is less than that of the school district as a whole. In exceptional circumstances, the whole of the school district may be

designated as a project area, but only if there are such slight differences in concentration of children from low-income families in the several school attendance areas that the school district can be regarded as an area of high concentration of children from low-income families. Projects for meeting the special educational needs in a school attendance area shall be applied in a manner that will best benefit those children who are to the greatest extent educationally deprived whether the project area is served by a single school, or two or more schools, either elementary or secondary.

(c) Joint project area

In the case of projects undertaken jointly by two or more public school districts, that part of the project area which lies in the school district of each participating district shall be designated on the same basis as it would if the project had been undertaken separately by that district, except as such designation may affect the size, scope and quality of the program or project.

(d) Children to participate

The project for which the application for a grant is made must be designed for the number of educationally deprived children who are estimated to be in the project area and who would benefit from such a project. Subject to the application of paragraph 4 (b), all children within the project area who are in need of the services to be provided by the project will be eligible to participate therein without regard to whether they are from low-income families and without regard to whether they are attending school at the time. However, educationally deprived children who are in the school district but who are outside the project area may participate in the project but only to the extent that such a participation does not dilute the effectiveness of the project or prevent educationally deprived children in the project area from enjoying the full benefits of the project.

An educationally deprived child is one whose educational achievement is below normal expectancy for his age and grade. The term also includes those children who are handicapped because of physical, mental, or emotional impairment.

School officials may review the various school records including the scholastic and standardized test records of the school and of the individual children in the attendance area(s) selected to determine the number and needs of the educationally deprived children. Describe and list in priority order, the most pressing educational needs of such children in the various attendance areas selected. Supply information on the incidence and severity of each of the educational needs.

(e) Project tailored to area

Each project must be tailored to contribute particularly to meeting the special educational needs of educationally deprived children in the project area designated for that project. For example, a project designed to meet the special educational needs of educationally deprived

children in urban areas may be inappropriate for meeting significantly different needs of educationally deprived children in rural areas. The application should describe in general or specific terms the special educational needs of the educationally deprived children in the project area.

(f) Project funds may not supplant State or local funds

A project will not be deemed to have been designed to meet the special educational needs of educationally deprived children in the project area unless the funds made available for such a project are to be used to supplement, and not to supplant, State or local funds in the project area. The application shall contain an assurance that the use of funds under Title I, P.L. 89-10 in a project area will not penalize the project area in relation to the expenditure of State or local funds and will not result in a decrease in the use in the project area of State and local funds which in the absence of funds under Title II of the Act would be made available in that project area.

(g) Construction limited to exceptional cases

A project application may not cover the construction of school facilities except in those exceptional cases in which such construction is demonstrated to be essential to assure the success of a program or project under Title I, P.L. 89-10. If the construction of school facilities is demonstrated to be essential for a program or project, the application must also comply with other requirements of Title I, P.L. 89-10 and the regulations in this part, such as the requirements in 4 in regard to participation by children in private schools and the requirements in 6 in regard to labor standards and overall State construction planning. In any event, the construction must be functional, must be undertaken in an economical manner, and must not be elaborate in design or extravagant in the use of materials in comparison with school facilities of a similar type constructed in the State within recent years.

3. Size, Scope and Quality of Projects

(a) Reasonable promise of success

Each application must propose a project of sufficient size, scope and quality, within the limits of available funds, as to give reasonable promise of substantial progress toward meeting the special educational needs of educationally deprived children in areas having high concentrations of children from low-income families. The budget for a project shall avoid extravagant expenditures which would defeat the intent of the Act to meet the special educational needs of educationally deprived children, and project applications must justify any increases in present levels of expenditure for comparable activities as essential to meeting the special needs of such children.

(b) Describe objectives

The application for a grant for a project shall describe the objectives of the project and the relation of the project to the program of

the local educational agency under Title I, P.L. 89-10. It must demonstrate that the project is sufficiently well planned to meet those objectives and that the project makes adequate provision for its implementation in an effective manner.

(c) Limited number of projects

The applications of a public school district for grants should be concentrated on a limited number of projects rather than risk a diffusion of effort over a larger number of projects. The size, scope and quality of the program and the individual projects of the district will be dictated in large degree by the amount of grant funds available to that district.

(d) Limited size of area

Projects shall be restricted to project areas comprised of a single attendance area, or a limited number of attendance areas, with high concentrations of children from low-income families. Although it would be desirable to assist every educationally deprived child in a school district, the application for a grant must not designate a project area that is so large that the effect of such a designation will be to dilute the effectiveness of the project.

(e) Joint application

A joint application may be made by two or more eligible public school districts for grants to each for a single project to be carried out jointly or through other arrangements between such districts if such an undertaking is expected to result in a more effective or efficient project for meeting the special educational needs of the educationally deprived children of each of the participating districts in the project area than would projects separately undertaken.

4. Participation by Children in Private Schools

(a) Provision for participation

To the extent consistent with the number of educationally deprived children resident in the public school district who are enrolled in private elementary and secondary schools, the public school district must make provision for including special educational services and arrangements in which such children can participate. See page 6, Section 1 (d) "Conformity with State law."

(b) Application must give description

The application for each project must show the degree and manner of expected participation by educationally deprived children enrolled in private schools in the program of the public school district under Title I, P.L. 89-10. Participation by geographical area with respect to educationally deprived children enrolled in private schools must be substantially comparable to that with respect to children enrolled in public schools and the provision for such participation shall be designed

to be applied, insofar as it is practicable, to children enrolled in private schools who reside in the areas affected by the program. If it is not practicable to apply a project to such children because the children are enrolled in a private school located in another school district, a cooperative project which will apply to such children may be arranged with the public school serving such other school district.

(c) Avoid separation classes

Any project to be carried out in public facilities and involving joint participation by children enrolled in private schools and children enrolled in public schools shall include such provisions as are necessary to avoid classes which are separated by school enrollment or religious affiliation of the children.

(d) Limitations of services in private facilities

Special educational services and arrangements, including broadened instructional offerings made available to children in private schools, shall be provided at public facilities. Public school personnel shall not be made available in private facilities. This does not prevent the inclusion in a project of special educational arrangements to provide educational radio and television to students at private schools.

5. Title and Control over Funds and Property

(a) Assurance in application

Each application by a public school district shall provide assurance that the control of Federal funds granted pursuant to the application, and title to property acquired with such funds, shall not inure to the benefit of any private school but shall be in a public agency for the uses and purposes provided in Title I, P.L. 89-10, and that a public agency will administer such funds and property for carrying out the purposes of the project.

(b) Equipment requirements

Equipment acquired with funds granted under Title I, P.L. 89-10 may in certain cases be placed on private school premises, but in any event title to and administrative control over all equipment so acquired must vest in and be retained by a public agency. This requires the keeping of records of, and accounting for, equipment acquired in order that the public agency will maintain administrative control of the equipment and assure itself that the equipment is being used for the uses and purposes of the project, or for a related educational purpose.

(c) Public agency requirements

The application must assure that funds under Title I, P.L. 89-10 will at all times be under the control of, and be administered by, a public agency and that such a public agency will be responsible for assuring that such funds are applied only for the purposes for which they are granted.

6. Requirements with Respect to Construction

A project application may not cover the construction of school facilities except in exceptional cases. (See Section 2(g), page 9).

In a case of a project involving the construction of school facilities, the application for a grant shall provide assurance that all laborers and mechanics employed by contractors or subcontractors on such construction will be paid wages at rates not less than those determined by the Secretary of Labor to be prevailing on similar construction in the locality in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 275a--276-5); that such contractors and subcontractors will comply with the regulations in 29 CFR Part 3 (see 29 F.R. 97), and include all contract clauses required by 29 CFR 5.5(a) and (c) (see 29 F.R. 100, 101, 13463, and 29 CFR Part 3, Subpart (b)--Interpretation of the fringe benefits provisions of the Davis-Bacon Act--published at 29 F.R. 13465); and that the nondiscrimination clause prescribed by Executive Order No. 10925 of March 6, 1961 (26 F.R. 1977), as amended by Executive Order No. 11114 of June 22, 1963 (28F.R. 6485), will be incorporated in any contract for construction work, or modification thereof, as defined in the Rules and Regulations of the President's Committee on Equal Employment Opportunity (41 CFR Part 60-1).

In cases where construction is required for a project the applicant will cause work on the project to be commenced within a reasonable time after receipt of notification from the State Department of Education that funds have been allotted, and to be prosecuted to completion with reasonable diligence.

7. Provision for Measurement of Educational Achievement and Evaluation of Programs

(a) Description of procedures

An application by a public school district shall describe the procedures and techniques to be utilized in making an evaluation at least annually of the effectiveness of its program under Title I, P.L. 89-10 in meeting the special educational needs of educationally deprived children, including appropriate objective measurements of educational achievement.

(b) Evaluation of opportunities

The evaluation of the effectiveness of a program shall include an evaluation of the increase in educational opportunities afforded by such a program as well as by each of the projects comprising that program.

An application by a public school district shall describe the procedures and techniques to be utilized in making an evaluation at least annually of the effectiveness of its program in meeting the special educational needs of educationally deprived children, including appropriate objective measurements of educational achievement.

(c) Measurement of achievement

The measurement of educational achievement under such a program shall include the measuring or estimating of educational deprivation of those children who will participate in the program and the comparing at least annually, of the educational achievement of participating children with some objective standard or norm. The type of measurement used should give particular regard to the requirement on the part of the State that it report to the Commissioner on the effectiveness of the several programs of the participating public school districts in the State in improving the educational achievement of educationally deprived children.

(d) Private school children

The evaluation of programs and projects should, consistent with the nature and extent of participation by children enrolled in private schools, be extended to participation of children enrolled in private schools.

8. Reports by Public School Districts

Each application by a public school district shall provide assurance that it will render to the Missouri State Department of Education an annual report and such other reports, in such form, and containing such information, as may be reasonably necessary to enable the State Department of Education to perform its duties under Title I of the Act, including the measurements of educational achievement and program effectiveness. The public school district shall agree to keep such program and fiscal records, and afford such access thereto, as the Missouri State Department of Education may find necessary to assure the correctness and verification of such reports and the expenditure of funds granted under Title I of the Act.

The local public school district shall agree to keep such program and fiscal records for a period of five years past the end of the fiscal year, and afford such access thereto, as the State Department of Education may find necessary to assure the correctness and verification of such reports and the expenditure of funds granted under this Title I, P.L. 89-10 (unless notified otherwise by the State Department of Education.)

9. Relation to Community Action Programs

(a) Cooperation required

The application for a grant for a project shall state whether there is in the school district of the public school district a community action program approved pursuant to Title II of the Economic Opportunity Act of 1964 (Public Law 88-452) and, if so, that the project has been developed in cooperation with the public or nonprofit agency responsible for such a community action program with the view, among other things, of avoiding duplication of effort. The local school district shall seek to establish and maintain genuine working relationships with such public or nonprofit agency during the operation of the project.

(b) Commingling of funds prohibited

Cooperation with the community action program does not permit the commingling of funds under Title I, P.L. 89-10 with funds under Title II of the Economic Opportunity Act of 1964, but does permit the simultaneous use of funds under each of those Acts to finance identifiable portions of a single project.

10. Utilization of Results of Programs and Projects

(a) Description in application

An application for a grant for a project shall describe the method to be adopted by the applicant for reviewing, selecting, and disseminating significant information derived from such a project to teachers and administrators in public and private schools so that they will have information on the latest developments and most recent experiments in education available for use in program planning and operation. The provision in that regard may include, among other things, in-service education, the use of professional libraries on library informational systems, professional workshops and seminar consultations and visitations, and reports on the organization, operation and outcome of projects under Title I, P.L. 89-10.

(b) Promising educational practices

Promising educational practices developed through such projects of the public school district, or through projects of other public school districts disseminated to it, shall be considered for, and, to the extent appropriate and not in violation of the assurance called for by paragraph (f) of 2, be adopted in, all the public schools of the public school district through the use of State or local funds.

11. Limitations on Payments to Public School Districts

(a) Continuation of fiscal effort

No payments under Title I, P.L. 89-10 for any fiscal year may be paid by the State Department of Education to a public school district unless the State Department of Education finds that the combined fiscal effort of the public school district and the State with respect to the provision of free public education by that public school district for the preceding fiscal year was not less than such a combined fiscal effort for that purpose for the fiscal year 1964.

(b) Fiscal effort based on per pupil expenditures

For purposes of this section, fiscal effort by a public school district shall be measured by the amount of the per pupil expenditures by the public school district from current revenues except expenditures for the acquisition of land, the erection of facilities, interest, or debt service and except expenditures from funds derived from Federal sources for which the public school district is required to account for expenditures to the Federal Government directly or through the State Department

of Education, such as funds under Title I, II, and III of the Elementary and Secondary Education Act of 1965, Titles III and V of the National Defense Education Act of 1958, or the Economic Opportunity Act of 1964. Expenditures by a State with respect to a public school district rather than by such a public school district itself shall be deemed to have been maintained at the same level as in fiscal 1964 unless the basis for making such expenditures has been altered or if such expenditures are assumed by such a public school district. In such an event, the actual expenditures of that nature shall be taken into account in both years in determining combined fiscal effort. For fiscal year 1966, a combined fiscal effort shall not be deemed to be a reduction from that for fiscal year 1964 unless the per pupil expenditure during fiscal year 1965 is less than that in fiscal year 1964 by more than five percent. Any such reduction in fiscal effort by a public school district for any fiscal year as compared to such fiscal effort for fiscal 1964, as determined pursuant to this section, will disqualify a public school district unless the public school district is able to demonstrate to the satisfaction of the State Department of Education that such a reduction was occasioned by an unusual event, such as the removal of a large segment of property from the tax rolls, that could not have been fully anticipated or reasonably compensated for by the local educational agency and that the fiscal effort of the local educational agency does not otherwise indicate a diminished fiscal effort.

(c) Basic grant limitation

The total of payments made to a public school district in respect to basic grants for fiscal year 1966 shall not be greater than 30 percent of the sums budgeted for current expenditures by that public school district for that year.

(d) Ratable reduction

The ratable reduction effected pursuant to these regulations shall not be affected by any determination under this section of ineligibility of a public school district for a basic grant or a special incentive grant.

12. Use of Funds

(a) Fiscal year extension

Funds granted to public school districts under Title I of the Act shall be available until August 31 following the fiscal year, for which the Federal appropriation was made for use by the State Department of Education and public school districts for projects approved during that fiscal year, except that grants for construction shall remain available for use for a reasonable period of time taking into consideration the nature of the program or project to be served by the construction and the magnitude of the construction to be undertaken.

(b) Justification of expenditures

For purposes of the regulations in this part a use of funds under Title I, P.L..89-10 by a public school district will be determined on the

basis of documentary evidence of a binding commitment for the acquisition of goods or property, for construction, or for the performance of work, except that use for services of persons and for travel shall be determined on the basis of the time such services were rendered or such travel was performed.

(c) Funds after approval

Funds distributed to public school districts shall not be available for use with respect to obligations incurred by such agencies for a project prior to the effective date of the approval by the Commissioner of the State application for participation or prior to the date on which the application of the public school district for a grant with respect to that project was received by the State Department of Education in substantially approvable form.

Project Approval, Payment, and Audit

Eligible Applicants

Public school districts eligible for a basic or special incentive grant may make application for projects and funds under Title I, P.L. 89-10.

Project Approval Procedures

A public school district through the authorized representative of the board of education may submit proposed projects at any time during a school year, prior to the cut off dates as announced annually. Such projects shall be on official application forms and include an appropriate description of the project and proposed budget. Review and approval of projects is a responsibility of the State Department of Education which will notify applicants of approved project(s) and the entitlement of moneys available for the approved project(s). No project to utilize Title I, P.L. 89-10 funds shall be instituted at the local district level until approval has been received from the State Department of Education. Funds for projects must be obligated by the close of the fiscal year (June 30) for which they are made available.

Payment Procedures

Upon approval of the project, the State Department of Education may advance to the public school district funds not in excess of the estimated amount needed through December 31, 1965. Thereafter payments will be made on the basis of quarterly reports by the public school district of its expenditures and needs under the project. In future years, the State Department of Education will inform districts of fiscal procedures.

Audit Requirements

It shall be the responsibility of the local board of education and their authorized representative to arrange for audit of all Title I, P.L. 89-10 projects. The Title I, P.L. 89-10 audit should be included in the regular school district audit coverage by the audit service. The audit must verify that the correctness and validity of the financial portion of approved Title I, P.L. 89-10 projects are truly supported in the financial records and are within the authorized budget for the project and that activity involved therein appears to meet the intent for which the funds have been granted.

Title I
Public Law 89-10
Definitions

(a) "Act" means P.L. 89-10, the Elementary and Secondary Education Act. Public Law 874, 81st Congress, was amended by adding Title II (20 U.S.C. 241-a-241e) which is Title I of the Elementary and Secondary Education Act of 1965 (P.L. 89-10).

(b) "Attendance area" means, in relation to a particular public school, the geographical area in which the children who are normally served by that school reside. An attendance area for an elementary school may not necessarily be coterminous with an attendance area for a secondary school.

(c) "Average daily attendance" means average daily attendance in elementary and secondary schools, not beyond grade 12, as determined in accordance with State law, except that where the local educational agency of the school district in which a child resides makes or contracts to make a tuition payment for the free public education of that child in a school situated in another school district, the attendance of that child shall be held and considered (1) to be in attendance at a school of the local educational agency so making or contracting to make such a tuition payment, and (2) not to be in attendance at a school of the local educational agency receiving such a tuition payment or entitled to receive such a tuition payment under the contract.

(d) "Average per pupil expenditure in a State" means the aggregate of the current expenditures (as defined in paragraph (h) but otherwise without regard to the sources of funds from which such expenditures are made) of all local educational agencies in the State, divided by the aggregate number of children in average daily attendance to whom such agencies provided free public education.

(e) "Commissioner" means the United States Commissioner of Education.

(f) "Construction" means the erecting, building, acquiring, altering, remodeling, improving, or extending of school facilities, and includes the preparation of drawings and specifications for school facilities and the inspection and supervision of the construction of school facilities.

(g) "County" means a division of a State of the Union which is treated as a county by the Secretary of Commerce in compiling and reporting data regarding counties.

(h) "Current expenditures" means those expenditures for free public education to the extent that such expenditures are made from current revenues except expenditures for the acquisition of land, the erection of facilities, interest, or debt service and except expenditures made from funds under Title I, II, and III of the Elementary and Secondary Education Act of 1965 (P.L. 89-10).

(i) "Educationally deprived children" means those children whose educational achievement is below that normally expected of children of their age and grade, including children who are handicapped because of physical, mental, or emotional impairment.

(j) "Elementary school" means a day or residential school which provides elementary education as determined under State Law. Section 160.010 RSMo 1963 defines the term "elementary school" as a public school giving instruction in two or more grades not higher than the eighth grade. Section 171.091 RSMo 1963 authorizes a school district to provide kindergarten for persons between five and six years of age.

(k) "Equipment" includes machinery, utilities, and built-in equipment and any necessary enclosures or structures to house them, and includes all other items necessary for the functioning of a particular facility as a facility for providing educational services, including such items as instructional equipment and necessary furniture, printed, published, and audio-visual instructional materials, and books, periodicals, documents, and other related materials. Equipment does not include supplies which are consumer in use, or which may not be reasonably be expected to last longer than one year.

(l) "Federal percentage" means the percentage of the average per pupil expenditure in a State for a prior fiscal year which is used in computing maximum basic grants under Title I, P.L. 89-10 of the Act. For fiscal year 1966, the Federal percentage is fifty percent.

(m) "Fiscal year" means a period beginning on July 1 and ending on the following June 30. (A fiscal year is designated in accordance with the calendar year in which the ending date of the fiscal year occurs.)

(n) "Free public education" means education which is provided at public expense, under public supervision and direction, and without tuition charge, and which is provided as elementary or secondary education, not above grade 12, in a State. Elementary education may, if so determined under State law, include education below grade 1 meeting the above criteria.

(o) "Handicapped children" means mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children.

(p) "Local educational agency" means a board of education or other legally constituted local school authority having administrative control and direction of free public education in a county, township, independent, or other school district located within a State, including a State agency which operates and maintains facilities for the providing of free public education in a county, township, independent, or other school district located within a State, but does not mean a public authority which merely provides a service function for public elementary or secondary schools.

(q) "Low-income factor" means the limit of family annual income which is used in determining families with low annual incomes for the purposes of Title I, P.L. 89-10 of the Act. For fiscal year 1966, the low-income factor is $2000.

(r) "Program" means an over-all plan with respect to funds made available under Title I, P.L. 89-10 during a fiscal year which is intended to be put into effect in a school district through individual projects of which it is the sum.

(s) "Project" means an activity, or set of related activities, proposed by a local educational agency and designed to meet certain of the special educational needs of educationally deprived children in a designated geographical area.

(t) "Project area" means the attendance area, or combination of attendance areas, having a high concentration of children from low-income families which is designated in an application by a local educational agency for a grant under Title I, P.L. 89-10 as the area to be served by the particular project.

(u) "School facilities" means classrooms and related facilities (including initial equipment) for free public education and interests in land (including site grading and improvements) on which such facilities are constructed, but does not mean gymnasiums and similar facilities intended primarily for use for exhibitions for which admission is to be charged to the general public.

(v) "Secondary school" means a day or residential school which provides secondary education as determined under State law, except that it does not include any education provided beyond grade 12. Section 160.010 RSMo 1963 defines the term "high school" as a public school giving instruction in two or more grades not lower than the ninth nor higher than the twelfth grade.

(w) "State" means a State of the Union, the District of Columbia, Wake Island, Puerto Rico, Guam, American Samoa, the Virgin Islands, or the Trust Territory of the Pacific Islands.

(x) "State educational agency" means the officer or agency primarily responsible for the State supervision of public elementary and secondary schools. This is the State Board of Education, the Commissioner of Education and the State Department of Education.

EXCERPTS FROM P.L. 89-10
Title I, Section 205 (a)

"Sec. 201. In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.

"Sec. 205(a). A local educational agency may receive a basic grant or a special incentive grant under this title for any fiscal year only upon application therefor approved by the appropriate State educational agency, upon its determination (consistent with such basic criteria as the Commissioner may establish) --

"(1) that payments under this title will be used for programs and projects (including the acquisition of equipment and where necessary the construction of school facilities) (A) which are designed to meet the special educational needs of educationally deprived children in school attendance areas having high concentrations of children from low-income families and (B) which are of sufficient size, scope, and quality to give reasonable promise of substantial progress toward meeting those needs, and nothing herein shall be deemed to preclude two or more local educational agencies from entering into agreements, at their option, for carrying out jointly operated programs and projects under this title;

"(2) that, to the extent consistent with the number of educationally deprived children in the school district of the local educational agency who are enrolled in private elementary and secondary schools, such agency has made provision for including special educational services and arrangements (such as dual enrollment, educational radio and television, and mobile educational services and equipment) in which such children can participate;

"(3) that the local educational agency has provided satisfactory assurance that the control of funds provided under this title, and title to property derived therefrom, shall be in a public agency for the uses and purposes provided in this title, and that a public agency will administer such funds and property;

"(4) in the case of any project for construction of school facilities, that the project is not inconsistent with overall State plans for the construction of school facilities and that the requirements of section 209 will be complied with on all such construction projects;

"(5) that effective procedures, including provision for appropriate objective measurements of educational achievement, will be adopted for evaluating at least annually the effectiveness of the programs in meeting the special educational needs of educationally deprived children;

"(6) That the local educational agency will make an annual report and such other reports to the State educational agency in such form and containing such information, as may be reasonably necessary to enable the State educational agency to perform its duties under this title, including information relating to the educational achievement of students participating in programs carried out under this title, and will keep such records and afford such access thereto, as the State educational agency may find necessary to assure the correctness and verification of such reports;

"(7) that wherever there is, in the area served by the local educational agency, a community action program approved pursuant to Title II of the Economic Opportunity Act of 1964 (Public Law 88-452), the programs and projects have been developed in cooperation with the public or private nonprofit agency responsible for the community action program; and

"(8) that effective procedures will be adopted for acquiring and disseminating to teachers and administrators significant information derived from educational research, demonstration, and similar projects, and for adopting, where appropriate, promising educational practices developed through such projects.

"(b) The State educational agency shall not finally disapprove in whole or in any part any application for funds under this title without first affording the local educational agency submitting the application reasonable notice and opportunity for a hearing.

P A R T II

G U I D E L I N E S

TITLE I

"Programs for Educationally Deprived Children"

THE ELEMENTARY AND SECONDARY
EDUCATION ACT OF 1965

P. L. 89-10

October 1965

State Department of Education
Jefferson City, Missouri

TABLE OF CONTENTS

FOREWORD

The contents of these guidelines are intended to be of assistance to local public school officials in planning projects for their school districts. In planning projects school officials should familiarize themselves with Part I, "Regulations", pages 1-22 and the following pages of these Guidelines.

Criteria for Project Review

In general, the following criteria will be employed by the State Department of Education in review of project applications:

A. Preparation for project planning
   Does the project application adequately describe:
   1. All attendance areas of the district with regard to concentration of children from low-income families?
   2. Procedures used to identify educationally deprived children in the areas of high concentration of such children?
   3. Methods used to determine special educational needs of educationally deprived children?
   4. Areas of greatest special educational needs of educationally deprived children?

B. Content of Project
   Does the project application adequately describe:
   1. Methods by which special educational needs are to be met?
   2. Size and scope of the project?
   3. Educational aims and objectives of the project?
   4. That the project is to be an addition to or extension of the present educational program?

C. Compliance with the Act
   Does the project application adequately describe:
   1. Measures taken to provide for the participation of educationally deprived children enrolled in non-public schools and residing in the project attendance area?
   2. Date of compliance with the Civil Rights Act?

D. Evaluation
   Does the project application adequately describe:
   1. Plans for periodic and terminal evaluation of the progress of the children participating in the project?
   2. Processes and materials to be used in evaluation?

E. Finance
   Does the project application adequately describe:
   1. Present financial support of education by the district?
   2. Plans for maintenance of financial records?
   3. Budget estimate of financial needs for the project?
   4. That the project funds will not supplant local or State funds?
   5. Provision for audit of project records?

DETERMINATION OF ATTENDANCE AREAS WITH CONCENTRATION OF CHILDREN FROM LOW-INCOME FAMILIES WITHIN LOCAL PUBLIC SCHOOL DISTRICTS

Local public school officials must determine the degree of concentration of children from low-income families living in each public school attendance area within the district. The Act defines low-income families as: (1) those having an annual income of less than the low-income factor; (2) those having an annual income in excess of the low-income factor from payments received under a State plan of Aid to Dependent Children (Title IV of the Social Security Act). For the 1965-66 year the family low-income factor is $2000. In future years it will be established by Congress by law. Exact information concerning family income will probably not be available to local school officials, however, the best possible data should be used for this determination.

The identification of attendance areas, therefore, must be based on family income data or data indicative of low-income, such as AFDC payments and other welfare data; health statistics, such as infant mortality and deaths from tuberculosis; housing statistics; and data from school surveys which include information on or related to family income. School officials may use some of the following sources from which to obtain pertinent information.

1. School guidance records
2. School cumulative records
3. School health records
4. School lunch records (free lunch)
5. Survey information obtained within the district
6. Local or county welfare agencies
7. Local housing agencies
8. Local or County health agencies
9. Census records
10. Local governmental agencies

The manner in which determinations are made will become part of the records of the district and will be reported in Section C, Part I - Basic Data to the State Department of Education.

Attendance areas for establishment of projects under Title I, P. L. 89-10 must be designated by type of organization such as: elementary, junior high school, senior high school. Attendance areas for proposed projects in the various organizational levels may be coterminous or may overlap within a district.

Assuming that School District "X" is comprised of six elementary schools, one junior high school, and one senior high school; it is evident that one senior high school attendance area, one junior high school attendance area, and six elementary attendance areas exist.

It thus becomes the task of local public school officials to determine the degree of concentration of children from low-income families within each attendance area as compared to the concentration for the district as a whole. Such a ranking is required by Part II of the application, and the local public school district must start with the school with the highest concentration of children from low-income families, and proceed down the list in rank order from that point.

When this determination is made the attendance areas should be listed as follows:

1. Extremely high concentration for the district as a whole
2. Higher than the concentration for the district as a whole
3. Same as the concentration for the district as a whole
4. Less than the concentration for the district as a whole.

EXAMPLE

Name of School	Type of Organization		Enrollment	Concentration	
	School	Grade Span		Degree	Percent
Average concentration for the district				3	14%
Hickman	Senior High	10-12	600	3	14%
Bunceton	Junior High	7-9	600	3	14%
Oakpark	Elementary	K-6	200	1	35%
Townhouse	Elementary	K-6	400	2	20%
Central	Elementary	1-4	300	2	18%
Briarcliff	Elementary	K-6	400	3	14%
Seaside	Elementary	K-6	200	4	8%
Mountainview	Elementary	K-6	300	4	3%

To be eligible for projects under Title I, an attendance area must contain a concentration of children from low-income families which is the same as, or higher than, the concentration of such children for the district as a whole. Emphasis shall be placed on attendance areas with the highest concentrations.

THE NUMBER OF CHILDREN TO BE SERVED

The project area should be sufficiently restricted in size so as to avoid diluting the effectiveness of the project. Although it would be desirable to be able to serve every educationally deprived child in the school district, this is not the purpose of the legislation. Instead, its purpose is to focus Federally financed educational projects on the five to six million children in the United States who most need extra help. This means that the local public school district must concentrate its efforts and its projects upon the educationally deprived children in attendance areas of high concentrations of low-income families.

In school districts where one school serves the entire district, the full amount of the funds allocated for the district can be used for projects to provide additional educational opportunities to meet the special educational needs of educationally deprived children of the district. In most school districts with several schools, there will be attendance areas which do not qualify for projects. Title I, P. L. 89-10 is not a general aid-to-education law, therefore, proposed projects must meet the attendance area requirements of the Act.

Establishment of eligible attendance areas within a public school district removes further consideration of the low-income factor in project planning. The determining factor within these areas then becomes "the special educational needs of educationally deprived children". Educationally deprived children may or may not fall into the low-income category. Proposed projects should provide for the most pressing needs of the educationally deprived children within eligible attendance areas. As required by the Act, consideration shall be given to the educationally deprived children living within the areas who attend non-public schools

DETERMINATION OF EDUCATIONALLY DEPRIVED CHILDREN AND THEIR SPECIAL EDUCATIONAL NEEDS

Educationally deprived children as defined in the Regulations are: those children whose educational achievement is below that normally expected of children of their age and grade, including children who are handicapped. ("Handicapped children" means mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children.)

In the determination of educationally deprived children, several sources, both objective and subjective, may be used. Objective measurement is essential in this identification. One objective measurement shall be some standardized instrument with recognized national norms. Educational deprivation in learners may be "general" as gathered from a composite score or "specific" related to some content area or area of specialization included in the test.

Types of special educational deficiencies include, but are not limited to:

(1) Achievement significantly below normal in the basic educational skills of (a) reading, (b) language arts, (c) numbers and (d) social studies;

(2) Performance and production indicative of a low level of educational motivations, such as poor attendance, poor work-study habits and skills, nonparticipation in school activities, and school drop-outs;

(3) Behavioral deviations as manifest by school conduct, truancy, juvenile delinquency, vandalism, and social withdrawal;

(4) Special handicaps, including health, nutrition, vision, speech, hearing, and orthopedic handicaps which interfere with normal educational development;

(5) Cultural starvation resulting from lack of opportunity to learn of the historical contributions of the arts, literature, and science to our National heritage;

(6) Lack of equal educational opportunity due to deficiencies in the school program and facilities, such as limited curricular offerings, inadequate school lunch and transportation services, and insufficient materials, equipment, and facilities to provide a comprehensive educational program; and

(7) Disruptive home and family conditions as evidenced by one-parent homes, foster parents, wards of the court, and orphans.

The identification of educationally deprived children will provide information to determine the special educational needs of those children.

<u>The needs of educationally deprived children shall be listed in order of the degree of urgency of the need. In planning Title I Projects, attention shall be given to the most pressing special educational needs of the educationally deprived children</u>.

Procedures which may be used in the determination of special educational needs may take the nature of:

A. Behavioral
   - Teacher observation
   - School attendance records
   - Case studies
   - Home visitation

B. Physical
   - Teacher observation
   - Dental records
   - Cumulative records
   - Medical records

C. Academic
   - Teacher grades
   - Special diagnostic test and reports
   - Teacher made test
   - Standardized test (scholastic aptitude, achievement, multiple aptitude).

For example, one of the needs of the educationally deprived children might be "to read at a level which more nearly parallels the children's ability." The school has evidence, which it presents when it submits the Part II project application that the children in the project areas are behind in reading in reference to their ability. This same evidence would serve as a basis for selecting objectives.

To continue the example, the objective is, of course, to improve the reading of the children, and specifically the applicant would look for the following changes as evidence that improvement has occurred. For example:

(1) increased reading comprehension as measured by a standardized test
(2) increased facility in reading skills as observed by teachers
(3) use of reader of a higher level
(4) better attitude toward reading, and in general toward school
(5) more enjoyment of books and reading.

Clearly, the objectives of any project are to overcome or reduce a specified need. The applicant should describe the desired changes to occur as a result of the project. The objectives should be so clear and specific that he can gather evidence which shows change. Some of the objectives will be easy to measure; others will be difficult. Nevertheless, all objectives should be specific enough so that evidence can be gathered and presented which will show change.

Evaluation of all projects is required by the Act. The information obtained in determining the special educational needs of the educationally deprived children will provide a base line for evaluating the effectiveness of the projects. See pages 35-36 for Guides for Testing and Evaluation.

PROVISIONS FOR THE PARTICIPATION OF EDUCATIONALLY DEPRIVED CHILDREN ENROLLED IN PRIVATE SCHOOLS

The State Department of Education, before it approves a grant, must determine that the applicant local public school district has provided sufficient opportunities for the participation of educationally deprived children residing in the project areas who are enrolled in private schools. The Act requires that such opportunities be provided to the extent consistent with the number of such children who are enrolled in private elementary and secondary schools. This requirement of the Act is interpreted to apply to the total program of the local school district, not necessarily to each project. However, the local public school district application for each project must show the degree and manner of expected participation by educationally deprived children enrolled in private schools in order that the State may judge the total program in this respect.

The basic grants are determined on an impartial count of the children 5 to 17 years old of low-income families, irrespective of whether these children are in public schools, in private schools, or are out of school. Furthermore, the grants may also be used to strengthen the education of poor children of kindergarten age and of those who have dropped out of school, without regard to affiliation with public or private schools. Because of statutory limitations there will necessarily be more activities and services for which the public schools are eligible than those from which private school children can benefit.

The Act is meant to provide broadened instructional offerings and other services under publicly sponsored auspices which will be available to elementary and secondary school students who are not enrolled in public schools. However, the Act does not authorize provision of services to a private institution per se. Nor does the Act authorize the purchase of materials or equipment or the construction of facilities for private schools.

In what kinds of special educational services and arrangements can private school pupils participate? The key phrases to bear in mind are (1) meeting special educational needs, (2) specialized services not normally provided, and (3) under publicly sponsored auspices. To consider the question in terms of the locale of these special educational services and arrangements, nothing in Title I prevents private school pupils from participating in any activity conducted under Title I on the premises of a public school. However, Title I programs and projects must be in conformity with the State Constitution and Statutes. Section (d), page 6 of the Regulations gives information concerning conformity with Missouri laws.

Private school pupils could also participate in educational activities conducted under public auspices in places other than the premises of public schools during non-school hours, such as on field trips; in summer work-and-study camps; in on-the-job training for high school students; in programs of concerts, dramas, and lectures. Pages 33 and 34 of these Guidelines lists projects that may meet the most pressing educational needs of educationally deprived children. Many of these projects could provide for the participation of private school children.

Mobile educational equipment (including portable equipment) may be purchased with project funds if such equipment is necessary for the successful operation of a project to meet one of the most pressing educational needs of educationally deprived children, and is not otherwise available. Once purchased the equipment may be used in connection with project activities and services including, if necessary, the loan of such equipment for use of educationally deprived children in private schools. Such equipment, however, must not be allowed to remain on private school premises any longer than necessary and in no event after the end of the period for which the project was approved. Such equipment should not be placed on private school premises if it is practical to offer the educationally deprived children attending that school the benefits of such equipment by using it on public premises.

To the maximum extent possible the children enrolled in private schools who will participate in a project should be children who reside in the project area. The needs of educationally deprived children residing in the project area should determine the nature of the project or projects. Children who attend private schools in the project areas but do not live there may participate in the project if those children have the same needs and it would defeat the purpose of the project to segregate such children from those who also attend such private schools but live in the project area.

SIZE, SCOPE, AND QUALITY

The law requires that projects and programs be of sufficient size, scope, and quality so as to give reasonable promise of substantial progress toward meeting the needs of educationally deprived children in school attendance areas having high concentrations of children from low-income families. Since there will be a specific maximum amount that each public school district may be granted in any one year, each such district's program (and all of its projects) will need to be tailored to that maximum amount as well as to the criteria set forth in the Act, the Regulations, and these Guidelines.

(1) Size - The number of pupils in the total program of the public school district should be commensurate with the number of pupils from low-income families as described in the Act. Each project, if there is more than one, could deal with a part of this number or with all of the number, but the total number of different pupils in all projects should, in general, not add up to more than the number indicated above.

(2) Scope - If one project--say kindergarten--is so large in size as to use up 3/4 of the public school district's maximum grant, it is not likely that that district's total program will have much scope. Scope is related to the variety of coordinated approaches a public school district makes toward helping its educationally deprived children.

For example, assume a public school district's maximum basic grant is $200,000. If the local public school district proposed a kindergarten project for 200 children at a cost of $150,000, the cost of the project would certainly appear too large, and the scope would be questionable. The one project, using most of the maximum basic grant, would limit the number of

other children in the project area. It would be wiser to reduce the cost of the project so that other projects could be funded to deal with the many other educationally deprived children of different ages in the area. Thus the scope could be broadened and the concentration deepened by reducing the size of the project area. In general, the more satisfactory program would probably be one which contained a variety of smaller projects.

(3) Quality - Most of the studies which have examined educational quality have concluded that quality and financial support go hand in hand. Many studies have also found that educating educationally deprived children is likely to be more costly than educating other children. An examination of the types of children included in the term "educationally deprived" would lead to a similar conclusion. Therefore, it is unlikely that a total local school district Title I program which invests a relatively small amount for each participating child is a high quality program.

RELATIONSHIP TO COMMUNITY ACTION PROGRAMS

The application of the local public school district for a grant under this Title should describe the procedures and specific activities undertaken to develop local district programs and projects in cooperation with the public or private nonprofit agency responsible for the Community Action Program wherever there is, in the area served by the local school district, a Community Action Program approved pursuant to Title II of the Economic Opportunity Act of 1964 (Public Law 88-452).

Cooperation between the local school district and the local Community Action Program should insure that:

(1) programs are tailored to the interest of each Act

(2) programs proposed under one Act are meshed to fit with complementary and reinforcing programs under the other Act

(3) comprehensive plans are developed to take advantage of available legislation by working with relevant sister agencies to attack the problem along conceptual lines rather than institutional lines.

Cooperation does not permit the commingling of funds, but does permit the simultaneous use of funds under each of these Acts to finance identifiable portions of a single project.

Responsibility for carrying out the programs authorized under Title I of Public Law 89-10 is, of course, lodged with local public school districts, and these Guidelines should in no way be interpreted as giving the local community action agency a veto over Title I programs. What is required is that local public school districts develop their programs in cooperation with local community action agencies. Similarly it is expected that when local Community Action Programs are planned, cooperation will be sought with the local school districts.

RELATIONSHIP TO OTHER TITLES OF THE ELEMENTARY AND SECONDARY EDUCATION ACT

Title I projects may be planned to cooperate with the Regional Educational Laboratories under Title IV of Public Law 89-10, or the Supplemental Centers and Services under Title III of Public Law 89-10. Such projects may well use the research and demonstration results gathered under one of these titles, or may make available school system resources under Title I to supplement activities under one or both of these other titles.

Similarly, part of the library materials and resources bought from funds granted under Title II of Public Law 89-10 may be placed in project areas. For example, if one of the most pressing needs of educationally deprived children is library services, Title I could provide an elementary school librarian and Title II could strengthen the library materials for the library.

DISSEMINATION OF INFORMATION

The law requires that teachers and administrators participating in Title I programs have readily available the latest and most modern developments and experiments in education for their use in program planning and operation.

For this reason, the application of the local school district for a grant under this Title should describe the procedures and activities it plans to undertake so that significant information derived from educational research, demonstration, and similar projects (including, where appropriate, those promising educational practices developed through Title I projects in other school districts) will be disseminated to its teachers and administrators.

Procedures and activities for dissemination of such information include, though are not limited to:

(1) in-service education;

(2) professional libraries or informational systems;

(3) professional workshops, seminars, etc; and

(4) gathering and making available to teachers information on research and the results of research, demonstrations, and projects which are applicable to, and may hold promise for, the local school district.

The emphasis should be on information that can be related to the assessment of needs and the planning of programs for educationally deprived children, although this should not be the exclusive concern of dissemination activities.

CONSTRUCTION

In addition to the restraining language in the Act and the Regulations, construction should be undertaken only in extraordinary cases because:

(1) It is a capital investment of long duration. If a new building contributes to the educational achievement of children, it does so only over a long period of time, and in the meantime, many children will not receive services which could have been provided with the money used for construction.

(2) Reduction of class size, i.e., reduction of the numbers of pupils per teacher, or per adult, can be accomplished immediately, without construction, by utilizing a teacher aide or more than one teacher in a classroom.

(3) Fifty percent of the State annual per pupil cost of education represents only 10 to 20 percent of the per pupil cost of construction. The number of children, therefore, who could be accommodated in any one year in regular school facilities constructed with the amounts available under Title I would be extremely small in relation to the total number of children on whose behalf such funds were authorized.

(4) Present facilities can be better utilized by initiating projects after school, on Saturdays, and during the summer. Many buildings remain open for only 180 six-hour school days -- a mere fraction of their potential.

(5) Most important, construction probably will not yield as much in terms of pupil attainment as alternative projects. A local school district must weigh the merit of sacrificing a program such as one that would infuse a significant number of specialists in counseling, psychology, health, and remedial services to one that would erect a lone facility. A million dollars spent on construction is a million dollars not spent on various action programs that would directly affect the lives of educationally deprived children this year.

The use of Title I funds may be used for the construction fo school facilities only if such facilities are necessary to enable the applicant to carry out a specific project as approved by the State Department of Education.

In requesting funds for construction the applicant is expected to submit evidence showing (1) that existing facilities are not available either through remodeling or by rental and (2) that the facilities proposed for construction are the minimum school facilities required for the operation of a project under which certain specific services will be provided.

TYPES OF PROJECTS WHICH MIGHT BE CONSIDERED FOR APPROVAL UNDER TITLE I

The organization of projects to meet the most pressing of the special educational needs of educationally deprived children should be designed to meet the specific needs of those children participating in the project. The scope and nature of the projects will vary among the local districts.

A project incorporates a set of related activities and services. The main activity or service should be directly related to specified educational needs of educationally deprived children and should be designed to help them overcome their educational deficiencies. The project may also include such supplementary services as may be required to assist children in overcoming physical and psychological or emotional conditions that would otherwise prevent them from benefiting to the fullest possible extent from their participation in the project. Supplementary services could include, if necessary, such services as psychological testing, counseling, parent education, and the provision of food, clothing, and eyeglasses.

The easiest projects to plan are those which are extensions of ongoing programs. Most local school districts, however, would benefit from the introduction of new activities and services in their programs. Such new endeavors would have the ancillary result of a strengthening of the whole educational effort in the community.

The most pressing educational needs of educationally deprived children may be met by some of these projects:

1. Establishment of kindergarten
2. Summer school courses or summer day camp
3. Out-of-school supplementary instructional programs
4. Establishment of mobile materials centers
5. Special programs during non-school hours involving educationally deprived children, together with their parents to establish closer rapport with the school and its objectives
6. Development of audio-visual, educational television, and other resource materials specially designed to assist learning
7. Curriculum materials center
8. Field trips for cultural and educational development
9. Evening school library services to provide a proper place for study
10. Elementary and secondary instructional programs for unemployed, out-ot-school youth, between the ages of 16 and 21
11. Saturday special opportunity classes

12. Scheduling of concerts, dramas, and lectures; mobile art exhibits and libraries

13. Employment of additional personnel for improvement of instruction in the content areas which show general educational deprivation

14. Supervisory personnel and full-time specialists for improvement of instruction and to provide related pupil services

15. Employment of teachers aides

16. Special in-service programs to train teachers, reading specialists, guidance counselors, and teacher aides serving educationally deprived children

17. College-based institutes for training teachers in special skills

18. Special remedial and enrichment classes

19. Identification of potential drop-outs and development of curriculum and teaching procedures designed to keep them in school

20. Guidance programs for educationally deprived children and families

21. Provisions for the development of the talents of gifted children

22. Program to improve coordination, supervision, and direction of pupil personnel services

23. Attention to job placement opportunities as part of school guidance functions

24. Financial assistance to potential drop-outs through part-time work as an incentive to remaining in school

25. Employment of personnel needed to achieve coordination among the projects concerned with the welfare of educationally deprived children

26. Work experience programs

27. Occupational training classes

28. Special classes for handicapped children

29. School health, psychiatric, and psychological services

30. Financial assistance to needy high school pupils

GUIDE FOR TESTING AND EVALUATION

Basis for Evaluation.

Evaluation procedures, including provision for appropriate objective measurements of educational achievement, must be an integral part of each project and described in the application. Without evaluation it is impossible for a local public school district to ascertain the effectiveness of a particular project or program and make sound decisions about the continuing, discontinuing or modifying of educational practices.

Evaluation should be carried out at two levels -- for each discrete project and for a total program that is the sum of several projects. The central question is, has the educational attainment (or achievement) of children participating in a Title I project been increased due to project participation? The only way this question can be answered is for the local public school district to define project objectives (largely through specific objectives) and try to measure attainment. Projects which benefit children who do not attend public schools should be evaluated to the same extent as those projects which benefit only public school children.

The crucial importance of evaluation is underscored by its inclusion in four different sections of Title I. Sections 205(a) (5), 206(a) (3) (A) and 212(a) of the Act contain evaluation requirements. The law specifies evaluation by the four different governmental units--local public school district, State Department of Education, U.S. Office of Education, and a National Advisory Council appointed by the President. Evaluation will also be a crucial factor in any congressional review of activities under Title I. In large part, the future of the Title I program is contingent upon proper implementation of the evaluation sections of the law.

Steps in Evaluation.

The following steps are essential in the evaluation of projects under Title I, P.L. 89-10:

1. Determination of special educational needs (see pages 26-27 of these Guidelines). Projects or programs should be determined from an analysis of the most pressing needs of educationally deprived children.

2. Special project activities or services.

   It will be necessary for data to be collected to determine the baseline (starting point) from which the evaluation of the effectiveness of the project will be made. This base line data should be diagnostic in nature to determine special activities and services which might be necessary to insure desired outcomes. For instance: If reading has been identified as the most urgent educational deprivation, it then becomes important to secure information from a variety of sources on each individual to determine his ability to profit from the project. Many special services may be indicated from health records, attendance records, study habits, cultural opportunities, home and family conditions, etc.

3. Specific objectives of projects and programs

The specific objectives of projects should grow directly out of the special educational needs of the educationally deprived children to be involved in the project group. The objectives of projects should be specific enough to be effectively measured in terms of behavioral outcomes.

Program objectives should reflect overall planning on the part of personnel of the local public school district to provide assurance that all projects are designed to fit the total plan for meeting the special educational needs of the educationally deprived children in the school districts.

4. Anticipated effectiveness of projects

Local school district personnel will be required in the project application to make a projection of the anticipated effectiveness of the activity on the educationally deprived children involved in achieving the desired project objectives.

5. Proposed Procedures and Techniques for Evaluation

Evaluation of Title I projects will be determined at least annually from a base line or reference point established at the beginning of the project period. Evaluation of progress toward objectives will be reported in meaningful units obtained from the differences between an end-of-project or annual measurement and the base line data.

Progress of educationally deprived children will usually be less than that of other members of the school population. It becomes necessary to evaluate measured gains in terms of expected gains based on the students' prior rate. For instance, if the student had made an annual gain of 5 months in each of the two preceding years, it could be assumed that five (5) months would be his expected gain. This could be compared with the measured gain during the project to determine its effectiveness.

6. Annual Evaluative Report

It will be necessary for each local school district to make an annual evaluative report to the State Department of Education. It is important that this report be expressed in terms of <u>educational attainment</u>, and be written in terms of progress toward the specific objectives of each project and of the total program. The following information will be required for preparation of the annual evaluative report:

Base line data
Annual or end-of-project data
Objectives
Measuring instruments

<u>Published Tests</u> - Should be identified by name, form and sub-tests used.

<u>Locally constructed tests</u> - Procedure for development should be briefly explained. Subjective appraisals such as attitudes or behavior must be thoroughly documented.

PREPARATION OF APPLICATION

Grants for projects will be made on the basis of applications from local public school districts. It is necessary that complete and exact information be given in the application. School officials should follow carefully the regulations, guidelines, and instructions in preparation of applications. This will expedite review of project applications by the State Department of Education.

A. Part I, Basic Data, Form OE 4304

1. One set (5 copies) of this form from each district making application will cover all projects for the school year.

2. Special instructions accompany Form OE 4304.

B. Part II, Project Application, Form OE 4305

1. One set (5 copies) of this form must be completed for each project submitted for approval.

2. Special instructions accompany Form OE 4305 (Part II)

3. Careful attention should be given to:

Item 10 (Project Budget) - Salaries

a. Salaries must be for personnel employed for approved Title I projects.
b. Additional amounts paid to regular personnel for scheduled additional hours in Title I after-school programs, Saturday programs, and summer programs can be included.

Item 10 (Project Budget) - Other

a. These expenditures must be further broken down on the "Supplementary Project Budget."

Item 14 - Positions to be added

a. All positions to be paid from project funds must be listed in this item. These must be for Title I positions that are in addition to the staff that would normally be employed by the district.

C. Conformity with Regulations

1. All information and data in Part I and Part II of the application must be in conformity with the Regulations, pages 1 through 22.

STATE PROCEDURES FOR APPROVAL OF TITLE I PROJECT APPLICATIONS

1. The school district will complete project applications and distribute as follows:
   (a) Mail original and 3 copies to: Director of Title I, P. L. 89-10
   State Department of Education
   Jefferson City, Missouri

   (b) One copy to be retained by local district

2. Project applications will be stamped with the date they are received by the State Department of Education in Jefferson City.

3. Project applications will be reviewed in order of date received.

4. Project applications delivered in person will be dated and processed in the same order as those received by mail.

5. The State Department of Education will approve applications submitted by eligible districts if the projects proposed are eligible and meet Federal and State criteria. A project may be approved for a lesser amount of funds than that requested, provided such action will not impair its effectiveness for making substantial progress toward meeting the educational needs of educationally deprived children. Project proposals may also be returned to the district with specific recommendations for revision or modification.

6. The State Department of Education must determine that the proposed projects meet the requirements of the Act and the Regulations.

7. Project proposals which appear to over-emphasize certain age or grade levels contribute to an unbalanced program. Such projects will not be funded unless the district has presented sufficient evidence to show that the lack of balance was deliberate and based on good reasons.

8. Project applications will be classified as follows:

   (a) Approved (in full or in part)

   Approved applications - School officials may start approved parts of projects after receiving a letter of approval from the State Department of Education, and funds may be requested for the project.

   (b) Substantially approvable

   Substantially approvable - School officials may start projects, after notification by the State Department of Education, with the understanding that funds will be withheld until final approval requirements are met.

   (c) Not approvable

   Not approvable - If notified that a project is not approvable, school officials may submit new or revised applications or request consultation from the State Department of Education concerning project applications. Project applications will not be finally disapproved without first providing the school district a reasonable notice and opportunity for a hearing.

FISCAL ADMINISTRATION

Procedures to be followed by districts in reporting of estimates, obligations, and disbursements.

1. Report of Local Expenditures. (See page 43 Exhibit A)

   Obligations of project funds may not precede date of approval of the project.

   Keep a separate financial record for each project.

   It is suggested that this record be kept current. As each purchase order is issued it should be encumbered: record the date, purchase order number, name of vendor, account number, amount of the obligation, and the available balance for the project. When payments are made for materials received, payroll, etc., record the date, vendor, or reason payment was made, account number, amount of payment, check number, and available balance.

   Payments made for project obligations should be recorded as negative entries in the "amount obligated" column (5) and will not affect the amount of available balance. Cancelled orders should be entered as negative amounts in the "amount obligated" column. This will affect an increase in the amount of the available balance by the amount of the cancellation.

   If your school district does not use encumbrance accounting, this procedure will need to be studied carefully as you proceed. A carbon copy of the Report of Local Expenditures shall be kept and the carbon copy sent to the State Department of Education at the close of each quarter. This procedure will provide ready substantiation of quarterly reports of expenditures and will be kept in the State Department for audit purposes.

   Use of this form will permit school officials to know exactly what obligations have been made, what payments have been made, and what funds are available for use in each project.

2. District Estimates of Need for Federal Funds. (See page 44 Exhibit B)

   After projects are approved by the State Department of Education, the local district will submit a "Quarterly Disbursement and Estimated Requirement of Federal Funds" which will give an estimate of the amount of money required to operate the project (s) during the quarter. Based on this estimate the State Department of Education will determine the funds to be forwarded to the local district.

   For the following quarter and each quarter thereafter, districts with approved projects will submit by the 10th day of the first month of each quarter its "Quarterly Disbursement and Estimated Requirement of Federal Funds" for each project.

EXAMPLE

1st Quarter	Approved Estimate of required funds	$30,000.00
	Actual cash expenditures	28,000.00
	Cash on hand - end of 1st quarter	$ 2,000.00
2nd Quarter	Approved Estimate of required funds	$30,000.00
	Less cash on hand - end of 1st quarter	2,000.00
	Amount of funds advanced	$28,000.00
	Actual cash expenditures	27,500.00
	Cash on hand - end of 2nd quarter	$ 500.00
3rd Quarter	Approved Estimate of required funds	$35,000.00
	Less cash on hand - end of 2nd quarter	500.00
	Amount of funds advanced	$34,500.00
	Actual cash expenditures	36,500.00
	Cash deficit - end of 3rd quarter	$ 2,000.00
4th Quarter	Approved estimate of required funds	$31,500.00
	Plus cash deficit - 3rd quarter	2,000.00
	Total funds advanced	$33,500.00
	Actual cash expenditures	33,250.00
	Cash on hand - end of 4th quarter	$ 250.00

The "Annual financial settlement" will determine:

(1) the amount to be returned to the State Department of Education, or

(2) the reimbursement to be made for the expenditures in excess of funds advanced for the project(s).

3. District Obligations and Their Liquidation

Obligation of Federal funds will occur when the State Department of Education gives written approval of the district project and assigns a project number. Obligating documents, contracts, purchase orders, etc. must not be issued prior to the date of project approval. Generally, obligations of funds must be made prior to June 30 of the fiscal year in which the project was approved. Summer projects (must be approved prior to June 30) may require obligations of funds during the months of July and August. All obligations must be liquidated no later than June 30 of the year following the close of the fiscal year in which the project was approved.

"Quarterly Disbursement and Estimated Requirements of Federal Funds" and "Record and Report of Local Expenditures" must be submitted to the State Department of Education as part of the financial records for each project.

4. Project Completion Reports

Following the completion of a project by a district, a project report must be made to the State Department of Education. This report will contain complete financial information in regard to the completed project - June 30 or August 31. Forms for this report will be supplied by the State Department of Education prior to the close of the fiscal year.

5. Audits

All financial activities under this program are subject to audit at both the local and State agency level.

(a) Local Agency Audits

Project expenditure records will be audited locally. Such audits may be done as a regular part of the local school audit procedures prescribed by State laws or regulations. Local agency audit programs should be developed in accordance with generally accepted auditing standards, with due consideration for Federal policies governing the use of grant funds as well as State or local policies and procedures. The local audit report should include separate financial schedules or statements identifying receipts and expenditures applicable to these specific projects and appropriate statements certified as being true.

Reports and workpapers of local audits should be available for review by appropriate State and Federal auditors and should include a description of the method and extent of tests, examinations, and other techniques used in making the required verifications.

(b) Specific Audit Considerations

For audits of local agencies, it is essential that specific audit procedures be developed to verify that:

a. Funds disbursed by the local district were received and properly accounted for
b. Payments reported by the local district were actually made to the vendors, contractors, and employees and that they conform to applicable laws and regulations, including procurement requirements
c. Refunds, discounts, etc., were properly credited to the specific programs as reductions of the gross expenditures
d. Payments are supported by adequate evidence of the delivery of goods or performance of services

(b) Specific Audit Considerations (continued)

e. Encumbrances or obligations included in the report of expenditures were actually incurred during the fiscal year for which the expenditure was claimed and, upon liquidation, were properly adjusted
f. The same item is not reported as an expenditure for 2 or more years, e.g., encumbrance in one year and payment in another
g. All expenditures claimed for federally supported Title I projects were made for properly approved projects and are easily identifiable with these projects
h. State and local district rules applicable to equipment records and control are followed
i. Prorated expenditures, such as salaries, travel, etc., are divided correctly between two or more accounts, and that the basis of such division can be substantiated as reasonable and equitable
j. The sources of funds expended for federally reimbursed projects were stated correctly, and that the same expenditures were not claimed under more than one Federal program
k. Unexpended or unearned Federal funds advanced or overpaid were returned promptly or otherwise correctly accounted for
l. If the local district is on a fiscal year different from the Federal fiscal year, the audit report reflects outstanding obligations as of June 30 or August 31, whichever the case may be, in sufficient detail to permit identification of subsequent payments with the applicable obligation and comparison with reports submitted by the local agency to the State agency.

The audit report should be properly certified by the auditor to the effect that the procedures he used to verify and otherwise substantiate his findings are in accordance with the procedures outlined above.

Exhibit A

RECORD AND REPORT OF LOCAL EXPENDITURES

Local Agency _____ State _____

Federal Program _____ Project No. _____ Date Approved _____ Amount Approved $5,000.00

Obligation Reference Date	Pur. Ord. Number	Item or Name of Vendor	Account Number	Amount Obligated	Amount Paid	Date Paid or Canc.	Check Number	Available Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11/1/65								$5,000.00
11/3/65	497	Standard School Supply	230 c	$ 647.50				4,352.50
11/15/65	736	School Equipment Co.	1230 c	2,500.00				1,852.50
11/30/65		September Payroll	213		$300.00	11/30/65	355	1,552.50
12/15/65	740	Standard School Supply	230 c	150.00				1,402.50
12/18/65	497	Standard School Supply	230 c	(647.50)	640.00	12/18/65	749	1,410.00
12/30/65		October Payroll	213		450.00	12/31/65	738-40	960.00
12/31/65	736	School Equipment Co.	1230 c	(2,500.00)	-0-			3,460.00
		TOTALS		$ 150.00	$1,390.00			3,460.00

NOTE: This report shows that the total disbursements to date were $1,390.00

Unpaid obligations, for 1 outstanding purchase order 150.00

Total Funds, used or obligated $1,540.00

Balance still available for new payrolls or purchase order 3,460.00

Total originally approved $5,000.00

Exhibit B

QUARTERLY DISBURSEMENT AND ESTIMATED REQUIREMENT OF FEDERAL FUNDS BY LEA

Elementary and Secondary Education Act of 1965-Title I

INSTRUCTIONS: Please complete this report for each project approved during this quarter. Submit original and two copies no later than 10 days after each quarter to the State Educational Agency.

PROJECT NO.	STATE SERIAL NOS.	FISCAL YEAR PROJECT APPROVED

PART I - DISBURSEMENTS FOR PAST QUARTER ENDING: _____

ITEMS	AMOUNT OF DISBURSEMENTS
1. Disbursements of Federal cash previously reported	$
2. Disbursements of Federal cash for reporting quarter	
3. Federal cash on hand at end of quarter	
4. (Federal cash accounted for) TOTAL -	$

PART II - ESTIMATED REQUIREMENTS FOR NEXT QUARTER ENDING: _____

MONTH FEDERAL CASH IS NEEDED	ESTIMATED AMOUNT NEEDED
1. Enter Month-	$
2. Enter Month-	
3. Enter Month	
4. (Add 1, 2, and 3) TOTAL -	
Less:	
5. Federal cash on hand at end of quarter (Same as Part I, Item 3)	
6. Net amount of Federal cash required (Item 4 minus 5)	$

Remarks:

SUBMITTED BY (Type name and title)

DATE

LEVELS OF DECISION MAKING, TITLE I, P.L. 89-10
ELEMENTARY & SECONDARY EDUCATION ACT 1965

U. S. Congress

1. Determination of Act
2. Determination of intent of Act

↕

U. S. Office of Education

1. Serves as a transactional agent
2. Develop Federal regulations

↕

Missouri State Department of Education

1. Develop State guidelines and regulations
2. Determine local educational agency allocation
3. Process application
4. Approve or reject projects
5. Provide consultation to schools
6. Provide payments
7. Collect data and receive reports
8. Review evaluations

↕

Local Public School District

1. Determine attendance areas
2. Survey needs of students
3. Develop local plans
4. Include non public school children
5. Place resources and personnel
6. Evaluate projects

↕

Local Administrative Staff

1. Serve as a transactional agent between project plan to teachers
2. Assist Supt. and Board of Education in project development, implementation and evaluation

↕

Teachers

1. Assist local administrators in project development
2. Assist in materials selection
3. Assist in project instructional organization
4. Assist in determination of instructional method

↕

Child

1. Select from certain alternatives in instructional activities prescribed by project and teacher

A P P E N D I X K

Title I Evaluation Guide

TITLE ONE
EVALUATION GUIDE

FOR

LOCAL EDUCATIONAL AGENCIES

OPERATING TITLE I PROJECTS

UNDER

THE
ELEMENTARY AND SECONDARY
EDUCATION ACT OF 1965
P. L. 89-10

MAY, 1966

STATE DEPARTMENT OF EDUCATION

JEFFERSON CITY, MISSOURI

Table of Contents

INTRODUCTION

Why Evaluate?

Evaluation is an important part of the process of education. Evaluation helps us in diagnosing pupils' strengths and weaknesses, in prescribing plans of action based on the diagnosis, in seeing whether our educational practices are succeeding, and in setting up revised plans to meet our objectives. The effectiveness of Title I projects depends to a considerable extent on the feedback that comes from good evaluation. The measurements of pupil changes and attainments in Title I projects must be more carefully assessed and controlled than casual teacher judgment. On the other hand, an elaborate research study is not required.

The crucial importance of evaluation in the Elementary and Secondary Education Act is underscored by its inclusion in four different sections of Title I: 205 (a) (5), 206 (a) (3), 207 (b), and 212 (a). Note that the law, in effect, requires evaluation at four different governmental levels--local, State, U.S. Office of Education, and a National Advisory Council appointed by the President. The results of evaluation at all these levels, of course, will be of crucial importance in any congressional review of activities under Title I.

Any review of Title I at the national level cannot be effective unless the State and local educational agencies supply the necessary evaluative data. Consequently, it is essential that adequate data be gathered by each local educational agency and that such data be analyzed and synthesized by the State educational agency. Evaluation must be carried out by the local educational agency at two levels--for each discrete project and for a total program comprising all of the agency's projects.

Purpose of this Guide

The purpose of this guide is to provide instructions and illustrations to aid the local district in completing the evaluation report of Title I projects. This report consists of two parts:

Part I Evaluation of the Total Title I Program
Part II Evaluation of Title I Projects

It is not the intent of the State Department of Education or the U.S. Office of Education to utilize the Annual Evaluation Report to make comparisons between local districts. Not only do we not wish to make comparisons; but because of the differences in approaches and needs to be met, comparisons of this type would be neither valid not meaningful.

Annual Evaluation Reports to be Submitted by the Local Educational Agency to the State Department of Education

Part I **Evaluation of Total Title I Program**

Number: One copy of this report shall be submitted by each district operating a Title I project.

Date: This report is due 30 days after the latest ending date of any project. The latest ending date of any project for fiscal year 1966 (1965-66 school year) is August 31, 1966.

Part II **Evaluation of Title I Projects**

Number: One copy for each Title I project
Each copy shall include the following:

Type of Information or Data

One copy of Short Answer Section

One copy of Use of Standardized Tests and Other Measures

One copy for each project activity of Summary of Project Effectiveness

One copy for each evaluation design used of Progress Report of Title I Children

One copy for each subtest of each subject area and grade level of Frequency Distribution of Standardized Test Scores

One copy of Summary of Non-Test Data

Date: This report is due not later than 30 days after ending date of the project.

INSTRUCTIONS FOR PART I

EVALUATION OF TOTAL TITLE I PROGRAM

INSTRUCTIONS FOR PART I

Evaluation of Total Title I Program

Page 1

The Local Educational Agency should enter the number of each approved project and the amount of the project (including amendments).

The legal name of the district should be the same as listed on the approved projects.

The authorized representative must be the same as the authorized representative who signed and submitted the projects for the Local Educational Agency. The authorized representative may be assisted by others in the preparation of the report.

Page 2

Items (1) and (2)

In determining an unduplicated number do not count any child more than once, though he may be involved in more than one project.

Page 3

Item 9(a)

Technical or professional assistance refers to assistance provided by professional personnel of the State Department of Education, colleges or universities, individuals from private enterprise, or commercial companies.

Page 4

Items 10 - 14

The amounts requested in these items will not equal the total amount approved for the Title I program of the Local Educational Agency.

INSTRUCTIONS FOR TABLES IN PART I

Evaluation of Total Title I Program
Table 1. Worksheet for Determining Dropout Rate
Table 2. Dropout Rates (Holding Power) for Title I Project School Compared to Non-Title I Schools

The dropout rate should be computed as follows:

$$\text{Annual Dropout Rate} = \frac{\text{Number of Dropouts}}{\text{Arithmetic Accountability}}$$ [1/] [2/]

Arithmetic Accountability = End of Year Membership + All Graduates + Dropouts

---

1/ Dropout--A pupil who leaves a school, for any reason except death, before graduation or completion of a program of studies without transferring to another school. /Schools must keep a complete accountability of students throughout the year in order to differentiate between dropouts and transfers./ The term "dropout" is used most often to designate an elementary or secondary school pupil who has been in membership during the regular school term and who withdraws from membership before graduating from secondary school (grade 12) or before completing an equivalent program of studies. Such an individual is considered a dropout whether his dropping out occurs during or between regular school terms, whether his dropping out occurs before or after he has passed the compulsory school attendance age, and, where applicable, whether or not he has completed a minimum required amount of school work. (Definition from: U.S. Department of Health, Education, and Welfare, Pupil Accounting for Local and State School Systems, State Educational Records and Reports Series: Handbook V, pp. 96-97.

2/ Arithmetic Accountability is determined by adding the following three items:

(A) End-of-the-year membership [3/] --The number of pupils on the current roll of a class or school as of the close of the regular school term, of the year studied. /For example, if we were to study the 1964-65 dropout rate, the end of year membership would be at the close of the regular school term.

(B) Graduate--An individual who has received formal recognition for the successful completion of a prescribed program of studies.

(C) Dropout--See above definition.

3/ Special Note: The end of year membership includes all members of the grade on the last day of school. Those students who drop out between the last day of school and the following school year should be considered as a dropout for the next year.

Dropout Rates for Title I Project Schools
Table 2.

Insert the dropout rate for the appropriate grade levels in Title I schools and Non-Title I schools. The "All Sch." column should contain the dropout rate for the appropriate grade levels for the whole district. The following should also be completed: No. of schools, Total No. of students, and No. of dropouts.

Definitions for Table 3

Average Daily Attendance (ADA)--The aggregate days attendance of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered as days in session. The reporting period is generally a given regular school term.

Membership, Average Daily(ADM)--The aggregate days membership of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered as days in session. The reporting period is generally a given regular school term. For purposes of obtaining statistical comparability only, pupil-staff ratios involving kindergarten and nursery pupils attending a half-day session are computed as though these pupils are in membership for a half day.

INSTRUCTIONS, ILLUSTRATIONS, AND GUIDES FOR PART II

EVALUATION OF TITLE I PROJECTS

PART II

Evaluation of Title I Projects

Page 1

The State Project Number will be found on the Local Educational Agency's copy of "Request for Federal Funds" or the "Quarterly Disbursement and Estimated Requirement of Federal Funds by Local Educational Agency."

The Local Educational Agency Project Number will be on the Local Educational Agency project and the approval letter from the State Department of Education.

The County Code and Local Educational Agency Code has been sent to all Local Educational Agencies in the state.

Title of the Project should be the same as given on the project submitted by the Local Educational Agency.

Short Answer Section:

Items 1 through 5(a) are self-explanatory.

Page 2

Items 5(b) through 5(d) are self-explanatory.

Page 3

Item 6

The types of evaluation designs A through E are illustrated on pages 7 through 11 of this guide.

Page 4

Table 6

An example for completing this page is given on page 12 of this guide.

Page 5

Table 7

The Local Educational Agency should submit one copy of Table 7 for each activity of the project that is designed to meet the needs of educationally deprived children.

(Part II, Evaluation of Title I Projects)

Page 6

Submit one copy of this page for each evaluation design used. The Local Educational Agency may use more than one design for each activity if they desire.

Page 7

Submit one copy of this page for each activity of the project.

Page 8

Submit one copy of this page for the subtest of each area and grade level for which pre- and posttest scores were obtained from standardized tests. In addition to submitting a table for each subtest, also submit one for all subjects in one basic skills area. For example; frequency tables constructed for Reading would include one for Vocabulary, one for Comprehension, and one for Total Reading (usually a combination of Vocabulary and Comprehension).

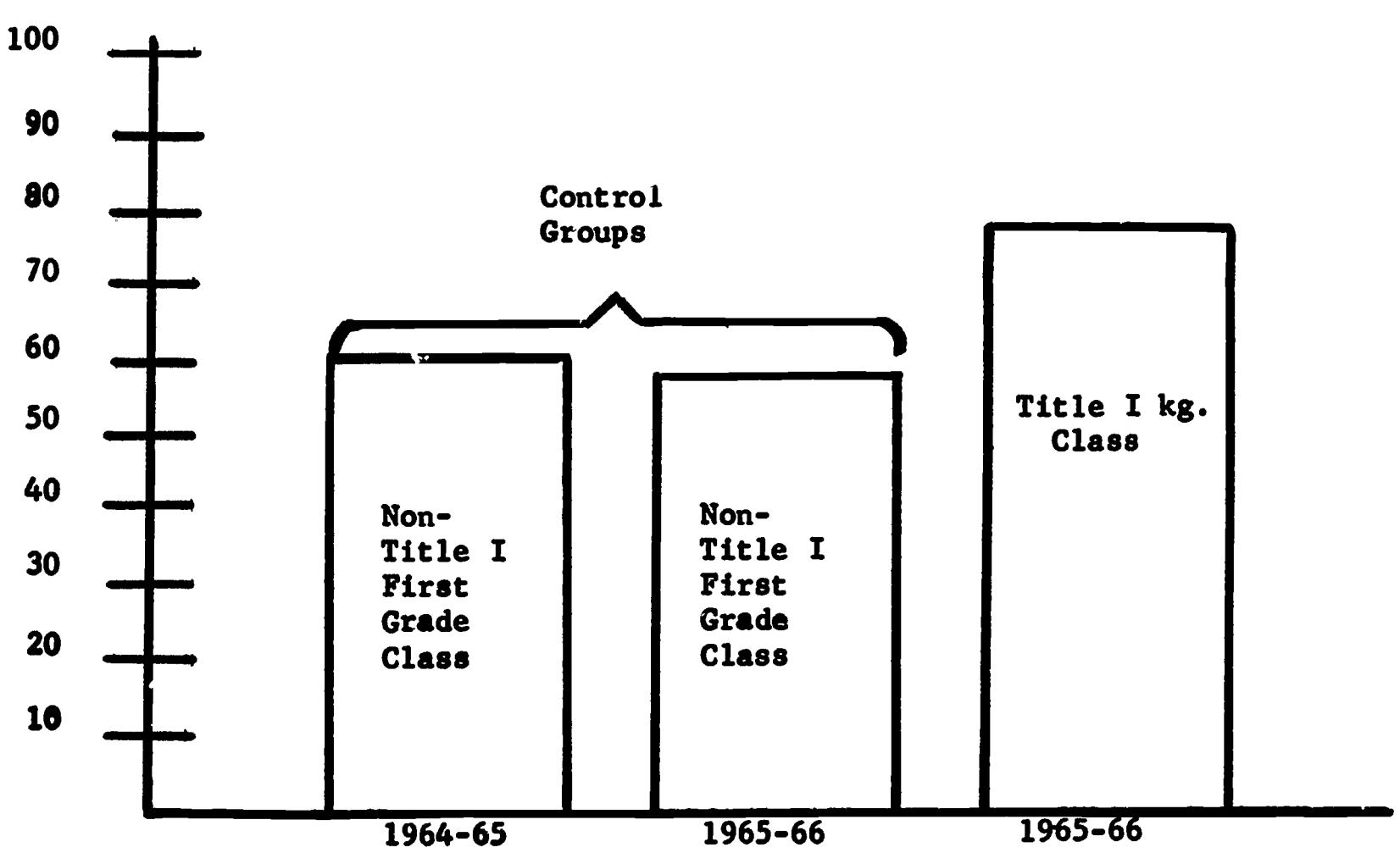
Illustrations of Evaluation Designs for

Part II - Evaluation of Title I Projects

Evaluation Design A: Two group experimental design using the project group and a conveniently available non-project group as the control.
Example 1.: Title I Kindergarten Project

As one means of evaluating the effectiveness of a kindergarten project, a local district used the scores made on the Reading Readiness Test which they administer to children entering the first grade.

The mean score on the readiness test earned by the Title I Kindergarten group at the end of the Kindergarten project was compared to the mean scores earned by two previous groups that entered first grade without having attended a kindergarten program. These results may be seen below.



Mean Scores on Readiness Test of beginning first grade classes compared to Kindergarten scores at end of Kindergarten class.

It can be seen that the two previous group means were similar, but the group that participated in the kindergarten program scored higher. Thus, it can be concluded that the Title I kindergarten project was effective in terms of the scores earned on the Reading Readiness Test.

Evaluation Design B: One group design using a pretest and posttest on the project group to compare observed gains or losses with expected gains.
Example 1.: Change Reported in terms of change in the first and third Quartile points for a seventh grade Title I group.

(Illustrations of Evaluation Designs)

Expected progress of the Title I Group, based on published norms, was .1 (one-tenth) of a grade progress for each month of instruction. The project was operated for a period of four months. The expected progress was .4 of a grade. The results may be seen below.

	$Quartile_1$	$Quartile_3$
Posttest	4.0	6.9
Pretest	3.6	6.3
Change	+.4	+.6

The first and third quartile points from the pre- and posttests were compared to report the change. The change in the first quartile point was +.4 of a grade which was equal to the expected change of .4. The change in the third quartile point was +.6 which was above the expected change of .4. The district concluded that; in terms of the test scores the Title I project was successful.

A guide for the computation of quartile points has been provided in the instructions.

Example 2.: Change reported in terms of comparing pretest and posttest median scores with the expected gain.

A Title I group was administered a reading vocabulary test before and after five months of instruction in reading vocabulary. The test data and results are shown below.

	Vocabulary	
	Pretest	Posttest
Median	4.0	4.6

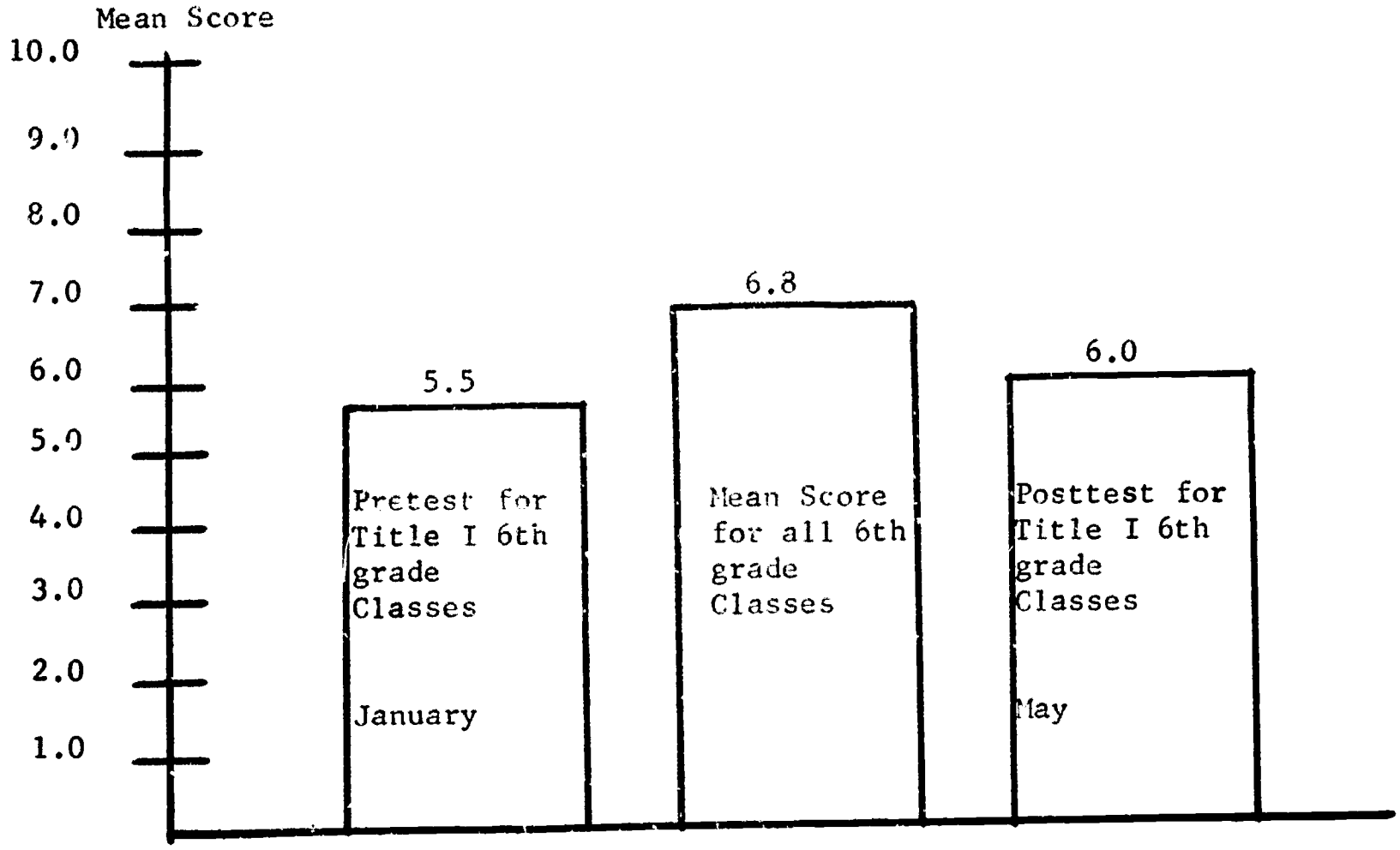
(Illustrations of Evaluation Designs)

The evaluation procedure was to compare the project group scores with a designated norm. The designated norm in this situation was the expected gain based on the published norms. Each pupil was expected to gain one month in achievement for each month of instruction. The length of the project was five months.

An examination of the median scores shows that the pretest median score was 4.0. The posttest median score was 4.6. The median gain was six months. It can be concluded that; in terms of the achievement test scores, the objective to raise the vocabulary level was achieved.

Evaluation Design C: One group design using pretest and/or posttest scores on the project group to compare observed performance with local, state, or national norms.

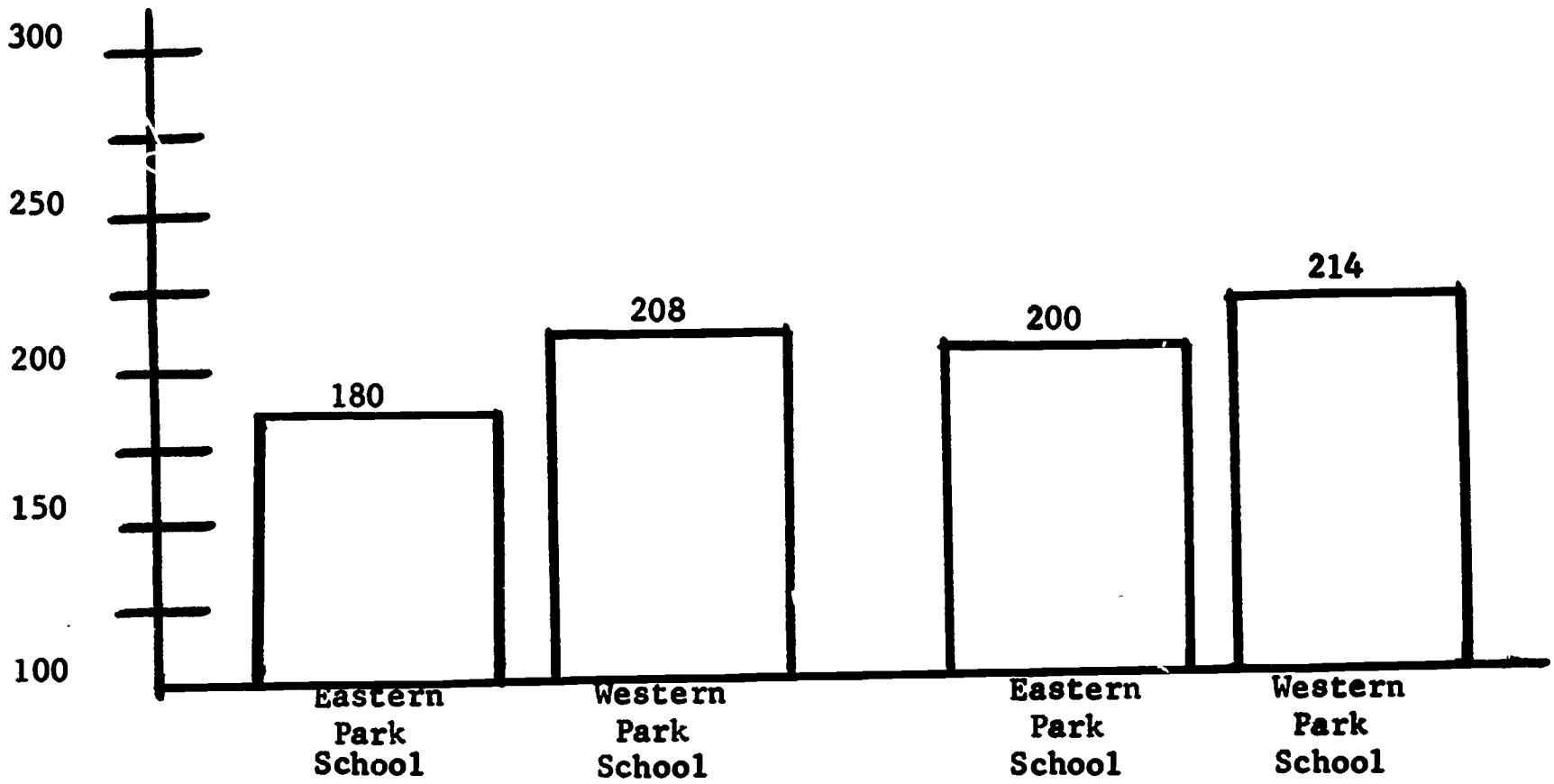
A district conducted a four month remedial project in arithmetic for a 6th grade class. In checking arithmetic scores of previous years it was found that the 6th grade classes in the district usually earned a mean of around 6.8 at the end of the term. The results of the pre- and posttest mean scores for the Title I group and the comparison with the local norm may be seen below.



The results indicated that the Title I group made substantial gain but did not reach the mean score of all the 6th grade classes in the district. This did not indicate that the project was not effective; the gain shown over the pretest score was substantial.

(Illustrations of Evaluation Designs)

Evaluation Design D: One group design using test data on the project group to compare observed performance with expected performance based upon data for past years in the school or upon past years of the group.
Example 1.: Data on a Title I project group compared with the data from previous years in the Title I school and a non-Title I school.

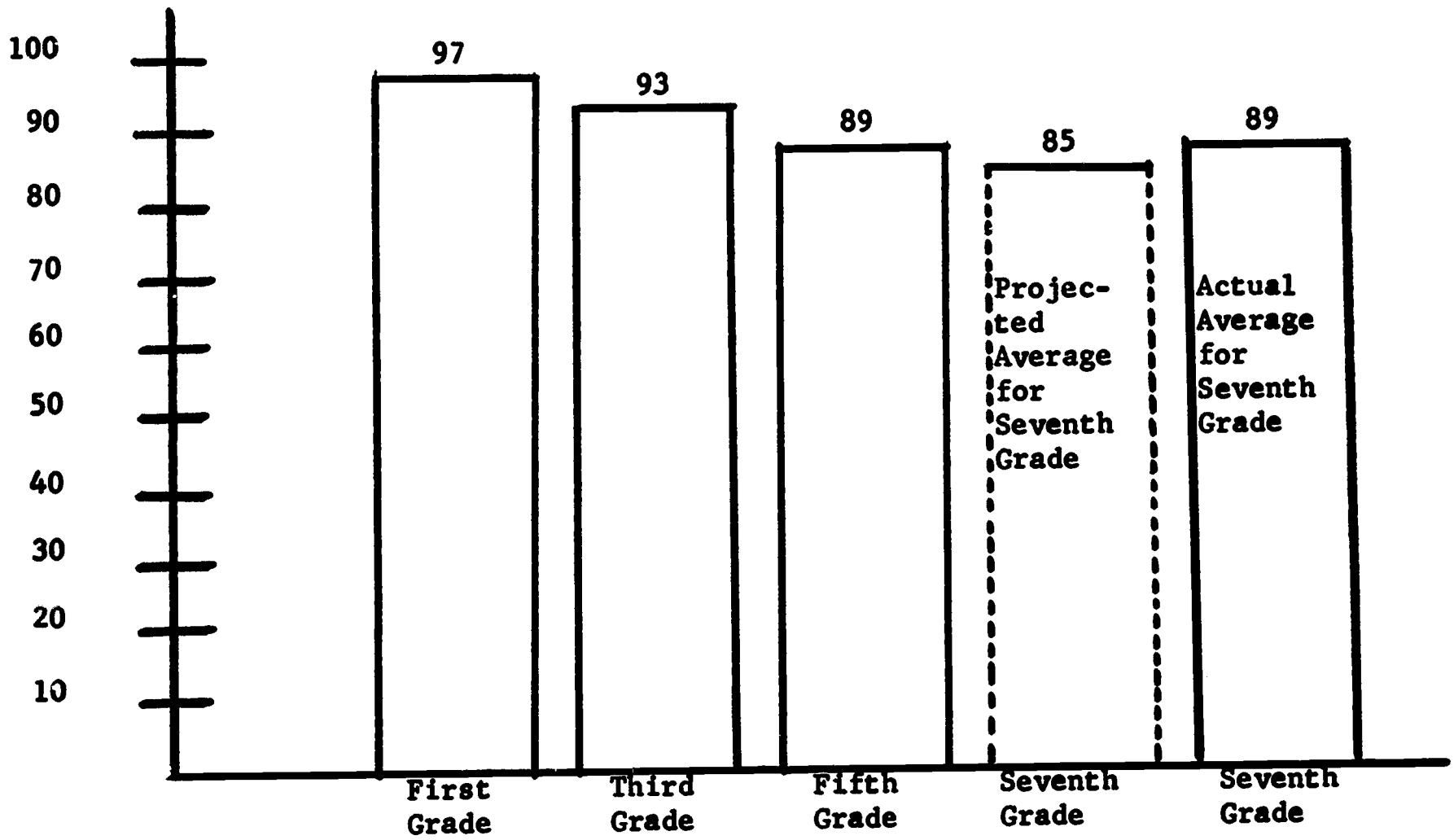


In Eastern Park School an enriched and individualized reading Title I project was inaugurated in the first grade. In May, this group of children earned a sight vocabulary test average score of 200. Comparison was made with the average of 180 posted last year by Eastern Park School first-graders, and average scores of 208 last year and 214 this year earned by first-graders in the Western Park School. The project was judged successful by the school district.

Example 2.: Data on a Title I group compared with data from the previous scores of the same group.

Mean achievement reading test scores of 97, 93, and 89 were recorded in grades one, three, and five respectively for members of a seventh grade Title I project group at the beginning of the Title I project. In the seventh grade, the projected average for this group without the benefit of the Title I project would be 85. The actual average in the seventh grade of the project group would then be contrasted with the projected average.

(Illustrations of Evaluation Designs)



Often these quotients of educationally disadvantaged children tend to decrease as further yearly evaluations are made. In this example, it would be encouraging to see that this trend has been arrested. The project was judged successful by the school district.

Evaluation Design E: One group design using test data on the project group, but no comparison data.

A district conducted a concentrated remedial project with a sixth grade group for one semester and reported the results of the pre- and posttests as shown below.

	Mean
Posttest	5.5
Pretest	5.0
Change	+.5

It can be seen that there was a +.5 gain in the mean score for the group. Since this procedure reports results and does not afford a meaningful comparison, it is not as desirable as the other designs.

Illustration for Table 6. Use of Standardized Tests and Other Measures

Directions: Check, according to appropriate grade level(s), the specified types of standardized tests and other measures used in this project.

For example, if your project covered grades 1-8 and utilized standardized achievement tests and teacher made tests in the skill development activities and teacher ratings and observer reports in attitudinal and behavioral development activities; these would be checked as shown below:

MEASURES	SKILL DEVELOPMENT ACTIVITIES					ATTITUDINAL AND BEHAVIORAL DEVELOPMENT ACTIVITIES				
1. Standardized Tests & Inventories	Grades Pre-Kg. Kg.	1-3	4-6	7-9	10-12	Pre-Kg Kg.	1-3	4-6	7-9	10-12
a. Achievement		✓	✓	✓						
b. Intelligence										
c. Aptitude										
d. Interest										
e. Attitude										
f. Others (Specify)										
2. Other Tests										
a. Locally Devised Tests										
b. Teacher Made Tests		✓	✓	✓						
c. Others (Specify)										
3. Other Measures										
a. Teacher Ratings							✓	✓	✓	
b. Anecdotal Records										
c. Observer Reports							✓	✓	✓	
d. Others (Specify)										

Illustration for Table 8. Frequency Distribution of Standardized Test Scores.

A district conducted a five month Remedial Reading project for a fifth grade class. The pre- and posttest data for the vocabulary subtest are shown below:

Student Number	Pretest		Posttest		Student Number	Pretest		Posttest	
	Grade Score	Percentile	Grade Score	Percentile		Grade Score	Percentile	Grade Score	Percentile
1.	4.5	15	5.0	29	9.	3.7	2	3.9	3
2.	4.5	15	5.0	29	10.	3.7	2	4.0	4
3.	4.5	15	4.9	26	11.	3.6	1	3.6	1
4.	4.0	4	4.3	10	12.	3.9	3	3.6	1
5.	4.1	5	4.6	18	13.	3.6	1	4.0	4
6.	4.3	10	4.9	26	14.	4.0	4	4.5	15
7.	4.4	12	5.0	29	15.	3.6	1	3.9	3
8.	4.4	12	5.0	29					

The pretest score for Student No. One falls in category "A". This was determined by looking at the percentile rank (15). Category "A" includes percentile ranks 1 - 15.

The posttest score for Student No. One falls in category "B". This was determined by looking at the percentile rank (29). Category "B" includes percentile ranks 16 - 50.

The completed table showing pre and post percentile ranks for all fifteen students can be seen below.

Name of Test IOWA TEST of BASIC SKILLS Form 1

Name of Subtest Vocabulary Grade 5

Number of Children 15 Date of Pretest 1/7/66

Length of Project 20 (in weeks) Date of Posttest 5/27/66

Directions: Indicate the number of scores falling in each category (A-D) on pre- and posttests.

CATEGORIES	A	B	C	D
PERCENTILES	1st - 15th	16th - 50th	51st - 84th	85th - 99th
POSTTEST	8	7		
PRETEST	15			

Evaluative Criteria

The evaluative criteria listed below may be utilized to assess learning outcomes in the following areas. (These are suggestions and are not intended to be complete listings):

1. Basic skills in subject-matter areas
2. Emotional and social adjustment
3. Attitudes
4. Special abilities

Example: To assess change in attitudes in a given area; the district could use the following types of measuring devices or data: Observations, Questionnaires, Rating scales, Dropout information, Attendance records, Case studies, Anecdotal records, Pupils' writings, and Teacher grades.

EVALUATIVE CRITERIA	ACTIVITY AREAS			
	1	2	3	4
Standardized tests	X			X
Locally devised tests	X			X
Teacher-made tests	X			X
Teacher grades	X			
Observations	X	X	X	X
Questionnaires			X	
Rating scales		X	X	
Dropout information		X	X	
Attendance records		X	X	
Case studies	X	X	X	
Anecdotal records			X	
Records of student participation	X	X	X	
Pupils' writings	X	X	X	
Checklists		X	X	
Sociograms		X		
Parent involvement			X	

(Evaluative Criteria)

The following criteria may be used with projects in which the effectiveness of the major activities are not readily assessed through the use of the evaluation designs which have been provided.

TYPE OF PROJECT	EVALUATIVE CRITERIA
A. Kindergarten	1. Recorded teacher observations of work and play activities. 2. Individual records of pupil participation. 3. Results of Reading and Number Readiness tests. 4. Results of parent questionnaires concerning project activities and the effect the activities seem to have on their child. 5. Case studies.
B. Instructional Materials Center	1. Individual records of student utilization of materials. 2. Teacher observation of any change in students' work habits, class participation, and achievement. 3. Results of questionnaires completed by parents and students. 4. Individual records of quantity, quality, and level of material utilization. 5. Records of teacher use of materials for classroom activities.
C. Physical Education and Health	1. Records of periodic physical examinations. 2. Results of objective physical fitness tests. 3. Results of objective health tests. 4. Teacher observations of any change. 5. Case studies.
D. Library Services	1. Individual records of quantity, quality, interest area, and level of reading done by pupils. 2. Objective measurement of pupils' knowledge of library skills. 3. Records of utilization of library resources by teachers in classroom activities. 4. Results of questionnaires completed by teachers, parents, and students. 5. Teacher observations of pupil usage of library skills in independent classroom activities.

GUIDE FOR COMPUTING QUARTILE POINTS

District X diagnosed the educational needs of their pupils and found that in one qualified elementary area 40 per cent of the children fell one grade or more below their expected level on achievement test scores. The district implemented a remedial reading project in the school for grades 4 - 8. Any child who scored one grade or more below his expected level was included in the activities of the project.

The length of the project was four months. At the end of the project the Title I group was administered an alternate form of the same test. The pre- and posttest scores for children in grades 4 - 8 who participated in the project are shown on page To facilitate handling the scores, only 15 pupils have been included at each grade level in the example.

In order to show any change in the quartile points it was necessary to compute these points for the pretest scores and again for the posttest scores for each grade level and also for the total group.*

Pretest Scores

The first quartile point is that score below which are found one-fourth, or 25 per cent of the scores. The third quartile point is that score below which are found three-fourths or 75 per cent of the scores.

In order to make the scores easier to handle a frequency distribution was set up. The first step was to determine the range. This was found by computing the difference between the highest pretest score (7.5) and the lowest pretest score (2.6). The range was 4.9. Usually, the number of intervals to be used in constructing the frequency distribution is between 10 and 20. Dividing the range by the proposed number of intervals and rounding this value will result in an interval which will accomplish the desired results.

* In this example the quartile points have been computed for all grade levels in the Title I group. The same procedures would be used to compute the quartile points for each grade.

Reading Scores for Title I Remedial Reading Project

Student	4th Grade		5th Grade		6th Grade		7th Grade		8th Grade	
Number	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1.	3.5	4.1	4.5	5.0	5.0	5.3	6.5	6.9	7.0	7.5
2.	3.2	3.4	4.5	5.0	5.0	5.4	6.4	6.9	7.0	7.4
3.	3.0	3.5	4.5	4.9	5.4	5.9	5.4	6.0	6.9	6.9
4.	2.9	3.3	4.0	4.3	5.3	6.0	5.5	6.0	7.4	7.9
5.	2.6	2.9	4.1	4.6	5.0	5.5	5.3	5.9	7.3	7.9
6.	2.7	3.4	4.3	4.9	4.5	4.9	6.4	6.6	7.2	7.5
7.	3.5	3.2	4.4	5.0	4.5	4.5	6.0	6.3	6.8	7.3
8.	3.4	4.0	4.4	5.0	4.8	5.3	6.4	6.9	6.7	7.4
9.	3.3	4.0	3.0	3.9	5.0	5.6	6.4	6.9	6.3	7.0
10.	3.1	3.4	3.0	4.0	5.4	5.5	5.9	6.3	5.9	6.5
11.	3.1	3.3	3.6	3.5	5.1	5.6	5.9	6.4	7.3	7.7
12.	3.2	4.0	3.9	3.6	5.4	5.9	6.4	7.0	7.1	7.3
13.	2.7	3.2	3.6	4.0	5.1	6.0	6.0	6.6	7.5	7.6
14.	2.7	3.2	4.0	4.5	4.8	5.3	6.3	6.3	7.4	7.5
15.	2.6	3.6	3.5	3.5	4.7	5.0	6.2	6.8	7.0	7.8
TOTAL	45.50	52.50	59.30	65.70	75.00	81.70	90.40	97.80	104.80	111.30
Means	3.03	3.5	3.9	4.4	5.0	5.4	6.0	6.5	6.9	7.4

Means for all grades: Pretest 5.0 Posttest 5.5

(Guide for Computing Quartile Points)

Taking the range 4.9 and dividing it by 15 gives an interval size of .32, rounding this gives .3 as the interval size. It is customary to start the interval at a value which is a multiple of the size of that interval. The frequency distribution for the pretest scores is shown below.

Work Table for Frequency Distribution of Pretest Reading Scores of Title I Group.

Interval	Tally	Frequency (f)	Cumulative (f)
7.5 - 7.7	/	1	75
7.2 - 7.4	𝍸	5	74
6.9 - 7.1	𝍸	5	69
6.6 - 6.8	//	2	64
6.3 - 6.5	𝍸 ///	8	62
6.0 - 6.2	///	3	54
5.7 - 5.9	///	3	51
5.4 - 5.6	𝍸	5	48
5.1 - 5.3	////	4	43
4.8 - 5.0	𝍸 /	6	39
4.5 - 4.7	𝍸 /	6	33
4.2 - 4.4	///	3	27
3.9 - 4.1	////	4	24
3.6 - 3.8	//	2	20
3.3 - 3.5	𝍸	5	18
3.0 - 3.2	𝍸 //	7	13
2.7 - 2.9	////	4	6
2.4 - 2.6	//	2	2
	Total	75	

Computation of First and Third Quartile Points for Pretest Reading Scores.

$$\text{Quartile One } (Q_1) = L + \left(\frac{\frac{N}{4} - f_c}{f_w} \right) h$$

Where

L = lower limit of the interval containing Q_1.

f_c = cumulative frequency below the interval containing Q_1.

f_w = frequency within the interval containing Q_1.

N = total number of scores.

h = score interval.

Therefore, for the example

$$Q_1 = 3.6 + \left(\frac{\frac{75}{4} - 18}{20} \right) \times .3$$

$$= 3.6 + \frac{18.75 - 18}{20} \times .3$$

$$= 3.6112$$

$$= 3.6$$

The same formula may be applied to find Q_3 providing that the fraction $\frac{N}{4}$ is changed to read $\frac{3N}{4}$ and the entries for L, f_c, and f_w, are changed accordingly.

$$Q_3 = 6.3 + \left(\frac{\frac{3 \times 75}{4} - 54}{62} \right) \times .3$$

$$= 6.3 + \frac{56.25 - 54}{62} \times .3$$

$$= 6.3108$$

$$= 6.3$$

The same procedures were followed in constructing the frequency distribution for the posttest scores as was used with the pretest scores. These computations are shown below.

Work Table for Frequency Distribution of Posttest Reading Scores of Title I Group.

Interval	Tally	Frequency (f)	Cumulative (f)
7.8 - 8.0	///	3	75
7.5 - 7.7	𝍸	5	72
7.2 - 7.4	////	4	67
6.9 - 7.1	𝍸 //	7	63
6.6 - 6.8	///	3	56
6.3 - 6.5	𝍸	5	53
6.0 - 6.2	////	4	48
5.7 - 5.9	///	3	44
5.4 - 5.6	𝍸	5	41
5.1 - 5.3	///	3	36
4.8 - 5.0	𝍸 ///	8	33
4.5 - 4.7	///	3	25
4.2 - 4.4	/	1	22
3.9 - 4.1	𝍸 //	7	21
3.6 - 3.8	//	2	14
3.3 - 3.5	𝍸 ///	8	12
3.0 - 3.2	///	3	4
2.7 - 2.9	/	1	1
	Total	75	

Computation of First and Third Quartile Points for Posttest Reading Scores.

The same formula and procedures were used for computing the first and third quartile points for the posttest scores as was used for the pretest scores.

$$Q_1 = 3.9 + \left(\frac{\frac{75}{4} - 14}{21}\right) \times .3$$

$$= 3.9 + \frac{18.75 - 14}{21} \times .3$$

$$= 3.967$$

$$= 4.0$$

$$Q_3 = 6.9 + \left(\frac{\frac{3 \times 75}{4} - 56}{63}\right) \times .3$$

$$= 6.9 + \frac{56.25 - 56}{63} \times .3$$

$$= 6.9011$$

$$= 6.9$$

A summary of these results may be seen on page 8 of this guide.

A P P E N D I X L

List of 10% sample.

LIST OF PROJECTS THAT GO TO USOÉ

ADAIR	Kirksville #36
ADAIR	Novinger R-1
ATCHISON	Rock Port R-11
BARRY	Purdy R-11
BARRY	Southwest R-V
BARTON	Liberal R-II
BENTON	Warsaw R-IX
BOONE	Centralia R-VI
BOONE	Harrisburg R-VIII
BOONE	Two-Mile Prairie #42
BUTLER	Broseley R-II
BUTLER	Poplar Bluff R-I
CALDWELL	Cowgill R-VI
CAPE GIRARDEAU	Cape Girardeau
CAPE GIRARDEAU	Delta R-V
CAPE GIRARDEAU	Jackson R-II
CARROLL	Carrollton R-VII
CARTER	East Carter R-II
CASS	Pleasant Hill R-III
CLAY	Smithville R-II
COLE	Jefferson City
COLE	Russellville R-I
COOPER	Pilot Grove C-4
COOPER	Prairie Home R-V
CRAWFORD	Steelville R-III
DADE	Greenfield R-IV
DENT	Oak Hill R-I

DOUGLAS	Skyline R-II
DUNKLIN	Campbell R-II
DUNKLIN	Cardwell
DUNKLIN	Holcomb R-III
DUNKLIN	Rives C-2
DUNKLIN	Senath C-8
FRANKLIN	St. Clair R-XIII
GASCONADE	Gasconade R-I
GREENE	Fair Grove R-X
GRUNDY	Trenton R-IX
HENRY	Clinton
HENRY	Windsor R-I
HICKORY	Wheatland R-II
HICKORY	Weaubleau R-III
HOWARD	Glasgow R-II
HOWELL	Mountain View R-III
HOWELL	Peace Valley C-2
JACKSON	Grain Valley R-V
JACKSON	Kansas City
JASPER	Carterville C-91
JASPER	Sarcoxie R-II
JASPER	Webb City
LACLEDE	Lebanon
LAFAYETTE	Lexington R-V
LAWRENCE	Aurora R-VIII
LAWRENCE	Mount Vernon R-V
LINCOLN	Elsberry
LINN	Meadville R-IV
LINN	Marceline R-V

LIVINGSTON	Chillicothe
MCDONALD	Anderson R-I
MILLER	Eldon R-I
MILLER	St. Elizabeth R-IV
MISSISSIPPI	Charleston R-I
MONITEAU	California R-I
MONROE	Madison C-3
NEW MADRID	Gideon #37
NEW MADRID	Parma R-III
NEW MADRID	Lilbourn R-IV
NEW MADRID	Portageville R-I
NEWTON	Granby R-III
NEWTON	Seneca R-VI
NODAWAY	Maryville R-II
NODAWAY	West Nodaway R-I
OREGON	Alton R-IV
OREGON	Couch R-I
OREGON	Oregon-Howell R-III
OREGON	Thayer
OZARK	Dora R-III
PEMISCOT	Caruthersville #18
PEMISCOT	Hayti R-II
PEMISCOT	South Pemiscot R-V
PIKE	Louisiana R-II
POLK	Fair Play R-II
RAY	Special School of Richmond
RANDOLPH	Moberly
REYNOLDS	Centerville R-1

RIPLEY	Doniphan R-I
RIPLEY	Naylor R-II
RIPLEY	Ripley R-III and IV (coop)
ST. CHARLES	Weldon Springs R-III
ST. CLAIR	Collins C-3
ST. CLAIR	Lowry City C-4
ST. CLAIR	Osceola
ST. CLAIR	Roscoe C-1
ST. LOUIS	Berkeley
ST. LOUIS	Kirkwood
ST. LOUIS	Ritenour
SALINE	Marshall
SCHUYLER	Schuyler R-I
SCOTT	Chaffee R-II
SCOTT	Sikeston R-VI
SCOTT	Scott County R-I
SHANNON	Winona R-III
SHANNON	Birch Tree R-II
STODDARD	Advance R-IV
STONE	Crane R-III
SULLIVAN	Green City R-I
SULLIVAN	Newton-Harris R-III
TANEY	Taney Co. Elementary School
WASHINGTON	Potosi R-III
WORTH	Sheridan R-II
ST. LOUIS CITY	St. Louis City
ST. LOUIS	School for the Blind

A P P E N D I X M

Evaluation forms, Title I, PL 89-10 (Missouri)

LOCAL EDUCATIONAL AGENCY ANNUAL EVALUATION REPORT
Part I
Evaluation of Total Title I Program

Elementary and Secondary Education Act of 1965

Title I

Public Law 89-10

TO BE COMPLETED BY STATE EDUCATIONAL AGENCY

STATE CODE	COUNTY CODE	LEA CODE	CENSUS BUREAU CLASSIFICATION
35			

TO BE COMPLETED BY LOCAL EDUCATIONAL AGENCY

LOCAL EDUCATIONAL AGENCY PROJECT(S)			
STATE PROJECT NUMBER	LEA PROJECT NUMBER	FISCAL YEAR	AMOUNT APPROVED (Including Amendments)
	1	1966	
	2	1966	
	3	1966	
	4	1966	
	5	1966	
	6	1966	
	7	1966	
	8	1966	
	9	1966	
	10	1966	
TOTALS			

LEGAL NAME OF LOCAL EDUCATIONAL AGENCY	AUTHORIZED REPRESENTATIVE FOR LEA NAME AND TITLE (Type or Print)	
CITY OR TOWN COUNTY	MAILING ADDRESS (Street and City)	
CONGRESSIONAL DISTRICT NO.	TELEPHONE (Area Code and Local No.)	
STATE, ZIP CODE	SIGNATURE	DATE

Part One: Evaluation of Total Title I Program

1. Indicate the (unduplicated) number of public school children involved in all Title I projects.

☐

2. Indicate the (unduplicated) number of private school children involved in all Title I projects.

☐

3. Did your district use approved Title I funds in conjunction with an approved Title II, or Title III project? Example: The Title I project supplied a librarian and equipment; and Title II supplied the books and materials.

YES ☐ NO ☐

4. Is there an approved Community Action Program in your district?

YES ☐ NO ☐

5(a) Describe successes and difficulties encountered in securing Community Action Agency cooperation. Use additional pages if necessary.

5(b) Describe any cooperation on Title I projects between your district and the Community Action Agency. Use additional pages if necessary.

6. Indicate the method(s) used by your district for establishing project areas:

- ☐ Census information
- ☐ AFDC payments
- ☐ Health statistics
- ☐ Guidance records
- ☐ School surveys
- ☐ Housing statistics
- ☐ Other welfare data (specify) _____

Part One: Evaluation of Total Title I Program

7. Indicate the principal problems encountered in the operation of projects:

- ☐ Lack of personnel
- ☐ Lack of space in which to conduct project
- ☐ Lack of attendance by students
- ☐ Lack of cooperation of parents
- ☐ Other (specify) _____

8. Indicate the methods used by your district to develop or increase staff for Title I program:

- ☐ In-service training
- ☐ Utilized present personnel in hours other than regular working hours
- ☐ Summer school training arrangements
- ☐ Recruited from local population
- ☐ Recruited from outside of district
- ☐ Other (specify) _____

9(a) Did your district receive technical or professional assistance, other than that provided by employees of local school district, in any of the following phases of your Title I program;

- ☐ planning
- ☐ operation
- ☐ evaluation

Part One: Evaluation of Total Title I Program

9(b) Indicate the source of such technical or professional assistance:

- ☐ State Department of Education personnel
- ☐ other governmental agencies
- ☐ college or university personnel
- ☐ individuals from private enterprise (dentist, doctor, psychologist, etc.)
- ☐ commercial companies (include this category only if services extended beyond supplies, materials, and equipment

10. Indicate, for the total Title I program, the amount of funds used for salaries for new personnel (this includes regular staff working in summer projects).

11. Indicate, for the total Title I program, the amount of funds used for salaries for regular staff working additional hours during the regular school year.

12. Indicate, for the total Title I program, the amount of funds used or obligated to purchase, rent, or lease supplies and equipment.

13. Indicate, for the total Title I program, the amount of funds used or obligated for remodeling.

14. Indicate, for the total Title I program, the amount of funds used or obligated for construction.

TABLE 1. WORKSHEET FOR DETERMINING DROPOUT RATE

COUNTY CODE _____

NAME OF LEA _____

LEA CODE _____

Month	Membership at Beginning of Month	Transfers		Graduates	Deaths	Dropouts	Membership at End of Month
		IN	OUT				
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
JANUARY							
FEBRUARY							
MARCH							
APRIL							
MAY							
JUNE							1/
TOTALS				3/		2/	

CALCULATIONS: Arithmetic Accountability

End of Year Membership 1/ _____

Number of Dropouts 2/ _____

Number of Graduates 3/ _____

(If not in Item 1)

TOTAL ACCOUNTABILITY _____

Annual Dropout Rate = Number of Dropouts / Total Accountability

= _____ %

TABLE 2. DROPOUT RATES (HOLDING POWER) FOR TITLE I PROJECT SCHOOLS COMPARED TO NON-TITLE I SCHOOLS IN THE DISTRICT

NAME OF LEA _____ COUNTY CODE _____

LEA CODE _____

	If Possible 1963 - 1964			If Possible 1964 - 1965			If Possible 1965 - 1966			1966 - 1967			1967 - 1968		
Grade	Title I Sch.	Non Title I Sch.	All Sch.	Title I Sch.	Non Title I Sch.	All Sch.	Title I Sch.	Non Title I Sch.	All Sch.	Title I Sch.	Non Title I Sch.	All Sch.	Title I Sch.	Non Title I Sch.	All Sch.
12															
11															
10															
9															
8															
7															
No. of Schools															
Total No. of Students															
No. of Dropouts															

See instructions for Dropout Formula and Definitions.

TABLE 3. AVERAGE DAILY ATTENDANCE AND AVERAGE DAILY MEMBERSHIP RATES FOR TITLE I PROJECT SCHOOLS COMPARED TO NON-TITLE I SCHOOLS

NAME OF LEA _____

COUNTY CODE _____

LEA CODE _____

	If Possible 1963 - 1964				If Possible 1964 - 1965				1965 - 1966				1966 - 1967			
	Title I Schools		Non-Title I Schools		Title I Schools		Non-Title I Schools		Title I Schools		Non-Title I Schools		Title I Schools		Non-Title I Schools	
Grade	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM	ADA	ADM
12th Grade																
11th Grade																
10th Grade																
9th Grade																
8th Grade																
7th Grade																
6th Grade																
5th Grade																
4th Grade																
3rd Grade																
2nd Grade																
1st Grade																

See instructions for definitions of "Average Daily Attendance" and "Average Daily Membership."

A Title I school is defined as any school in which a Title I project was conducted.

PERCENTAGE OF STUDENTS IN TITLE I PROJECT HIGH SCHOOLS CONTINUING EDUCATION* BEYOND HIGH SCHOOL COMPARED TO NON TITLE I HIGH SCHOOLS

COUNTY CODE _____

TABLE 4.

LEA CODE _____

NAME OF LEA _____

	If Possible 1963 - 1964		If Possible 1964 - 1965		If Possible 1965 - 1966		1966 - 1967	
	Title I Schools	Non-Title I Schools	Title I Schools	Non-Title I Schools	Title I Schools	Non-Tilte I Schools	Title I Schools	Non-Title I Schools
TOTAL NUMBER OF GRADUATES								
MEAN SIZE OF GRADUATING CLASS								
NUMBER OF SCHOOLS HAVING 0 - 10% CONTINUING GRADS.								
11 - 20%								
21 - 30%								
31 - 40%								
41 - 50%								
51 - 60%								
61 - 99%								
NUMBER OF SCHOOLS								

* A student is considered to continue his education if he enters one of the following, on either a full or part-time basis: Post-Graduate High School Course, Junior College, College or University, a Vocational or Technical Institute, or a Nursing School.

A Title I school is defined as any school in which a Title I project was conducted.

PERSONNEL INVOLVED IN TITLE I PROGRAM

TABLE 5.

COUNTY CODE _____

NAME OF LEA _____

LEA CODE _____

		NUMBER OF NEW PERSONNEL EMPLOYED FOR TITLE I PROGRAM*		NUMBER OF PRESENT PERSONNEL WORKING ADDITIONAL HOURS
	ACTIVITY ASSIGNMENT	MORE THAN HALF-TIME	HALF-TIME OR LESS	
1	2	3	4	5
1	TEACHER - PRE-SCHOOL			
2	TEACHER - KINDERGARTEN			
3	TEACHER - REMEDIAL READING AND LANGUAGE DEVELOPMENT			
4	TEACHER - SPEECH CORRECTIONIST			
5	TEACHER - EMOTIONALLY DISTURBED			
6	TEACHER - PHYSICALLY HANDICAPPED			
7	TEACHER - MENTALLY RETARDED			
8	TEACHER - SOCIALLY MALADJUSTED			
9	OTHER TEACHING ASSIGNMENTS NOT SPECIFIED ABOVE			
10	(SUM OF ITEMS 1 - 9) SUBTOTAL:			
11	TEACHER AIDE ASSIGNMENT			
12	LIBRARIAN ASSIGNMENT			
13	SUPERVISION ASSIGNMENT			
14	ADMINISTRATION ASSIGNMENT			
15	COUNSELING ASSIGNMENT			
16	PSYCHOLOGIST ASSIGNMENT			
17	TESTING ASSIGNMENT			
18	SOCIAL WORK ASSIGNMENT			
19	ATTENDANCE ASSIGNMENT			
20	NURSES ASSIGNMENT			
21	PHYSICIAN ASSIGNMENT			
22	DENTIST ASSIGNMENT			
23	DENTAL HYGIENIST ASSIGNMENT			
24	OTHER PROFESSIONAL AND TECHNICAL ASSIGNMENTS (NOT SPECIFIED ABOVE)			
25	(SUM OF ITEMS 11 THROUGH 24) SUBTOTAL:			
26	(SUM OF ITEMS 10 AND 25) GRAND TOTAL:			

* Includes members of regular staff working in summer projects.

LOCAL EDUCATIONAL AGENCY ANNUAL EVALUATION REPORT

PART II

Evaluation of Title I Projects

(To be completed for each project)

State Project No. _____ Name of LEA _____

LEA Project No. _____ of _____ Projects County Code _____

LEA Code _____

Title of Project: _____

Short Answer Section

Instructions: Answer each of the following questions. Do not leave blanks, if a question does not apply insert N/A (not applicable).

Project Description

1. Indicate, in the number of weeks, the length of this project.

2. Indicate the number of public school children involved in this project.

3. Indicate the number of children, involved in this project, who were not enrolled in any public or private school previous to participating in this project.

4. Indicate the number of private school children that participated in this project.

5(a) Indicate the number of private school children that participated in the services or activities of this project on public school grounds only.

Before school

After school

Weekends

Summer

TOTAL (This figure is not expected to be an unduplicated count).

Part Two: Evaluation of Title I Projects

Title of Project: _____

5(b) Indicate the number of private school children that participated in the services or activities of this project on private school grounds only.

☐ During the regular school day

☐ Before school

☐ After school

☐ Weekends

☐ Summer

☐ TOTAL (This figure is not expected to be an unduplicated count).

5(c) Indicate the number of private school children that participated in the services or activities of this project on both public and private school grounds.

☐ During the regular school day

☐ Before school

☐ After school

☐ Weekends

☐ Summer

☐ TOTAL (This figure is not expected to be an unduplicated count)

5(d) Indicate the number of private school children that participated in the services or activities of this project on premises other than public or private school grounds.

☐ During the regular school day

☐ Before school

Part Two: Evaluation of Title I Projects

Title of Project: _____

(5(d) Cont.)

☐ After school

☐ Weekends

☐ Summer

☐ TOTAL (This figure is not expected to be an unduplicated count)

6. Indicate the type of evaluation design utilized in this project:

☐ A. Two group experimental design using the project group and a conveniently available non-project group as the control.

☐ B. One group design using a pre-test and posttest on the project group to compare observed gains or losses with expected gains.

☐ C. One group design using pre-test and/or posttest scores on the project group to compare observed performance with local, state, or national norms.

☐ D. One group design using test data on the project group to compare observed performance with expected performance based upon data for past years in the project school.

☐ E. One group design using test data on the project group, but no comparison data.

☐ F. Others or Combinations (specify). _____

_____

Table 6. Use of Standardized Tests and Other Measures

Directions: Check, according to appropriate grade level(s), the specified types of standardized tests and other measures used in this project. See instructions for an illustration of how to complete this table.

MEASURES	SKILL DEVELOPMENT ACTIVITIES					ATTITUDINAL AND BEHAVIORAL DEVELOPMENT ACTIVITIES				
1. Standardized Tests & Inventories	GRADES Pre-Kg. Kg.	1-3	4-6	7-9	10-12	Pre-Kg. Kg.	1-3	4-6	7-9	10-12
a. Achievement										
b. Intelligence										
c. Aptitude										
d. Interest										
e. Attitude										
f. Others (Specify)										
2. Other Tests										
a. Locally Devised Tests										
b. Teacher Made Tests										
c. Others (Specify)										
3. Other Measures										
a. Teacher Ratings										
b. Anecdotal Records										
c. Observer Reports										
d. Others (Specify)										

Table 7. Summary of Project Effectiveness

For the 1st and 2nd objectives stated for the activities of this project, indicate the number of children falling in each category of the table below:

Type of Activity: _____

1st Objective: _____

2nd Objective: _____

	1st Objective			2nd Objective		
School Level	Substantial Progress	Some Progress	Little or no Progress*	Substantial Progress	Some Progress	Little or no Progress*
Pre-school						
Grades 1-3						
Grades 4-6						
Grades 7-9						
Grades 10-12						
Totals						

*Little or no progress above that normally expected for this group.

Professional judgment as well as objective measures should be used where appropriate.

Use this type of summary for activities falling in areas beyond the basic academic skills. These include:

The affective domain: attitudes, motivation, interests, adjustments, anxieties, etc.

Social development: acceptance, recognition, belonging, leadership, interaction, etc.

Physical development: general health and ability, speech, motor skills, dexterity, etc.

Basis for judgment of project activity effectiveness:

- ☐ Standardized test scores
- ☐ Teacher made tests
- ☐ Rating scales, questionnaires, etc.
- ☐ Observations by professional staff
- ☐ Other: Specify _____

Progress Report of Title I Children

Indicate Evaluation Design Used _____
(See the instructions for types of information to be reported concerning the progress of children involved in Title I project activities).

Describe the progress of the children involved in a Title I activity in accordance with the evaluation design selected. Use additional pages if necessary.

Summary of Non-Test Data

Include in this section the following types of information (use additional pages if necessary):

1. Results of informal questionnaires completed by parents and pupils (attach one copy of form used).

2. Narrative accounts of incidents and/or situations involving groups or individual participants in the project which may have human interest value.

TABLE 8. FREQUENCY DISTRIBUTION OF STANDARDIZED TEST SCORES

The following frequency table should be constructed for the subtest of each area and grade level for which pre- and posttest scores were obtained from standardized tests. In addition to constructing a table for each subtest, also construct one for all subtests in one basic skills area. For example; frequency tables constructed for Reading would include one for Vocabulary, one for Comprehension, and one for Total Reading (usually a combination of Vocabulary and Comprehension). See instructions for an illustration of how to complete the table.

Name of Test _____ Form _____

Name of Subtest _____ Grade _____

Number of Children _____ Date of Pretest _____

Length of project _____ (in weeks) Date of Posttest _____

Directions: Indicate the number of scores falling in each category (A-D) on pre- and posttests.

CATEGORIES	A	B	C	D
PERCENTILES	1st - 15th	16th - 50th	51st - 84th	85th - 99th
POSTTEST				
PRETEST				

A P P E N D I X N

Small school exemplary program (Dexter, Missouri)

Cultural Enrichment Project
Title I Elementary and Secondary Education Act 1965

Reorganized School District R-XI

Dexter, Missouri

INTRODUCTION

The Dexter Public Schools are involved in a unique program, operated through Title I of the Elementary and Secondary Education Act of 1965, which is designed to provide our students with desirable cultural experiences.

This booklet has been prepared to provide a summary of activities in which students participated during the first phase of the project from February through August, 1966.

John DeArman, Principal

Junior High School

Dexter, Missouri

November 3, 1966

CULTURAL ENRICHMENT PROJECT TITLE E.S.E.A.

The number of students in many schools who have visited an art museum, attended an opera, toured their state capitol, or witnessed a major live theatre performance is disappointingly small. However, most would agree that direct experience with these and similar events is very desirable.

With this idea in mind, the Dexter Public Schools have initiated a unique program of cultural enrichment under Title I of the Elementary and Secondary Education Act of 1965. Under the provisions of the program, the educationally and culturally deprived are provided with the following experiences:

I. Musical and dramatic activities including opera, symphony concerts, vocal concerts, ice shows, and live theatre performances ranging from the works of Shakespeare to musical comedy.

II. Tours of metropolitan department stores, assembly plants, airports, and other transportation terminals. (Such activities help to acquaint our rural children with aspects of urban life unfamiliar to them.)

III. Sports events including professional baseball and football, a rodeo, and a nationally known circus.

IV. Tours of the State Capitol building, Governor's Mansion, State Supreme Court, important monuments and shrines. (These activities are designed to develop an appreciation for our state government and for important events in the past.)

V. Visits to zoos, botanical gardens, museums of natural history, art museums, planetariums, and national parks complete the program of activities.

The extent of cultural deprivation of our students became apparent after observing the results of a survey made in December, 1965. We found that our students, living in a rural area which offers few cultural advantages, were severely lacking in the experiences necessary for successful competition with their more fortunate counterparts in other areas of the country. The results of the survey are illustrated as follows.

Experience Inventory

		Number & percent of students who have never participated in or observed these activities	
		Number	Percent
1.	Have you ever attended an opera?	605	92
2.	Have you ever seen a stage play?	566	88
3.	Have you ever attended an instrumental concert?	521	81
4.	Have you ever attended a vocal concert?	553	86
5.	Have you ever been in a large department store?	184	28
6.	Have you ever seen an ice show?	546	83
7.	Have you ever visited a large factory?	309	46
8.	Have you ever stayed in a hotel or large motel?	365	56
9.	Have you ever ridden an escalator?	218	33
10.	Have you ever visited a metropolitan airport?	316	46
11.	Have you ever been in a large city train terminal?	395	60
12.	Have you ever ridden in a taxi?	247	37
13.	Have you ever ridden a city bus?	322	46
14.	Have you ever visited an art museum?	470	72
15.	Have you ever visited a planetarium?	520	79
16.	Have you ever been to a zoo?	106	16
17.	Have you ever visited a museum of natural history?	465	70
18.	Have you ever visited a botanical garden?	467	71

Experience Inventory (cont.)

		Number	Percent
19.	Have you ever vacationed in a state park?	116	18
20.	Have you ever attended a summer day camp?	357	54
21.	Have you ever visited a national park?	480	73
22.	Have you ever seen a large dam?	188	28
23.	Have you ever been to the State Capitol?	380	56
24.	Have you ever observed a court session?	462	70
25.	Have you ever visited the National Capitol?	488	74
26.	Have you ever attended a rodeo?	604	90
27.	Have you ever seen a large circus?	333	51
28.	Have you ever attended a horse race?	396	60
29.	Have you ever been to a major league ball game?	558	84
30.	Have you ever ridden on a train?	383	58
31.	Have you ever taken a trip by airplane?	400	61
32.	Have you ever taken a river cruise?	432	65
33.	Have you ever eaten in a large restaurant?	379	57

This survey was administered to a random sampling of 657 students of the total school population of 1975 students.

To help meet the needs represented in the survey, the following program was adopted:

I. Personal Improvement:

Children who, because of economic conditions are not able to dress as well and look as well as their peers will naturally have some feelings of inferiority. Those who come from homes where there is little regard for social graces are hesitant about attending parties, meetings, etc. with those whose families place a premium on these matters. Consequently, children underprivileged in these areas often are not accepted well by other children. This rejection is felt very keenly, but few seem able to do much themselves to correct the situation. Our experience has indicated however, that most young people desire personal improvement and will respond favorably if given guidance.

The first phase of the Cultural Enrichment Project consisted of formal instruction in social graces, grooming, manners and self-confidence. The purpose of such a course was to properly prepare the student for the series of events to follow in phase two of the project. Students who exhibited the greatest need for such help were enrolled in the class which met for four hours each week after the end of the school day. The personnel involved in instruction included two faculty members, local professional people from other fields, and parents who volunteered their time to provide needed services.

Many of the students enrolled in the course were in need of the most basic instruction in ordinary cleanliness. Some came from homes without bath facilities. For these students school showers were made available. In addition kits containing towels, soap, toothbrush, dentifrice, comb, brush, shampoo, and other personal items were given each student. After proper instruction in the use of each item, the kits were taken home.

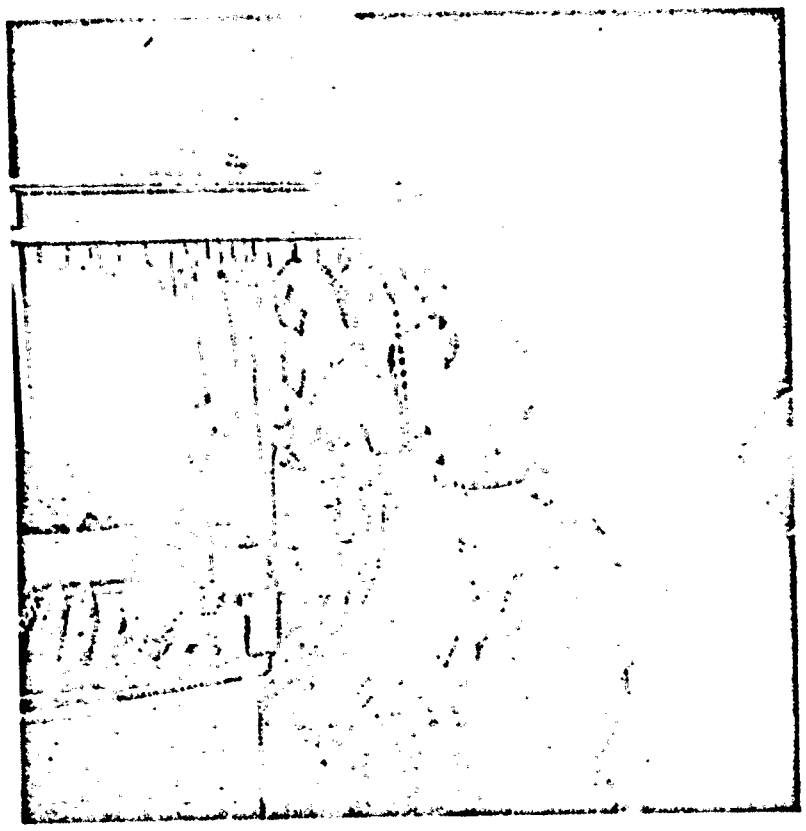
A number of local professional people volunteered their services in instructing the students in a variety of subjects. A doctor and a registered nurse worked with the group on matters of care of general health.

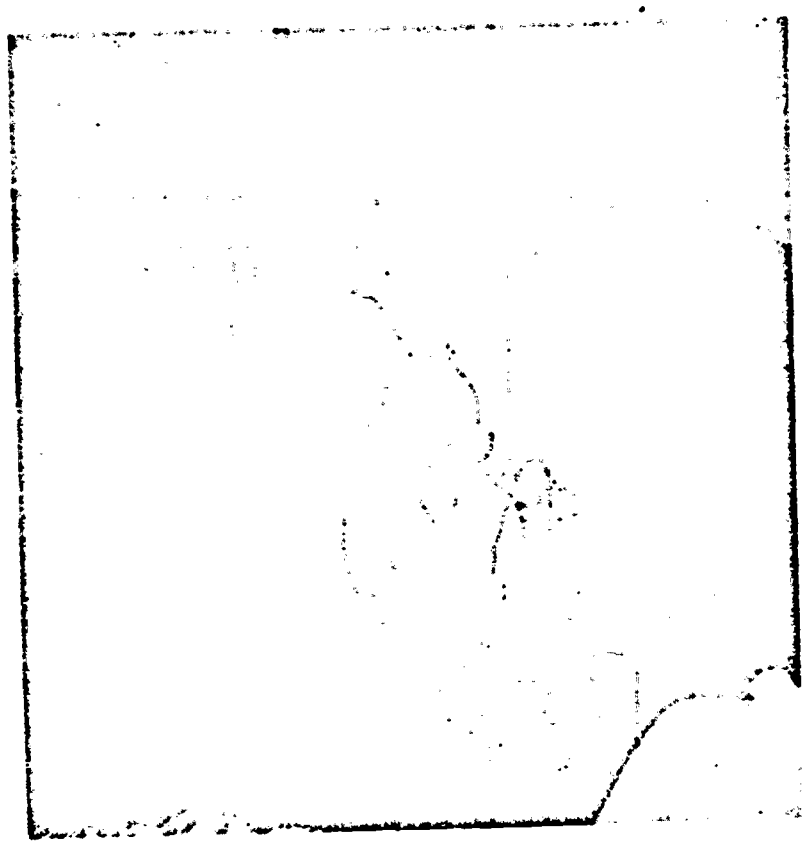
The aid of doctors and nurses was enlisted to provide information to the students concerning matters of general health.

A dental assistant provided instruction in the proper care of the teeth, supplementing her lectures with demonstrations made with the aid of models and visual aids.

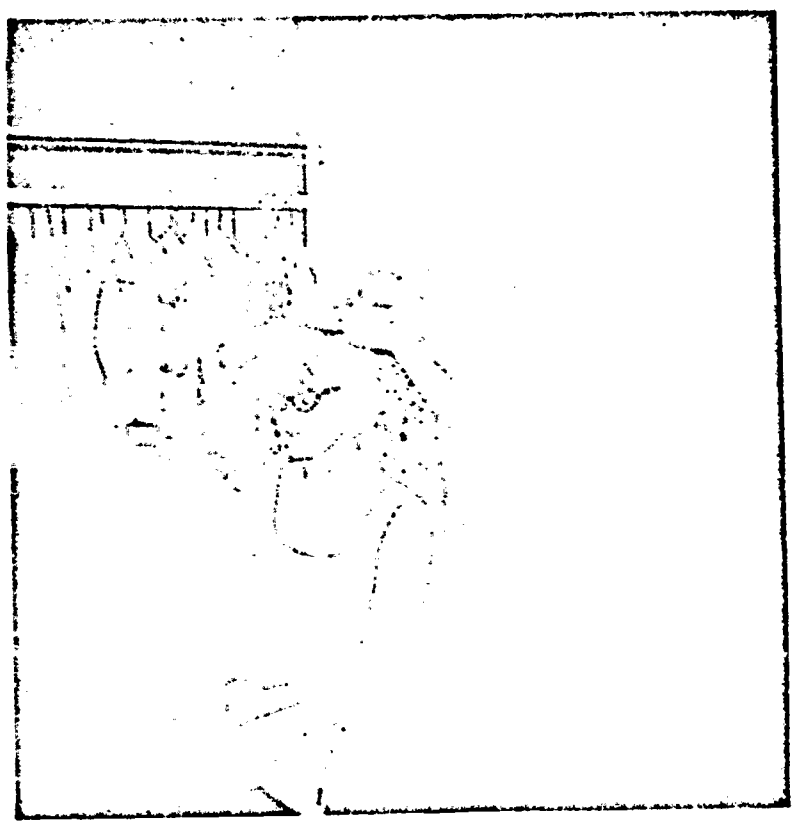
One of the greatest needs of the students was that of clothing acceptable both for school use and for attending the events scheduled for the second phase of the project. To fill this need a number of parents worked collecting and altering suitable garments. With this service provided, our underprivileged students could then dress better. This helped to remove some of their feelings of inadequacy and made them feel more acceptable to their peers (a matter of no small importance to the early adolescent) now that this part of their appearance had been improved. Part of standard class procedure for each student included proper care for their newly acquired clothing.

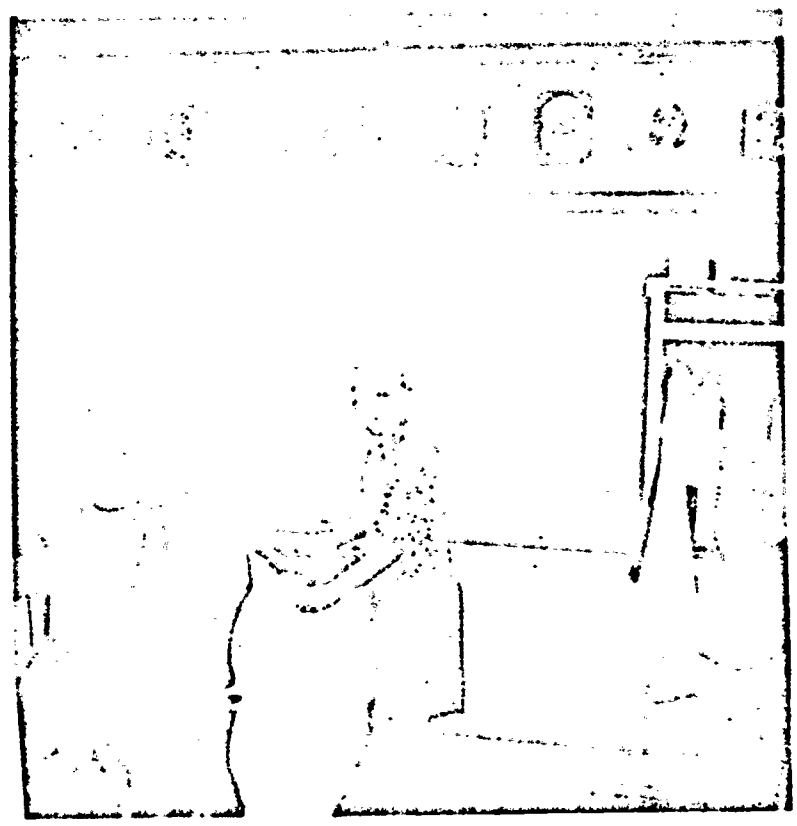
The services of three local beauticians were secured to provide instruction in the care of the hair, nails and complexion. Each of the girls was given a permanent by one of the beauticians. As unlikely as it may seem, none of these students had ever had this experience.





Professional beauticians provided demonstrations in personal grooming.





In succeeding class sessions students practiced concepts in good grooming learned from demonstrations by the beauticians.

II. Cultural Enrichment Experiences

Following the completion of the personal improvement course, a series of trips to different events and places of interest was begun. Preceeding each event, the students were thoroughly briefed on the program they were to attend. Teachers involved their entire classes in activities related to the event to be attended. For example, elementary classes studied the story of "Pinocchio" in advance of our trip to see the stage production. Upon their return those students who attended the play described it to other class members. Prior to seeing the production "Antony and Cleopatra" junior and senior high Language Arts classes studied the play. Thus even those who did not attend the program derived at least indirect benefit from the project.

Since most students' contact with such events is limited to films and television, the value of direct contact with a live performance can hardly be overemphasized.

The following is a resume' of events attended by our students:

A. Musical and Dramatic activities:

The central purpose of this group of activities was to expose the student to good theatre and good music, with which for the most part he had little or no previous contact, and to help him develop his interest in programs of quality and elevate his tastes in entertainment.

1. Ice Shows:

   (A) "Holiday on Ice" - Memphis
   (B) "Ice Capades" - St. Louis

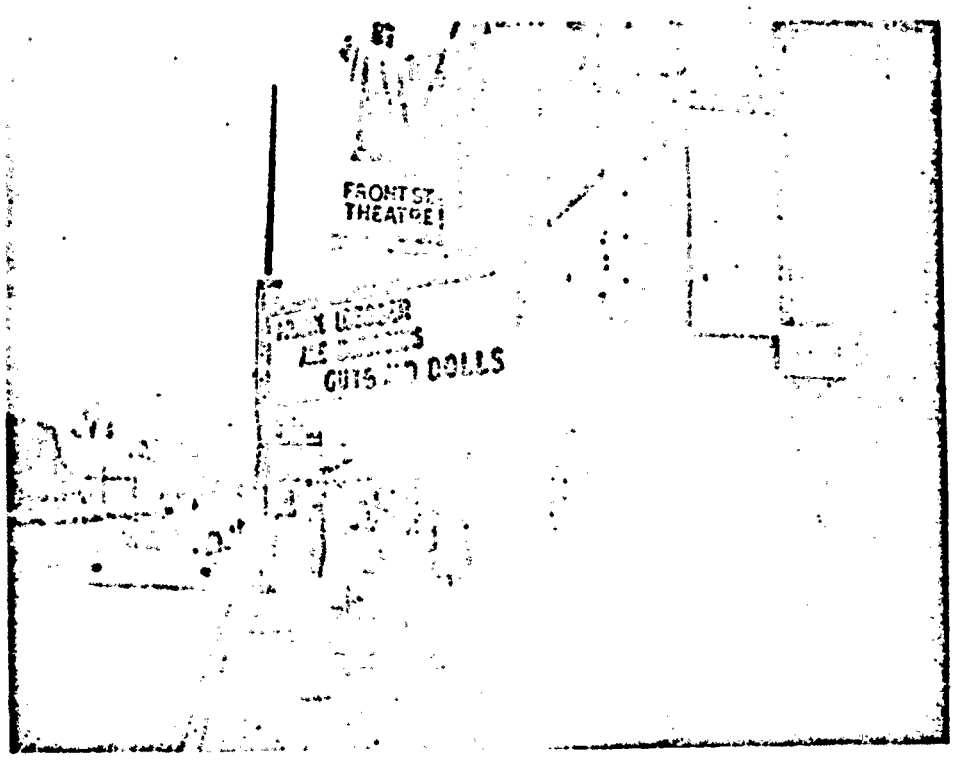
   These shows were chosen because of the high quality of lighting, music, costuming, and coreography which characterizes each of the productions. The production numbers from these shows featured such subjects as "Aladdin and His Wondrous Lamp", "Alice in Wonderland" and excerpts from such Broadway shows as "My Fair Lady", "Hello, Dolly!", and "The Sound of Music."

2. Stage Productions:

   (A) "Pinocchio" - Memphis

   This play, presented primarily for the benefit of elementary students, was a fully-orchestrated production of the classic story. In addition to the play, the students were taken on a tour of Brooks Memorial Art Gallery in Memphis.

Front Street Theatre



(B) "Guys and Dolls" - Memphis

This Frank Loesser musical was presented by Memphis' Front Street Theatre resident acting company. Students attending this performance were limited to junior and senior high school.

(C) "Antony and Cleopatra"

This presentation of Shakespeare's romantic tragedy featured the Front Street Theatre resident company with Rita Gam in the leading role. This was the first actress of star rank seen by the students.

(D) "The Desert Song"

Metropolitan Opera baritone William Walker was featured in this operetta by Sigmund Romberg, Presented at Municipal Opera in St. Louis

William Walker
Metropolitan Opera baritone

Eddie Albert

(E) "The Music Man - St. Louis

This musical by Meredith Willson featured Eddie Albert in the starring role and presented such well-known songs as "Till There Was You" and "Seventy-Six Trombones."

(F) "Can Can" - St. Louis

Recording artist Jane Morgan played in the starring role of this Abe Burrows - Cole Porter musical which featured such songs as "C'Est Magnifique," and "I Love Paris."

(G) "Bye Bye Birdie" - St. Louis

This musical comedy featured actress-dancer Gretchen Wyler.

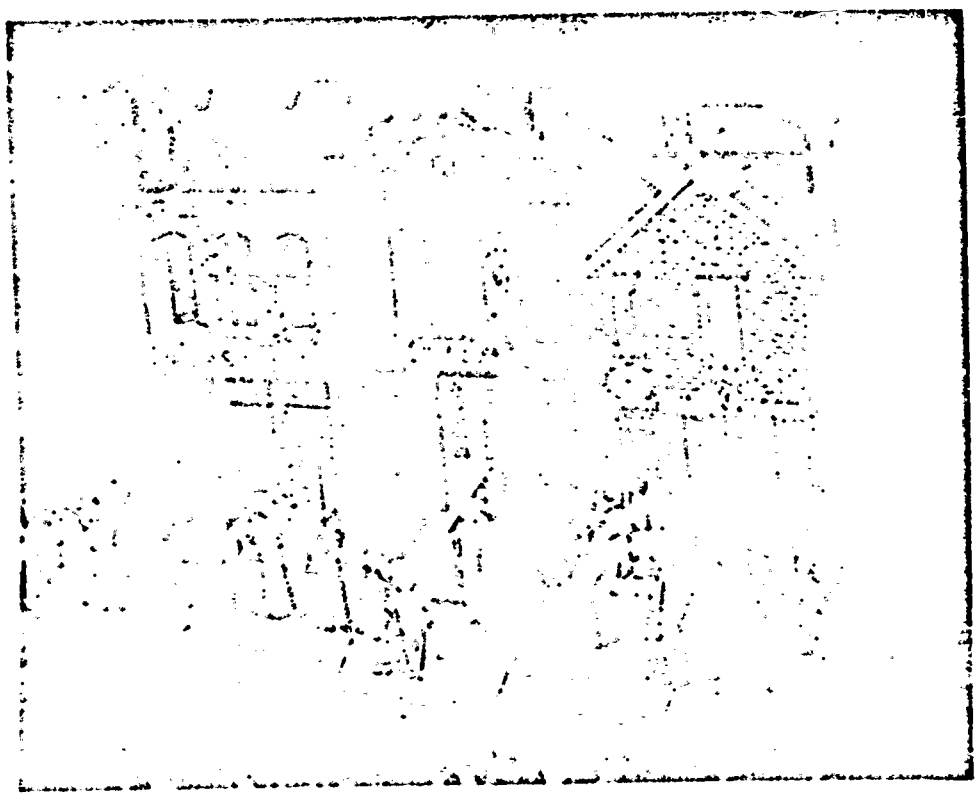
(H) "Oklahoma" - St. Louis

Rogers and Hammerstein's famous musical, the most widely produced in the world, featured television star Robert Horton and presented such songs as "Oh, What a Beautiful Mornin'", "The Surrey With the Fringe on Top", "Kansas City", and the title song "Oklahoma".

Before the performance the students were taken on a backstage tour of the theatre during which, visits were made to the wardrobe shops, rehearsal stage, carpentry shop where the sets are constructed and to the area behind the main stage. This was done to give the students an idea of the mechanics of producing and directing a play, and to allow them to view the theatre as the performers do.

The plays listed above were chosen because they represent theatre from serious dramatic works to musicals to comedies. It was believed by those in charge of the program that very desirable experiences could result from the students exposure to live theatre performed by well-known artists.

Scene from "The Music Man"



3. Concerts

(A) Memphis Symphony - Memphis

This program featured the full Memphis Symphony Orchestra under the direction of Vincent de Frank, the Memphis Civic Ballet and a fifty-one member chorus. This was the students first contact with symphony music and ballet.

(B) Henry Mancini - St. Louis

This program included a concert by Henry Mancini's orchestra featuring many of Mancini's own compositions and a medley of Academy Award-winning songs including "Charade", "Moon River", "Gigi", and "Days of Wine and Roses". The program was concluded by a vocal concert by Andy Williams.

Robert Horton

B. Sports Events

1. Professional Baseball and Football

(A) Students were taken in groups of fifty to see four St. Louis Cardinal baseball games and one group attended exhibition football game between the St. Louis Cardinals and Atlanta Falcons.

2. Circus

(A) A total of 137 students were taken to see performances of the St. Louis Police Circus and the Shrine Circus in St. Louis.

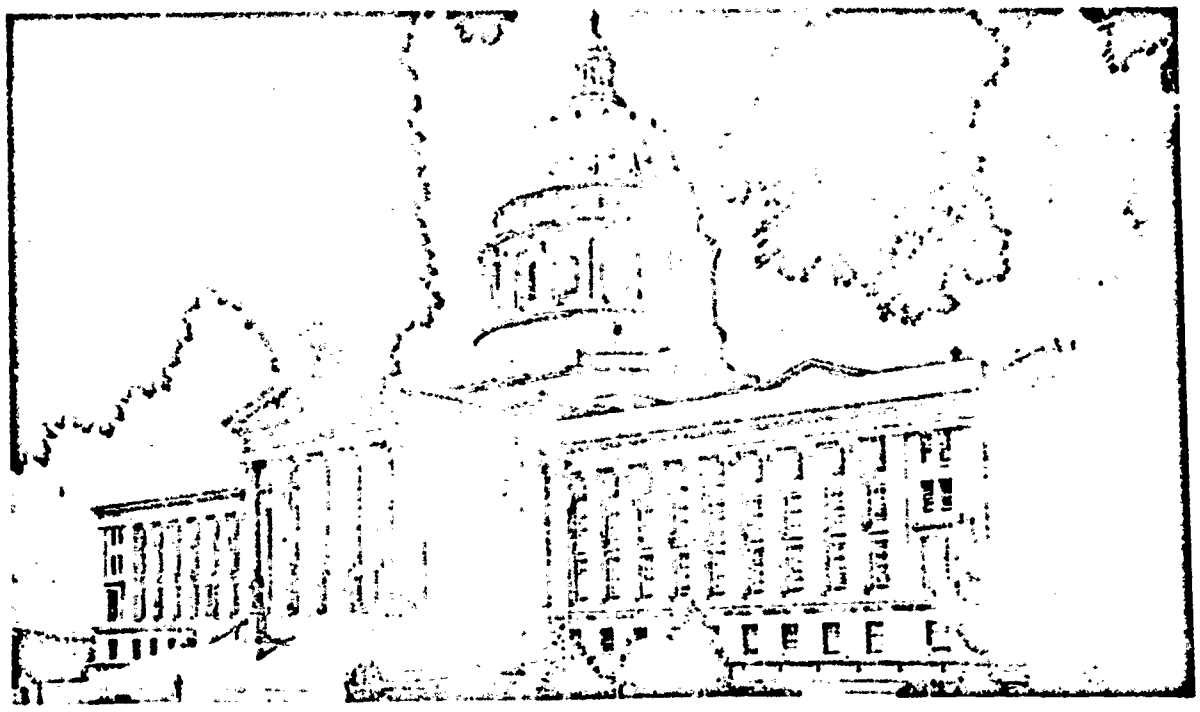
C. Shrines and Governmental Buildings

1. State Capitol Tour

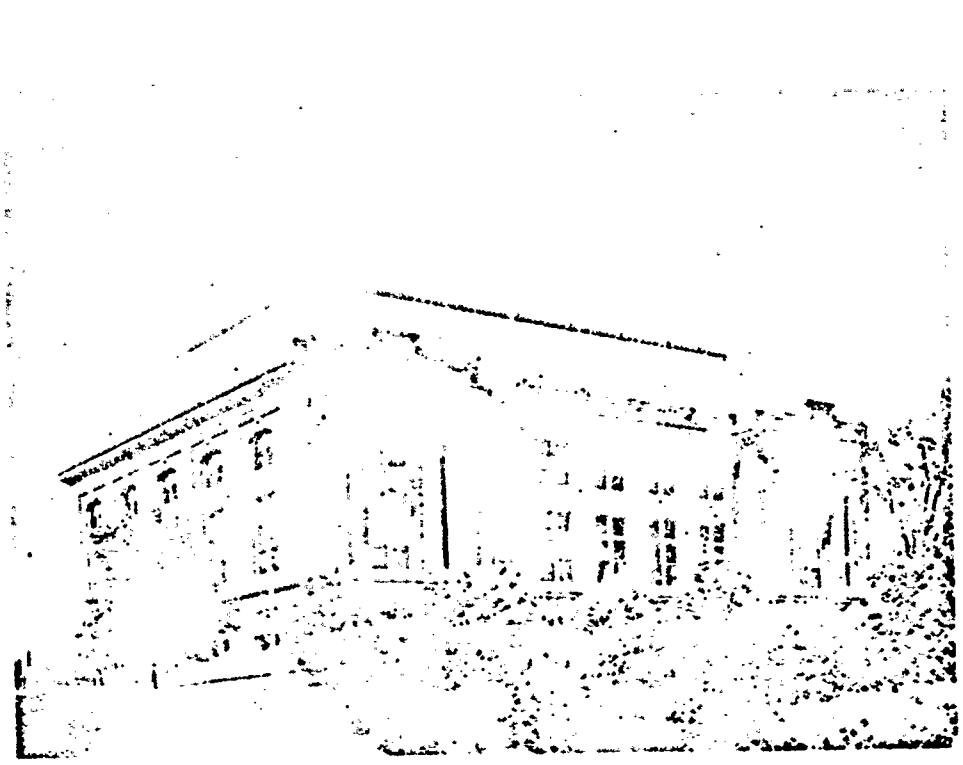
A total of 141 students were taken to Jefferson City where they toured the Governor's Mansion, Cole County Museum, Capitol Museum, State Highway Patrol Headquarters, State Supreme Court and the Capitol Building.

At the Supreme Court Building an Assistant Attorney General discussed the purpose and organization of the Court and took the students on a tour of the building during which he explained the work of the Attorney General and his staff.

Missouri State Capitol Building

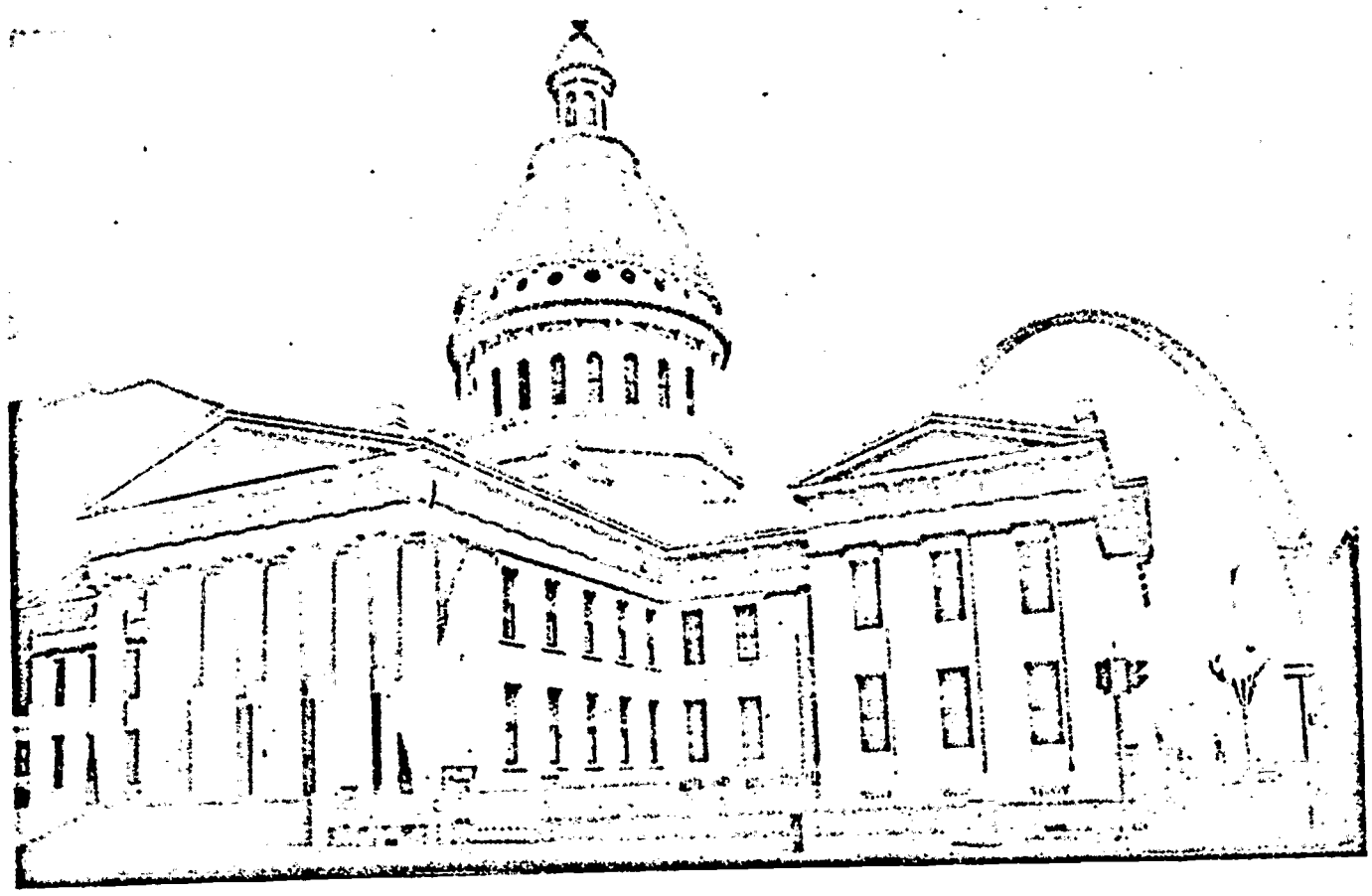


In the Capitol Building, the students visited the Governor's Office and were greeted by his administrative assistant. Later they toured the office of the Lt. Governor, the House Chamber, and Senate Chamber and viewed the Thomas Hart Benton Murals and other objects of art in the Capitol. The visit ended with a general tour of the Capitol and grounds.



Missouri State Supreme Court Building

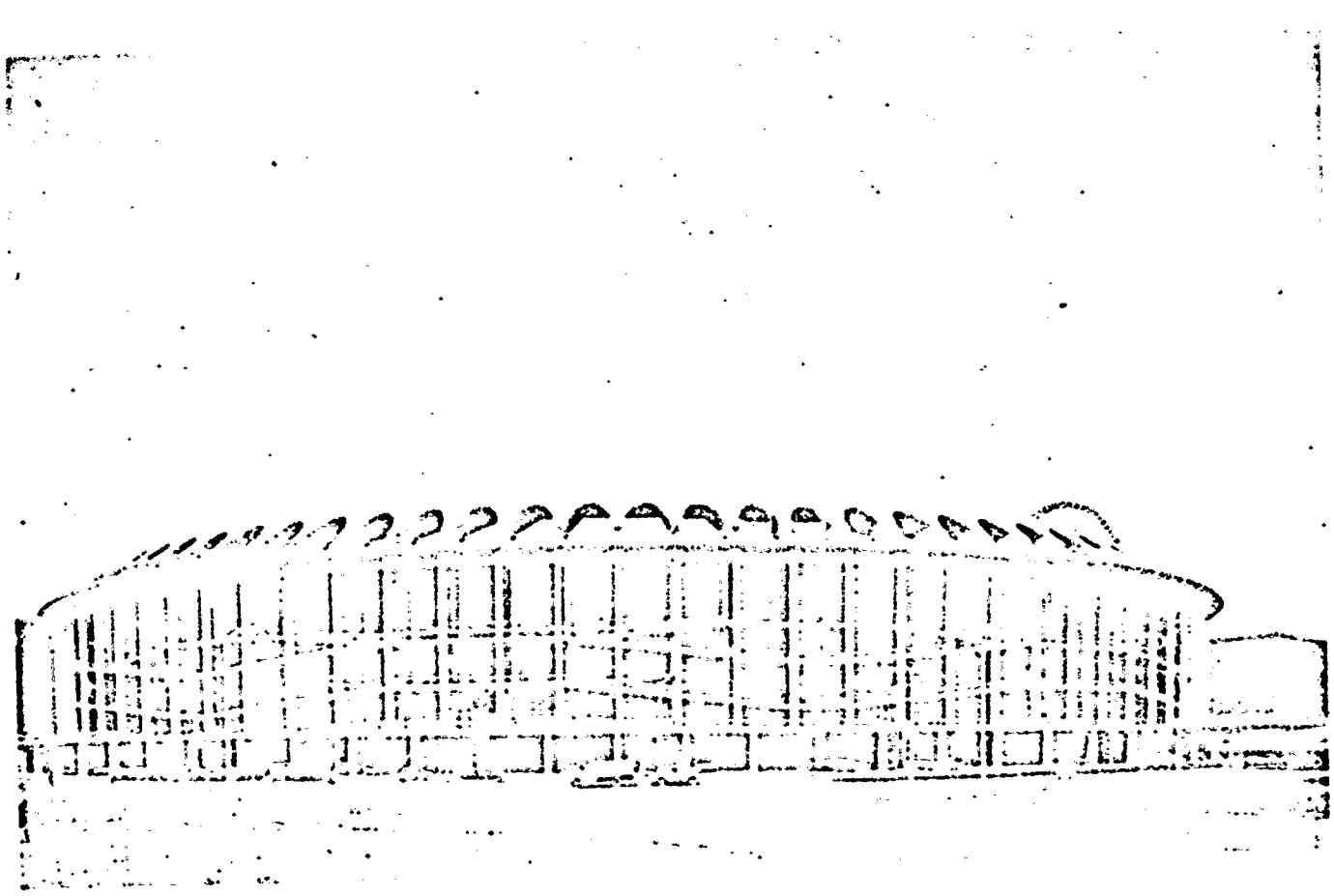
The Old Courthouse and Gateway Arch



2. Historic Buildings

Other buildings visited were the Old Cathedral-Basilica of St. Louis, The King, The Eugene Field Home, and The Old Courthouse, scene of the Dred Scott case and of Thomas Hart Benton's famous westward expansion oration, and the location of Carl Wimar's historical and allegorical murals.

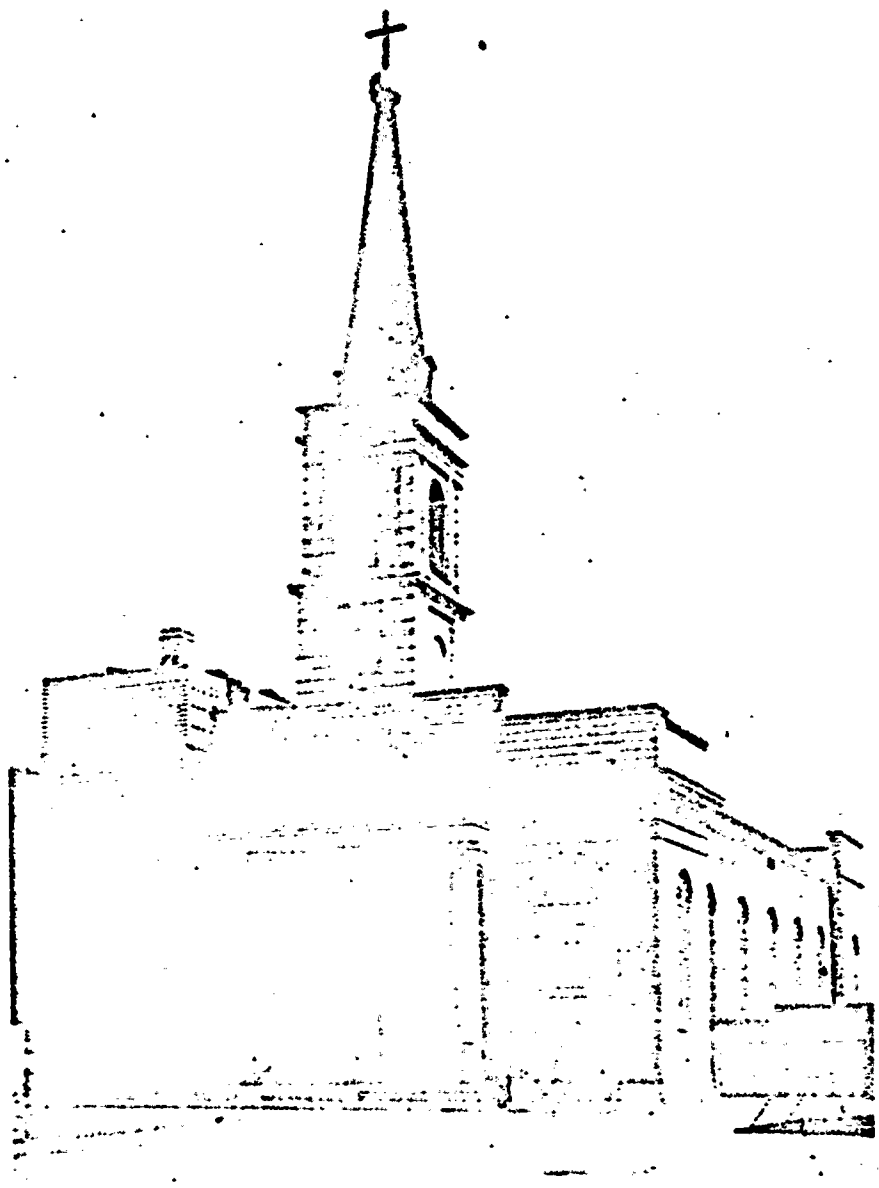
Busch Memorial Stadium



D. Aspects of Urban Life

1. In a number of instances, side trips were made in addition to the feature program. On these trips students were introduced to characteristics of urban life. These included tours of transportation terminals, large department stores, and large factories in the St. Louis area. One of the most rewarding of these trips was a tour of the Ford Motor Company in Hazlewood, Missouri during which the students observed the construction of an automobile from the receipt of the motor by the factory until the automobile was completed.

The Old Cathedral



E. General Tours

1. A total of ninety-one students were taken on a combined tour of Grant's Farm, (housing a game preserve, and once the home of President Grant), The National Museum of Transport, and the St. Louis City Art Museum.

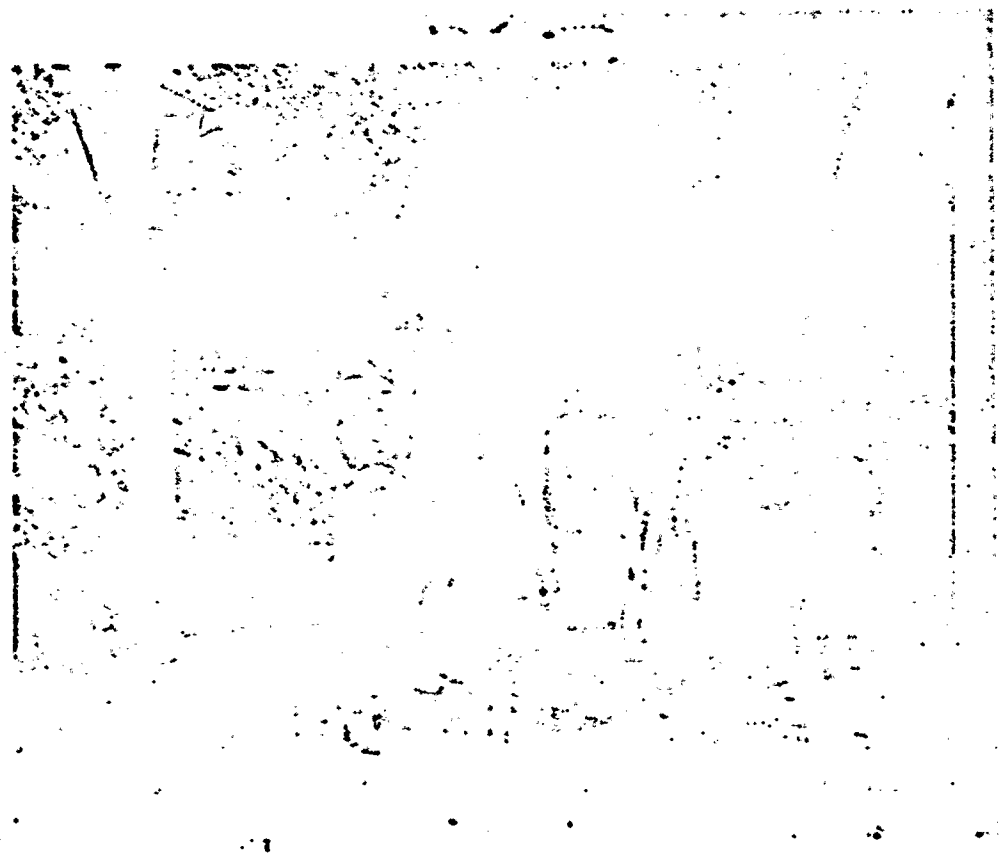
2. In order to introduce the students to a major National Park, a tour of Mammoth Cave National Park, Kentucky was arranged with seventy-nine students attending.

3. Four seperate tours of the St. Louis Zoo, Shaw's Gardens, McDonnell Planetarium, The Jewel Box, and Jefferson Memorial completed the program. These tours provided the students with experiences in the areas of botany, zoology, aerospace, and history.

Throughout this phase of the program the emphasis was on providing experiences completely new to the student and to make available travel to places with which he was unfamiliar. By doing so, his vision is broadened and he is able to speak to others from greater experience. He is involved directly and therefore more meaningfully. At this time when society is highly mobile and many young people have experienced a great deal of travel and have directly witnessed events such as those listed above, we cannot afford to allow our students to become completely provincial.

Those in charge of each tour insisted that the students practice what they had learned in the personal development course by requiring that each of them dress for each trip in the best clothing available to him. On each trip admissions, transportation, and meals in the better restaurants were provided through the grant.

Our students were supervised on each trip by one teacher or adult volunteer for every ten students. The teachers were required to become familiar with the event to be seen and to instruct the students during the trip. It was felt that there was considerable value to be derived from close association between the adults and the students.



Dexter Public School Students at
Grant's Farm - St. Louis

Mammoth Cave National Park, Kentucky

Therefore, the students and their supervisors attended each event, and dined in small groups making it possible for the adults and the students to become better acquainted and converse freely. Since it is common for families to dine separately rather than as one family group, due to modern day demands on time, we feel certain advantages are derived from this close association.

At the end of each event the students completed an attitude inventory on the event and the adults completed a questionnaire in which they gave their observations of their groups' reaction to the program.

We believe the advantages of such a program are obvious. Our students have been made aware of events, places, and forms of entertainment of high quality. By exposure to such programs we feel they may be influenced to choose the better things in life over those of little value, at the age when they are permitted to make their own choices. This has been the guiding principle behind the entire program. It is difficult to adequately evaluate such a program since the real benefits will be improved attitudes which will develop more fully, at a future time.

Appendix

Table I

Cultural Enrichment Grant

Title I Elementary and Secondary

Education Act 1965

Item	Amount
Transportation (Use of school buses, chartered buses, and train)	$4,588.00
Salaries (Instructors and bus drivers)	$5,380.00
Admissions	$4,480.00
Food	$8,140.00
Fixed Charges	$ 323.00
Other	$ 50.00
Total	$22,961.00

TOM BAKER
Stoddard County
Baker (Essex P. O.), Missouri 63846

Chairman:
Public Health and Safety

MISSOURI
HOUSE OF REPRESENTATIVES
SEVENTY-THIRD GENERAL ASSEMBLY

JEFFERSON CITY

COMMITTEES:
Appropriations
Agriculture
Education
Public Health and Safety

January 12, 1966

Mr. John DeArman, Principal
Dexter Public Schools
Dexter, Missouri

Dear Mr. DeArman:

Thank you very much for your letter of January 6 and I will assist you in any manner possible in making a tour of the State Capitol Building in Jefferson City on any Monday thru Friday between the hours of 9:00 a.m. and 4:00 p.m. All you will have to do is let me know your schedule and I will arrange to have you met at the Capitol Building and given a personally escorted tour.

I will also arrange for your group to be received by the Governor and other State Officials who may happen to be in town during the days you schedule your trip to Jefferson City.

Just let me know how I may assist you and I will do all I can to make your trip to the State Capitol more informative for your students.

With kindest regards, I remain.

Yours very truly,

Tom F. Baker

TFB:jkc

MISSOURI CONGRESS OF PARENTS AND TEACHERS

1966 Convention
Kansas City
October 25, 26, 27

4108 Will Ave.
St. L, Mo. 63125

St. Louis, Missouri
May 1, 1966

Mr. John DeArman
Director, Cultural Enrichment Project
Dexter Public Schools
Dexter, Missouri

Dear Mr. DeArman:

I am grateful to have received your letter and the summary of your Cultural Enrichment Project. The project is quite comprehensive, and the summary will make excellent reference material.

Your letter should have been answered more promptly. I held it up, however, until I could send you a copy of our latest Missouri Parent-Teacher, with an article on Page 8 which may interest you. My talk with Mr. Gibbons, which I managed to turn into an interview, gave the point of reference I had been hoping to find in order to publicize the advantages of the federal law. Please give Mr. Gibbons my greetings.

In my PTA work I have been in contact with most of the cultural organizations and institutions of the St. Louis area and am usually aware of their activities. Please let me know whenever I can be of any help to your project in this area - it would be a labor of love.

Best wishes,

Edward C. Schnabel
Cultural Arts Chairman
Missouri Congress of
Parents and Teachers

Department of Home Service

Are the Buses Rolling?

Edward C. Schnabel
Cultural Arts Chairman

The three Dexter School District buses parked at a St. Louis shopping center one hundred and sixty miles from home gave a hint of an unusual story. Upon inquiry, it was learned that they were awaiting their school children who, after finishing their lunches, would be taken to an entertainment attraction at the St. Louis Arena.

The story behind this journey was filled in for us by Mr. Joe W. Gibbons, principal of Dexter's Southwest Elementary School. He disclosed that the St. Louis trip was just one of an ambitious series arranged so that the youngsters may benefit from new cultural experiences. The financing has been made possible by an early grant secured under the new Federal Elementary and Secondary Education Act.

"The children were fascinated by the puppet show in Memphis, Tennessee, last week," Mr. Gibbons said. "One could hardly hear a pin drop. Most of them have not seen such things before." Mr. Gibbons' observation regarding his students' unfamiliarity with the major cultural institutions is paralleled elsewhere. In a district of suburban St. Louis, for instance, a survey revealed that 80 percent of the children had never been inside the City Art Museum.

Since the new federal law required that a school district must be the initiator of the applications for grants and since the law requires that these applications be "innovative and exemplary" in nature, the Dexter District has shown resourcefulness in securing its grant. It is time for each of us to ask if our own school districts have made similar efforts in filing imaginative and comprehensive applications for the federal grants. Our state has its full measure of cultural treasures. How about it, are your school buses rolling?

National Family Week

Mrs. Frank Mirkay
Parent and Family Life Education Chairman

National Family Week is listed in the Suggested PTA Calendar on page 260 of the 1965-1966 *Manual* as one of the special weeks of the year which units and councils might wish to observe during the month of May. It is probable that more PTA members will be concentrating, individually or collectively as members of study groups, on the importance of family living as they participate in programs and projects geared to emphasize this importance—because Family Week has been proclaimed nationally to be worthy of observance. Certainly, lending support to recognition of an observance practiced by churches of many denominations and by agencies interested in the family of today (and of tomorrow, too!) would lie within the area of highly desirable activities of unit or council. There could be no finer way to observe National Family Week than to pledge to provide opportunity for those parents who are interested, or are likely to be, to meet in study groups to further *educate themselves* about themselves and their families. However, *pledging* must be followed by *planning*. And, planning *now* would assure a fine program in parent education next fall.

More and more parents are concerned with becoming better parents than ever before in history. This is recognized fact. According to W. Clark Ellzey, acting chairman, Family Life Education Department, Stephens College, Columbia, in his presentation at the National Convention Seminar on Coping with the Responsibilities of Parenthood, "this must be, if we are to develop men to match the measure of a space age, and women to help work the wonder of a war-less world."

The PTA has always been one of the organizations to move in the direction of

The Daily Sikeston Standard - July 2, 1966 - Sikeston, Missouri

Dexter Develops New Concept To Expand Education Process

By WARREN SOKOLIS

DEXTER -- Operating on the theory that a school pupil can learn more through direct experience than through reading about an event or watching it on television, school officials at Dexter have initiated a program that is unique to schools in Missouri.

The project, which began in February, is designed to provide cultural benefits to the pupils through field trips to places of cultural, historical and recreational interest.

Financed entirely by federal funds under Title I of the Elementary and Secondary Education Act of 1965, the program exposes the children to a way of life that differs widely from the non-urban environment of southeast Missouri.

The program was drawn up by Carl Davis, elementary supervisor and assistant superintendent, and is directed by John DeArman, junior high school principal.

Children remember the things they do better than the things they read about, DeArman said. A demonstration of how something is done is better than reading about how to do it, he noted. This is "lasting learning."

A personal development course is taught during the school year to prepare the pupils for the field trips, DeArman explained.

In this phase of the program the children are taught proper social habits of grooming, dress and etiquette. In addition they learn good health habits. Instruction is given by the school personnel, doctors, nurses and beauticians, DeArman noted.

The trips themselves have been planned to provide the best possible educational experiences for the pupils, DeArman explained.

Included in the itinerary are serious and popular stage productions; aspects which are unique to urban life; zoological, botanical, scientific and other cultural attractions; natural and other scenic attractions; historical shrines, monuments and government buildings, and sports events.

Fifty or 100 pupils -- one or two busloads -- go on each trip, DeArman explained. They eat in the better restaurants and cafeterias. Their meals, transportation and admission tickets are paid for by the federal appropriation. Parents and teachers volunteer as supervisors on the trips, the director said.

"We try to provide one adult supervisor for every 10 students," he added. This enables the supervisor and the pupils to become better acquainted.

Children in grades five through 12 are eligible to go on the trips. "The program is open to children who have not had such experiences," he remarked, noting that a survey of the school district revealed that most of the children had never been exposed to the places included in the itinerary.

Prior to taking a trip, the children study about the place they are to visit and discuss it in the classroom, DeArman said. When they return, they report to their classmates what they have learned so the other pupils can also benefit from the experience.

In discussing the itinerary, DeArman pointed out that a balance between classical and popular stage and musical productions is achieved in the program.

At Memphis the pupils saw live theater productions of "Anthony and Cleopatra" and "Guys and Dolls." They attended the St. Louis Municipal Opera's presentation of Eddie Albert in "The Music Man," and will later attend four other Muni Opera presentations, "The Desert Song," "Can Can," "Oklahoma" and "Bye Bye Birdie," all featuring well-known show business personalities.

The younger children saw Buddy Clark's "Pinochio," and a trip is planned to St. Louis to see the Andy Williams show, featuring Henry Mancini's orchestra, DeArman continued.

One hundred children were taken to hear the Memphis Symphony Orchestra, and two separate groups attended Holiday on Ice at Memphis and Ice Capades at st. Louis.

These productions are not available in the immediate area, DeArman said, and because the school officials feel the theater is an important part of American life, the attractions were included in the program's schedule.

To observe aspects of urban life, the children tour train terminals, municipal airports, factories and large department stores the director said. On Tuesday they toured the Ford Motor Co. assembly plant at St. Louis.

Under the heading of zoological, botanical, scientific and other cultural attractions, trips have been scheduled for the St. Louis and Memphis zoos and Grant's Farm, the Jewel Box, Forest Park and McDonald's planetariums, the Jefferson Memorial, the Museum of Natural History, the Museum of Transportation and the City Art Museum at St. Louis.

Last week pupils went to Mammouth Cave National Park, Ky. They will also tour parks, dams, lakes, mountains and national forests under the natural and other scenic attractions phase of the program.

A tour of the state capital has been one of the highlights of the project thusfar, DeArman noted. They toured the capitol, the governor's mansion and office, the Supreme Court chambers, state legislature and the State Highway Patrol headquarters at Jefferson City.

The governor's aide or press secretary takes time to talk to the group and points out highlights of the governor's offices, and the pupils sit in the chairs of the Supreme Court justices.

Other historical shrine, monuments and government buildings on the itinerary are the old courthouse at St. Louis, St. Louis Cathedral, Eugene Field's home and the Candle House at St. Louis and visits to the county court when it is in session.

Trips are also planned to four major league baseball games, the Shrine Circus and rodeos, DeArman said.

A survey taken in St. Louis county showed that 80 per cent of the children living there had never visited most of the places that the Dexter children have or will visit at St. Louis. This makes the program even more significant.

DeArman said the University of Pittsburgh has inquired about this unique cultural program, and other school districts in Missouri are considering the development of similar programs. Thus, an innovation developed at Dexter may have a nation-wide effect on the concept of education in the United States.

ADULTS RATING OF STUDENT ON CULTURAL ENRICHMENT EXPERIENCE

Student's reception of program was:

Name of Student	Enthusiastic	Pleased but Not Enthusiastic	Indifferent	Bored
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

1. Was the program appropriate for the ages of the children involved? _____
2. Would you recommend this event for other children? _____
3. Have you ever attended this particular kind of event? _____

_____(Student) _____(Event)

Cultural Enrichment Experience Student's Rating Scale

	Yes	Possibly	Undecided	No
1. Have you ever attended a similiar event before?				
2. Would you welcome the opportunity to attend this activity again some time in the future?				
3. Would watching this type of program on television have been as enjoyable as seeing it firsthand.				
4. Did those in charge adequately provide background information that enabled you to have a meaningful experience?				
5. Were there other things viewed on the trip (such as buildings, eating establishments, city, highway, etc.) which you enjoyed as much as the planned activities?				
6. Would you encourage another person to attend this type of event?				
7. Were you at any time bored and wished you had stayed at home?				
8. Do you plan to tell others about this trip?				
9. Would you someday wish to live like the performers you observed?				
10. Would you be interested in attending this event at some future time at your own expense?				
11. Would you rather have attended some other type of entertainment or event instead of this one?				
12. Do you feel this event was of educational value as well as entertaining.				

A P P E N D I X O

Questions and Answers

Q U E S T I O N S and A N S W E R S

TITLE I

"Programs for Educationally Deprived Children"

THE ELEMENTARY AND SECONDARY
EDUCATION ACT OF 1965

P.L. 89-10

October 1965

State Department of Education
Jefferson City, Missouri

FOREWORD

The need for this pamphlet became apparent through discussion by the Superintendents' Advisory Committee in Jefferson City on October 6, 1965. The pamphlet is intended to assist local public school districts as they develop plans for projects under Title I, P.L. 89-10. It contains the answers to a number of questions that are being frequently asked. Local public school officials are advised to consult the State Department of Education for additional information needed for specific project development.

The State Department wishes to thank the members of the Superintendents' Advisory Committee, and other interested school officials, for the contribution of the majority of questions used in this pamphlet.

CONTENTS

I. GENERAL PURPOSE AND PROVISIONS

For what purpose are Federal funds available under this title?

To expand and improve elementary and secondary school programs for educationally deprived children in low-income areas.

Who are educationally deprived children?

Children whose educational achievement is below that normally expected of children of their age and grade, including children who are handicapped. Handicapped children are the mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children.

What agencies may receive grants under this program?

Local public school districts where there are concentrations of children from low-income families.

What is a low-income family?

During the year ending June 30, 1966, a family is deemed to be a low-income family if it has an annual income of less than $2,000 or receives assistance under the program of aid to families with dependent children (AFDC) under Title IV of the Social Security Act. For each of the 2 succeeding years, the standard will be as established by the Congress.

For how long will this Title be in effect?

As now enacted, for the 3 years ending June 30, 1968.

What funds have been appropriated for Missouri under this Title for fiscal year 1966?

$29,000,000.

Is Federal control of education prohibited?

Yes, as indicated in Section 604 of the law.

II. ELIGIBILITY OF LOCAL EDUCATIONAL AGENCIES

How is eligibility determined?

The basis for determining eligibility is the number of children aged 5 to 17 who are from families with incomes of less than $2,000 a year, or who receive assistance under Aid to Dependent Children regardless of total amount of income. The Act provides that eligibility be determined on a district basis. All local educational agencies in a county which has at least 100 such children may be considered eligible.

II. Continued

Who will determine eligibility?

The U. S. Commissioner of Education on the basis of data provided by the Bureau of the Census.

Are private and parochial schools eligible to receive grants?

No. But children enrolled in these schools must share in the benefits the Act provides.

Are junior colleges eligible to receive grants?

No. The Act specifically limits the use of funds to elementary and secondary education at levels not beyond grade 12.

Are State-operated schools for the handicapped (for example, the blind or deaf) eligible?

No. State-operated schools of this type are not local educational agencies as defined in the Act.

III. ELIGIBILITY OF PROJECTS

What is a project under this Title?

A project is an activity, or set of related activities, proposed by a local public school district and designed to meet certain of the special educational needs of educationally deprived children in a designated area. It should be of sufficient size, scope, and quality to give reasonable promise of substantial progress toward meeting those needs.

What types of projects should be proposed?

The type of project proposed is left to the discretion and judgment of local public school districts. Recognizing that the needs of educationally deprived children vary from district to district, the law specifies only that projects submitted be designed to achieve the overall purpose of the Title and that it be approved by the appropriate State educational agency. Local public school districts are encouraged to employ imaginative thinking and new approaches in their planning for the needs of the educationally deprived children in their districts.

Should projects be limited to the needs of children currently in school?

III. Continued

No. A project may be designed to meet the special educational needs of any educationally deprived children in a school attendance area, regardless of whether these children are currently attending school (between the ages of 5 and 20, inclusive).

May funds be used for preschool programs?

Yes. Providing the programs are for children not less than 5 years of age.

May funds be used for general increases in teachers' salaries?

No.

Under what conditions may funds be used to pay teachers' salaries?

They may be used for the payment of salaries for new positions or for additional services directly related to meeting the special educational needs of educationally deprived children enrolled in approved projects.

May funds be used for the construction of school buildings?

Certain limited classroom construction may be carried out when lack of minimum classroom facilities is the major obstacle to conducting educational programs for children in the project area and suitable space is not available for rental or lease. But, in general, the provisions of this title are not intended to relieve present or anticipated classroom shortages.

May funds be used for the rental of a part of an existing building owned by the local educational agency?

No.

May funds be used for the rental or lease of buildings not owned by the local public school district?

Yes, if space in existing school buildings is inadequate for the proposed project and such costs have been approved under the project.

If a local public school district is already operating a special program whose aim falls within the purpose of this Title, can it be granted funds to help pay for this program?

Yes, provided the Federal funds applied are used exclusively for the expansion and improvement of such a program.

IV. ELIGIBILITY OF CHILDREN

Are project benefits limited to children of low-income families?

IV. Continued

No. Although low-income identifies the attendance area to be served, educational deprivation determines who is to participate in the project. If, for example, the project is to improve reading performance, all persons in an attendance area who need such help could participate in the program, regardless of their family income.

Is participation in a project limited to children residing in an attendance area designated for the project?

Usually it is. However, children residing outside the attendance area served by the project may participate in the project if such participation does not dilute the total effectiveness of the project.

Are adults eligible to participate in projects under this Title?

Yes, to the extent that parental involvement is desirable in meeting the objectives of the project.

V. MAINTENANCE OF EFFORT

Are local public school districts and the State Department of Education required to maintain their previous level of effort in the support of education in order to remain eligible to receive funds under this title?

Yes. The combined total of State and local expenditures must be maintained at the 1963-64 level during 1965-66 and each succeeding year for the duration of projects under this title, in accordance with the requirements set forth in the Regulations.

VI. ALLOCATION OF FUNDS

How are these maximum amounts computed?

In accordance with the following formula: The number of children aged 5 to 17, inclusive, from families with an annual income of less than $2,000, plus the number of children aged 5 to 17, inclusive, from families receiving AFDC payments in excess of $2,000 a year, multiplied by one-half the average per pupil expenditure for free public education in the State.

Is there a legal maximum on the amount of basic grant funds that may be approved for a local public school district?

Yes. During fiscal year 1966, the amount of such funds may not exceed 30 percent of the amount budgeted by the local educational agency for current expenditures. This limitation will not apply to grants that may be made in subsequent years.

What are considered as current expenditures?

VI. Continued

Expenditures from current revenues except expenditures for the acquisition of land, erection of facilities, interest, and debt service and from Federal funds received under this title or other titles of the Elementary and Secondary Education Act.

May local public school districts join together for the purpose of carrying out projects under this title?

Yes, if each of the districts concerned is eligible to receive a basic grant and wishes to enter into a cooperative project.

May a local public school district transfer funds from its allocation to another educational agency?

No, except when necessary under a joint project.

VII. APPROVAL OF PROJECTS

Who has the authority to approve projects?

The State Department of Education. The State Department shall not finally disapprove a project without providing reasonable notice and opportunity for a hearing.

May the State Department of Education approve only part of the project application of a local public school district and make a corresponding adjustment in the amount of funds allocated?

It may approve such an application in part or for a less amount of funds than is called for by the application provided such partial approval does not alter the project to such an extent that it no longer provides reasonable promise of substantial progress toward meeting the purposes of this title.

May funds under this title be used as State or local matching funds for other Federal programs, for example, for programs under the National Defense Education Act or under vocational education legislation?

No.

Where within a local public school district should projects be carried out?

In attendance areas with high concentrations of children from low-income families. There may be more than one such area in a single school district.

VIII. PAYMENT OF FUNDS

How will funds be made available to the local public school district after a project has been approved?

VIII. Continued

Upon approval of the project, the State Department of Education will advance to the local public school district funds in the amount needed through December 31, 1965. Thereafter payments will be made on the basis of quarterly reports by the local public school district of its expenditures and needs under the project.

IX. ADMINISTRATIVE COSTS

Are the administrative and supervisory costs of local public school districts allowable for payment under this title?

Yes, if such costs are extra and identifiable costs, are directly related to the operation of the project and were included in the project application, not generally in excess of 3%.

X. PARTICIPATION OF CHILDREN ENROLLED IN PRIVATE SCHOOLS

Is it mandatory that the local public school districts provide opportunities for the participation of children enrolled in non-public schools?

Yes, to the extent consistent with the number of educationally deprived children in areas served by the program who are enrolled in private schools, opportunities for such participation must be provided.

May funds under this title be used to transport educationally deprived non-public school children to public schools?

Yes, if such transportation is in accordance with the regulations of this Act and the laws of the State of Missouri.

Does the title authorize the use of Federal funds for the payment of salaries of non-public school teachers?

No. The use of funds for this purpose is prohibited.

May equipment be placed on private school premises?

Yes, if it is mobile or portable it may be temporarily placed on private school premises.

XI. COORDINATION WITH COMMUNITY ACTION PROGRAMS

Must educational programs approved under this title be coordinated with community action programs sponsored by the Office of Economic Opportunity?

Yes. The law requires that local school boards develop programs under this title in cooperation with public or nonprofit agencies responsible for any community action programs which may have been approved under the Economic Opportunity Act in their localities. Genuine working relationships should be established during the planning and development of a program under this title and maintained during the operation of the program.

XII. RECORDS AND REPORTS

What records must a grantee keep?

The law requires all local public school districts receiving grants under this title to keep records relating to claims for Federal grants and expenditures of such grants.

What reports must a grantee make?

The law requires all grantees to make annual reports to the State Department of Education and such other reports as that agency may require. These reports must include information relating to the educational achievement of children participating in the program.

XIII. EVALUATION

How often must a grantee evaluate the effectiveness of a program?

The local public school district must make an evaluation at least once a year of the effectiveness of its approved projects in meeting the special educational needs of educationally deprived children.

Should the evaluation be extended to include participating children enrolled in private schools?

Yes, if their participation is sufficient to justify this.

What procedures should a grantee adopt in making an evaluation?

The procedures should include appropriate objective measurements of educational achievement and an evaluation of the increase in educational opportunities, as described in the Missouri Guidelines for Title I programs.

What are some possible bases for evaluation?

XIII. Continued

Achievement in basic educational skills; level of general educational attainment; drop-out rate; educational motivation as evidenced by attention, performance and production; behavioral deviations and other handicaps to educational progress; cultural and social conditions related to educational opportunity and progress; retardation in grade; and educational opportunities provided in the school setting including curricula, special programs and services, facilities, and competency of staff.

Can part of the funds allowed for administrative costs be used to acquire technical assistance for program evaluation?

Yes.

XIV. INFORMATION DERIVED FROM GRANT PROJECTS

What is the applicant's responsibility with respect to the dissemination of information?

The law requires that, as a basis for approval, the applicant's program must include effective procedures for reviewing, selecting, and disseminating to teachers and administrators significant information derived from educational research, demonstration, and similar projects including projects supported under this title.

A P P E N D I X P

Bibliography - Measurement and Evaluation (for LEAs)

MEASUREMENT and EVALUATION

Experimental Design

Campbell, D. T., and Stanley, Julian C., "Experimental Design and Quasi Experimental Designs for Research on Teaching." Chapter 5 of Handbook of Research on Teaching, N. L. Gage, Editor. The best single source available. It is unquestioned as the authority in experimental design in education. It is, as a starter, rather slow reading but well worth the effort. The beginning student may wish to concentrate on pages 171 to 220.

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The area of experimental design is the reason a good portion of the educational research literature and research proposals are not acceptable to knowledgeable researchers.

Substantive Area of the Handbook of Research on Teaching

Chapters:

15 - Research on Teaching in the Nursery School, Sears, Pauline S. S., Stanford University; Dowley, Edith M., Stanford University.

16 - Research on Teaching Reading, Russell, David H., University of California; Fea, Henry R., University of Washington.

17 - Research on Teaching the Social Studies, Metcalf, Lawrence E., University of Illinois.

18 - Research on Teaching Composition and Literature, Meckel, Henry C., San Jose State College.

19 - Research on Teaching Secondary School Mathematics, Henderson, Kenneth B., University of Illinois.

20 - Research on Teaching Science, Watson, Fletcher G., Harvard University.

21 - Research on Teaching Foreign Languages, Carroll, John B., Harvard Univ.

22 - Research on Teaching the Visual Arts, Hausman, Jerome, The Ohio State Univ.

Statistics

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Thorndike, Robert L., The Concepts of Over-&Underachievement, Bureau of Publications, Teachers College, Columbia University, New York, 1963.

McNemar, Quinn, Psychological Statistics, Third Edition, John Wiley & Sons, Inc. New York, Chapman & Hall, Limited, London, 1955. A standard statistical text.

Tatsuoka & Tiedeman, Handbook of Research on Teaching, Chapter 4 - "Statistics as an Aspect of Scientific Method," Gage, N. L., Editor, Rand McNally & Company, Chicago, 1963. Somewhat more concise. Difficult to understand, but it has an excellent diagram of the overall classification of statistical techniques according to scale type, role, and number of variables involved.

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Johnson & Jackson, Modern Statistical Methods, Rand McNally & Company, Chicago, 1959.

American Educational Research Association, What Research Says to the Classroom Teacher (National Education Association, Washington, D.C.)

Substantive Area Research Reviews

The Review of Educational Research is a journal of the American Educational Research Association which gives good quality reviews of substantive research in many fields in a three year cycle.

Bloom, Benjamin S., Compensatory Education for Cultural Deprivation, Holt, Rinehart & Winston, New York, 1965.

Russell, David H., Research Design and the Teaching of English, National Council of Teachers of English Campaign, Illinois, 1964.

Griffiths, Daniel E., Research in Education Administration, Bureau of Publications, Teachers College, Columbia University, 1959.

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Anderson, Kenneth E., Research on the Academically Talented Student, NEA, Washington, D. C., 1961.

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Thorndike, Robert L. and Hagen, Elizabeth, Measurement and Evaluation in Psychology and Education, John Wiley & Sons, Inc., New York, London, Chapman & Hall, Limited, 1959.

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