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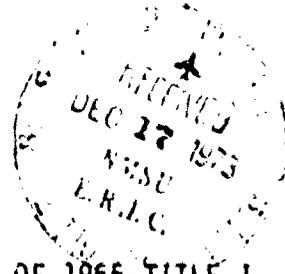
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ABSTRACT

Elementary and Secondary Education Act Title I programs in North Dakota are evaluated in this Annual Report. The first part of the report covers staff activities, a brief demographic view of North Dakota, public and nonpublic school participation, financial data, instructional activities, major accomplishments, and statistical data about the participants. The second part of the report gives the regulations and guidelines for evaluating these Title I projects. The guidelines include information on legal responsibility, a local evaluation plan, state and Federal Title I evaluation, and evaluation designs and devices. Copies of forms used to collect evaluation information are provided. (PS)

U.S. DEPARTMENT OF EDUCATION
OFFICE OF EDUCATION



ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965-TITLE I
NORTH DAKOTA ANNUAL EVALUATION REPORT FOR FISCAL YEAR ENDING
JUNE 30, 1971

SUBMITTED BY
NORTH DAKOTA DEPARTMENT OF PUBLIC INSTRUCTION
M. F. PETERSON, SUPERINTENDENT
WARREN PEDERSON, COORDINATOR-TITLE I, ESEA

"Buy North Dakota Products"

FORWARD

The Annual Evaluation Report of Title I, ESEA is prepared to fulfill an obligation of the State of North Dakota to the United States Office of Education.

Title I of the Elementary and Secondary Education Act of 1965, provides for financial assistance for the education of educationally deprived children in those school districts which have a high concentration of low-income families.

For the purpose of this program "Educationally Deprived Children" means those children who have the greatest need for assistance in order that their level of educational attainment may be raised to that level appropriate for children of their age. The term includes children who are handicapped and children whose need for such special educational assistance is the result of poverty or cultural or linguistic isolation from the community at large.

This report indicates the concern that North Dakota has for the early identification and treatment of educationally deprived children.

Warren Pederson, Coordinator
Title I, ESEA

TABLE OF CONTENTS

Staff Activities-----1
A Brief Demographic View of North Dakota-----3
Public - Non-Public Participation-----6
Financial Data-----9
Instructional Activity-----13
Major Accomplishments-----16
Statistical Data About Project Participants-----18
Appendix A
Appendix B

STAFF AND ACTIVITIES

The professional staff for Title I, ESEA during fiscal year 1971 consisted of the following:

- 1 Coordinator
- 1 Assistant Coordinator
- 1 Accountant
- 1 Migrant Coordinator
- 1 Reading Consultant
- 2 Evaluation Consultants, Part Time ($\frac{1}{2}$ FTE)
- 1 Consultant, Part Time ($\frac{1}{2}$ FTE)

There are five non-professional staff members.

During fiscal year 1971 professional staff members visited LEA's participating in Title I, ESEA for the purpose and number of times as listed on the following chart:

PURPOSE OF VISITS	NUMBER OF VISITS	% OF TOTAL VISITS
Program Planning	65	14.61
Program Development	13	2.92
Program Operation, Monitoring and Evaluation	310	69.66
Fiscal Reports	<u>57</u>	<u>12.81</u>
TOTAL	445	100.00

Six professional staff members from the Department of Public Instruction and Title I, ESEA conducted six training sessions which were attended by 333 participants from 240 of the districts operating Title I

projects. These training sessions were conducted for the purpose of explaining the Evaluation Reporting Forms, as given in Regulations and Guidelines for Evaluating Title I in North Dakota (Appendix A), assisting LEA's in the operation of fiscal year 1971 activities and planning for the development of fiscal year 1972 projects.

A workshop was conducted for school districts participating in the Migrant Program. Nine professional staff members were involved in this workshop which was attended by 245 participants from eight school districts.

Thirteen week-long workshops for Title I teachers were held throughout the State for the purpose of in-service training or further education for teachers in the areas of reading, mathematics, early childhood education and special learning difficulties. The workshops were funded by Title I, ESEA and were administered by the University of North Dakota, Continuing Education Service, Grand Forks, North Dakota.

Reading workshops were held at Bismarck, Minot, Valley City and Devils Lake. Two mathematic workshops were held at Mary College, Bismarck and two in mathematics were held at Devils Lake. Early childhood education workshops were held at Bismarck, Dickinson, Devils Lake and Minot. The special learning difficulties workshop was held at Carrington.

In all of the workshops, the information and discussion was directed toward the child who is educationally deprived.

A BRIEF DEMOGRAPHIC VIEW OF NORTH DAKOTA

North Dakota is a sparsely settled rural State and as a result has a large number of widely separated small schools. The majority of the small schools also have a small allocation under Title I. Table I gives the size of public school district enrollment in the State and Table II gives the distribution of Title I projects by the size of the Title I budget.

Table I shows that 95.22% of all the public school districts in the State enroll fewer than 1,000 elementary and secondary students. Using the information contained in THE NORTH DAKOTA EDUCATIONAL DIRECTORY for 1970-71, it was determined that the remaining 4.78% of the districts enroll 46% of the public school children of the State.

During fiscal year 1971, a total of 271 Title I projects were approved. Students in 294 districts were served by these projects. Table II shows that 53 projects (19.56% of the total) had approved amounts of less than \$5,000.00, 82 projects (30.26%) had approved amounts between \$5,000.00 and \$10,000.00, and 49 projects (18.08%) had approved amounts between \$10,000.00 and \$15,000.00. The 255 projects which receive less than \$40,000.00 account for 94.09% of all approved projects.

TABLE I
 SIZE OF PUBLIC SCHOOL DISTRICT ENROLLMENT IN
 THE STATE OF NORTH DAKOTA DURING SCHOOL YEAR 1970-71

<u>Size of Enrollment</u>	<u>Number of Operating Districts</u>	<u>% of Total</u>
0-499	294	82.58
500-999	45	12.64
1000-1499	4	1.12
1500-1999	3	.84
2000-2499	2	.56
2500-2999	1	.28
3000-3499	2	.56
3500-3999	1	.28
4000 or over	<u>4</u>	<u>1.12</u>
TOTAL	356	99.98

TABLE II
 DISTRIBUTION OF TITLE I PROJECTS
 BY THE SIZE OF THE BUDGET

<u>Amount of Budget</u>	<u>Number of Projects</u>	<u>% of Total</u>
Less than 5,000	53	19.56
5,000 to 10,000	82	30.26
10,000 to 15,000	49	18.08
15,000 to 20,000	28	10.33
20,000 to 25,000	16	5.90
25,000 to 30,000	10	3.69
30,000 to 35,000	11	4.06
35,000 to 40,000	6	2.21
40,000 to 45,000	5	1.84
45,000 to 50,000	3	1.11
50,000 to 55,000	1	.37
55,000 to 60,000	0	.00
60,000 to 65,000	2	.74
65,000 to 70,000	1	.37
More than 70,000	<u>4</u>	<u>1.48</u>
TOTALS	271	100.00

PUBLIC - NON-PUBLIC PARTICIPATION

A formal letter of agreement (Appendix B), which was initiated by the Department of Public Instruction and is required in all districts containing non-public schools has done much to bring a closer relationship between the public and non-public schools. The needs of the public and non-public students that each project addresses are determined cooperatively by the personnel of the public and non-public schools.

Non-public schools operate within the boundaries of thirty six school districts. Personnel in twenty six of these cooperating districts are making Title I activities available to those children attending non-public schools.

The following charts analyze the enrollment and participation of students in public and non-public schools within the State of North Dakota.

STATE ENROLLMENT

<u>Type</u>	<u>Number</u>	<u>Percent of Total</u>
Public	150,494	92.29
Non-Public	<u>12,580</u>	<u>7.71</u>
TOTAL	163,074	100.00

UNDUPLICATED PARTICIPANTS

<u>Type</u>	<u>Number</u>	<u>Percent of Total</u>
Public	36,113	93.11
Non-Public	<u>2,671</u>	<u>6.89</u>
TOTAL	38,784	100.00

COMPARISON OF PARTICIPANTS
TO ENROLLMENT

<u>Type</u>	<u>State Enrollment</u>	<u>Unduplicated Participant Enrollment</u>	<u>Percent Participating</u>
Public	150,494	36,113	23.99
Non-Public	<u>12,580</u>	<u>2,671</u>	<u>21.23</u>
TOTAL	163,074	38,784	23.78

Table III indicates which of the instructional programs and services made available to public school students are also being used by students in non-public schools.

TABLE III
STUDENTS SERVED IN TITLE I
(In descending order by largest total)

<u>Subject or Service</u>	<u>Public</u>	<u>Non-Public</u>	<u>Total</u>
Reading	23,746	772	24,518
Mathematics	7,226	310	7,536
Music	7,139	147	7,286
Library	5,310	155	5,465
Physical Education	5,106	94	5,200
English	4,220	227	4,447
Pre-School	3,907	50	3,957
Guidance	3,655	29	3,684
Art	2,595	163	2,758
Social Science	1,841	88	1,929
Natural Science	597	58	655
Speech Therapy	456	25	481
Special Education	262	9	271
Industrial Art	<u>15</u>	<u> </u>	<u>15</u>
TOTAL	66,075	2,127	68,202

FINANCIAL DATA

DISTRIBUTION OF TITLE I FUNDS
FISCAL YEAR 1971

*Public Schools	\$4,038,232.69
School for the Blind	11,981.00
School for the Deaf	32,179.00
Grafton State School	147,882.00
Marmot High School	35,259.00
Adolescent Center, State Hospital	25,674.00
Migrant Summer Program	421,683.00
Administration	<u>150,000.00</u>
TOTAL	\$4,862,890.69

*Reallocated Funds Included

The composite Title I budget for North Dakota, Table IV, during fiscal 1971, shows the relative emphasis local school districts placed upon these activities and services. This emphasis is further indicated by the per cent of the total which is budgeted in each of the codes. It should be noted that the area of instruction receives 87.17% of the total budget. A breakdown of the area of instruction into subject matter is done in Table VII, page 15.

TABLE IV
TITLE I FUNDS AS BUDGETED BY LEA'S IN FY '71

CODE	ITEM	SALARY	OTHER	TOTAL	% OF TOTAL
0100	Administration	100,457.36	10,405.77	110,863.13	2.88
0200	Instruction	3,137,177.51	216,392.70	3,355,570.21	87.17
0300	Attendance	-----	-----	-----	-----
0400	Health Services	7,859.00	277.00	8,136.00	.21
0500	Transportation	33,331.47	29,340.74	62,672.21	1.63
0600	Operation of Plant	10,317.00	4,543.71	14,860.71	.39
0700	Maintenance	5,772.21	2,078.70	7,850.91	.20
0800	Fixed Charges	-----	193,696.38	193,696.38	5.03
0900	Food Services	5,152.00	12,482.23	17,634.23	.46
1220	Minor Remodeling	-----	3,239.78	3,239.78	.08
1230	Equipment	-----	<u>75,047.45</u>	<u>75,047.45</u>	<u>1.95</u>
	TOTALS	3,300,066.55	549,504.46	3,849,571.01	100.00

A comparison, Table V, of the percentages budgeted in fiscal year 1969 and fiscal year 1971, shows that there were increases in administration, instruction, maintenance of plant and equipment, fixed charges and food services. The largest increase was 85.23% to 87.17% in the amount appropriated for instruction. There were decreases in attendance services, health services, pupil transportation, operation of plant, minor remodeling and equipment. The greatest decrease was 3.82% to 1.95% in the amount intended to be spent for equipment.

TABLE V
A COMPARISON OF THE PERCENTAGES OF
ITEMS IN APPROVED BUDGETS FOR FISCAL 1969
AND FISCAL YEAR 1971

<u>CODE</u>	<u>ITEM</u>	<u>1969</u>	<u>1971</u>
0100	Administration	2.57	2.88
0200	Instruction	85.23	87.17
0300	Attendance Services	.18	----
0400	Health Services	.39	.21
0500	Pupil Transportation	1.67	1.63
0600	Operation of Plant	.55	.39
0700	Maintenance of Plant and Equipment	.19	.20
0800	Fixed Charges	4.53	5.03
0900	Food Service	.63	.46
1220	Minor Remodeling	.24	.08
1230	Equipment	<u>3.82</u>	<u>1.95</u>
	TOTALS	100.00	100.00

INSTRUCTIONAL ACTIVITY

Information regarding money budgeted, number of students served, number of teachers working and number of aides employed in the various subject areas were maintained. The cost per student without taking into account the length of service to each student, was also computed. All of this information is shown on the tables VI and VII.

It should be observed that improvement of reading is the major effort of the LEAs in North Dakota. In fact, approximately 50% of the money expended and 40% of the personnel employed is directed toward the reading programs. Mathematics, pre-school and language arts activities are the other areas of high concentration of money and personnel. The sum of the expenditures and the sum of the full time personnel employed for these three activities account for another 25% of the effort of the LEAs.

The cost per student of special education, speech therapy, reading and pre-school, which is a part time project in most schools, would point to the fact that there is a relatively high concentration of effort for each individual student in these subject areas.

TABLE VI
INSTRUCTIONAL PERSONNEL EMPLOYED

<u>Type of Instruction</u>	<u>Number of Teachers Employed</u>	<u>Number of Aides Employed</u>
Reading	507	180
Pre-school (most are employed on part-time basis)	195	34
Mathematics	187	43
Language Arts	84	23
Music	78	6
Physical Education	63	10
Library	46	29
Social Science	38	9
Art	21	0
Special Education	17	3
Guidance	16	0
Natural Science	13	2
Speech Therapy	13	1
Industrial Arts	<u>1</u>	<u>0</u>
TOTALS	1,279	340

TABLE VII
INSTRUCTIONAL COST

<u>Type of Instruction</u>	<u>Cost of Instruction (Includes Equipment)</u>	<u>*Cost per Student</u>
Reading	\$1,806,088.89	\$73.66
Mathematics	369,766.11	49.06
Pre-school (most projects are part time)	280,126.89	70.79
Language Arts	198,327.16	44.59
Music	167,460.61	22.98
Library	137,548.52	25.17
Physical Education	115,326.46	22.17
Special Education	105,943.00	390.93
Social Science	74,147.66	38.43
Art	63,729.70	23.10
Guidance	52,332.07	14.20
Speech Therapy	37,707.37	78.39
Natural Science	20,900.22	31.90
Industrial Arts	<u>750.00</u>	<u>50.00</u>
TOTAL	\$3,430,154.66	

*Refer to Table III, page 8 .

MAJOR ACCOMPLISHMENTS

More schools were visited and more services were provided to LEAs during fiscal year 1971 than in previous years. Additional staff visits were made possible by assigning the Director of Migrant Programs to monitor programs in the eastern one third of the State and hiring an additional full time staff member for the purpose of monitoring programs in the rest of the State. The monitoring is done to make certain that the LEAs are complying with the regulations and that the LEAs were operating within the approved project plan. Further work of monitoring personnel is to provide assistance in planning, development and evaluation of programs.

An additional member was added to the staff on July 1, 1971, with responsibilities in the area of evaluation of programs and the dissemination of information. The services of this member should make it possible to obtain more detailed and reliable information for the LEAs.

Regulations and Guidelines for Evaluating TITLE I PROJECTS in North Dakota (Appendix A) was developed and put into operation for fiscal year 1971. Its use is continued in fiscal year 1972.

Workshops were held throughout the State for the purpose of implementing the evaluation design as put forth in Regulations and Guidelines for Evaluating TITLE I PROJECTS in North Dakota. These workshops were also planned to assist LEAs in planning the program for fiscal year 1972.

Earlier submission of projects for approval by LEAs has become a reality. This makes it possible for schools to make fuller use of the Title I potential at the beginning of the school term.

It was decided that area of service to students would be funded on a very limited basis, if at all, in fiscal year 1972. It was felt that the money which was spent on these services could be put to more beneficial use to students if it were spent on the skills of reading, mathematics and/or language arts.

Greater emphasis was placed on individual or small group instruction especially in the area of reading.

More spacious facilities were obtained for the Title I staff. Even though this is an improvement, a concern of coordination with the rest of the staff of the Department of Public Instruction has developed as a result of this physical separation.

STATISTICAL DATA ABOUT PROJECT PARTICIPANTS

This portion of the annual evaluation report summarizes statistical data about project participants gathered from each project. The analysis reported below is based upon a sample of 48 projects which are representative of the projects operating in North Dakota.

Table I illustrates the averages of a number of selected program variables for the total sample as well as for the reading programs. The averages are based upon the number of participants and not the number of projects. As you will notice in this table, participants were absent on an average of slightly more than one additional day this past year than they were the preceeding school term.

TABLE I
Averages of Selected Program Variables
For the Total Sample and by Program

	<u>Total Sample</u>	<u>Reading</u>	<u>Basic Skills</u>
Cost per student	\$169.27	\$183.00	\$141.93
Years of teaching exp. of instructor	12.5	12.8	11.4
Average age of participant	10.1	10.0	10.0
Average grade in school	4.1	4.0	4.1
Average no. of years in school	4.3	4.3	4.3
Days absent last year	4.4	4.6	4.0
Days absent this year	5.5	5.4	5.4
Size instructional group	4.6	4.7	4.6
Hours in program	70.0	65.7	81.3
Years in similar program	1.1	1.1	1.0

Nearly one-half (49.0%) of the participants in the sample were involved in projects in which reading machines were used. About the same proportion (47.5%) used programmed materials. Only 18.8% indicated the use of games to facilitate learning. Most of the Title I participants (95.3%) were taught by female teachers. Ninety-two per cent of the sample participants were public school children. Slightly more money was spent per student in reading programs than the average of the total sample.

Approximately 26% of the participants in the sample projects were taught by teachers with a reading credential, with another 48% instructed by individuals with some special reading preparation. For reading programs the percentages were 35% and 45% respectively. Sixty per cent of the same pupils were taught by teachers with bachelor or higher degrees. Table 2 summarizes the number and per cent of participants taught by instructors with various levels of preparation.

TABLE 2
Preparation of Title I Teachers

	<u>Total Sample</u>		<u>Reading</u>		<u>Basic Skills</u>	
	N	%	N	%	N	%
1. Standard Degree	113	7.5	66	6.8	46	10.8
2. Standard Degree with some reading	328	22.6	244	25.2	79	18.6
3. Standard Degree with reading cred.	146	10.1	138	14.3	8	1.9
4. Bachelor Degree	228	15.7	105	10.8	96	22.6
5. Bachelor Degree with some reading	354	24.4	189	19.5	162	38.1
6. Bachelor Degree with reading cred.	223	15.4	206	21.3	17	4.0
7. Masters Degree	38	2.6	20	2.1	9	2.1
8. Masters Degree with some reading	8	.6			8	1.9
9. Masters Degree with reading cred.	<u>12</u>	.8	—		—	
AVERAGE	3.9		3.8		3.9	

The family income of participants is illustrated on Table 3. The average income was between "average" and "poorer than average" with 42% of the participants were from families with poorer than average income.

TABLE 3
Family Income of Title I Participants

	<u>Total</u>		<u>Reading</u>		<u>Basic Skills</u>	
	N	%	N	%	N	%
1. Poverty (less than \$3000 family income)	137	9.4	100	10.3	29	6.8
2. Poorer than average but not poverty	475	32.8	297	30.7	157	36.9
3. Average	739	51.0	517	53.4	201	47.3
4. Reasonably well off	95	6.6	50	5.2	38	8.9
5. Very well off	<u>4</u>	.3	<u>4</u>	.4	<u>—</u>	
AVERAGE	2.55		2.55		2.58	

More than 69% of the Title I sample participants showed improvement in their attitude toward school from the beginning to the end of the project. Only about 3% of the students exhibited a poorer attitude at the end of the project. That percentage held for the reading and basic skills participants as well. The attitude ratings were made by the teachers at the end of the project and summarized in Table 4.

TABLE 4
Attitude Change of Participants

	<u>Total</u>		<u>Reading</u>		<u>Basic Skills</u>	
	N	%	N	%	N	%
1. No Response	24	1.7	24	2.5	0	.0
2. Deteriorated a great deal	6	.4	2	.2	4	.9
3. Deteriorated somewhat	46	3.2	29	3.0	14	3.3
4. About same	369	25.4	252	26.0	97	22.8
5. Improved somewhat	679	46.8	456	47.1	198	46.6
6. Improved a great deal	<u>326</u>	<u>22.5</u>	<u>205</u>	<u>21.2</u>	<u>112</u>	<u>26.4</u>
AVERAGE	3.83		3.77		3.94	

Participants achieving various levels of gains (or losses) from pre to post tests as measured in grade equivalents are illustrated on Table 5. Nearly 60 per cent of the participants in the total sample gained more than one-half a grade level, and that per cent for the participants in the reading program was nearly 70 per cent. Eighteen per cent of the basic skills participants scored the same or lower on the reading post tests than on the pre test.

TABLE 5
Difference Between Pre and Post Reading Tests

<u>Grade Equivalent Change</u>	<u>Total Sample</u>		<u>Reading Program</u>		<u>Basic Skills</u>	
	N	%	N	%	N	%
-5 and more	34	2.3	14	1.4	14	3.3
0 - -.4	170	11.7	86	9.0	62	14.6
.1 - .5	393	27.1	208	21.5	176	41.4
.6 - 1.0	405	27.1	302	31.3	98	23.1
1.1 - 1.5	251	17.3	199	20.6	44	10.4
1.6 - 2.0	119	8.2	96	9.9	15	3.5
2.1 - 2.5	42	2.9	34	3.5	8	1.9
2.6 - 3.0	25	1.7	19	2.0	6	1.4
3.1 and more	<u>10</u>	.7	<u>8</u>	.8	<u>2</u>	.5
	1449		966		425	

Approximately 50 per cent of the participants in the basic skills programs achieved a gain of more than one-half of a grade level. Reading participants again had the lowest percentage gaining one-half a grade level or less as evident in Table 6.

TABLE 6

Difference Between Pre and Post Composite Test Scores

<u>Grade Equivalent Change</u>	<u>Total Sample</u>		<u>Reading Program</u>		<u>Basic Skills</u>	
	N	%	N	%	N	%
-.5 and more	6	1.2	6	2.3	1	.6
0 - -.4	30	6.4	20	7.5	21	12.1
.1 - .5	169	35.1	67	25.2	61	35.3
.6 - 1.0	133	27.6	87	32.7	49	28.3
1.1 - 1.5	79	16.4	55	20.7	25	14.5
1.6 - 2.0	35	7.2	19	7.1	16	9.2
2.1 - 2.5	21	4.4	9	3.4		
2.6 - 3.0	5	1.0	2	.8		
3.1 and more	<u>4</u>	.8	<u>1</u>	.4	<u>—</u>	
	482		266		173	

A summarization of reading test results is presented in Table 7. The average gain of all Title I participants on all tests used was .78 of a grade level while the reading participants gained .89. By dividing the pre-test score by the number of years in school, the average gain made by participants previous to this year was calculated. The average reading participant gained an average of .7 of a grade level previous to this year in which he gained .89. When relating the months between the pre and post testing dates, it becomes evident that all categories gained significantly more than one month for each month between tests.

TABLE 7

Reading Test Results from All Tests

Program	N	Pre	Post	Gain	Previous Gain/yr.	Months between tests	Gain in relation to months between tests
Total Sample	<u>1449</u>	<u>3.30</u>	<u>4.08</u>	<u>.78</u>	<u>.76</u>	<u>6.1</u>	<u>.17</u>
Reading	968	3.23	4.12	.89	.70	6.5	.24
Basic Skills	425	3.61	4.18	.57	.84	5.2	.05

The reading test results on the four most commonly used measures are shown in Table 8. These figures include all Title I participants in the sample, not only those taking part in the reading programs. The largest gain (.96) appeared for those tested with the Gates McGinite Reading Test.

TABLE 8

Reading Test Results on the Most Commonly Used Tests				
	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
ITBS	354	4.08	4.86	.78
SRA	283	2.87	3.71	.84
Gates McGinite	313	2.92	3.89	.96
Stanford	346	3.14	3.64	.50

Tables 9-12 further break down the reading test results by grade level for the most commonly used tests. The largest gains were achieved on the Gates McGinite Reading Test especially in grades 3 (1.16 grade-equivalent gain) and 5 (1.05 gain). The 1.28 grade equivalent gain on the reading subsection of the SRA Achievement tests for grade 5 was the greatest average gain. The least gains were evident on the Stanford Achievement Test in the lower grades.

TABLE 9

Reading Test Results by Grade on the Iowa Tests of Basic Skills

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
1	6	1.20	2.25	1.05
2	9	1.39	2.26	.87
3	64	2.53	3.60	1.07
4	68	3.44	4.17	.73
5	83	3.91	4.64	.73
6	64	5.29	5.88	.59
7	33	5.90	6.56	.66
8	<u>27</u>	<u>6.41</u>	<u>7.20</u>	<u>.79</u>
TOTAL	354	4.08	4.86	.78

TABLE 10

Reading Test Results by Grade on the SRA Achievement Test

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
1	14	1.44	2.06	.62
2	56	1.91	2.76	.85
3	69	2.53	3.27	.74
4	56	2.80	3.62	.82
5	39	4.14	5.43	1.28
6	22	4.50	5.49	.99
7	8	5.18	5.81	.63
8	<u>7</u>	<u>7.36</u>	<u>8.56</u>	<u>1.20</u>
TOTAL	283	2.87	3.71	.84

TABLE 11

Reading Test Results by Grade on the Gates McGinite Reading Test

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
1	44	1.51	2.19	.67
2	66	1.93	2.92	.99
3	51	2.49	3.65	1.16
4	68	3.12	4.06	.94
5	50	4.00	5.05	1.05
6	<u>23</u>	<u>4.54</u>	<u>5.26</u>	<u>.72</u>
TOTAL	313	2.92	3.89	.96

TABLE 12

Reading Test Results on the Stanford Achievement Test

<u>Grade</u>	<u>N</u>	<u>GE</u> <u>Pre</u>	<u>GE</u> <u>Post</u>	<u>GE</u> <u>Gain</u>	<u>MBT</u>	<u>Gain-MBT</u>	<u>Prev. Gain/yr.</u>
1	45	1.44	1.68	.24			
2	63	1.92	2.32	.40			
3	59	2.43	2.71	.28			
4	49	3.24	3.61	.37			
5	32	4.14	4.48	.34			
6	48	4.60	5.38	.78			
7	37	4.73	5.91	1.18			
8	<u>12</u>	<u>5.09</u>	<u>5.76</u>	<u>.67</u>			
TOTAL	346	3.14	3.64	.50			

Only a few of the Title I programs were strictly arithmetic in scope. Table 13 summarizes the test results of sample participants in this type of program. The average gain was nearly a complete grade level whereas the average gain previously for this group was .62 grade level. While the average time between tests was six months, the average gain was nearly four additional months when speaking in terms of grade equivalents.

TABLE 13

Arithmetic Test Results for Students in Arithmetic Programs

	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>	<u>Months be-</u> <u>tween tests</u>	<u>Gain in re-</u> <u>lation to MBT</u>	<u>Ave. Gain</u> <u>/yr. prev.</u>
Arithmetic Participants	56	3.66	4.65	.99	6.0	.39	.62

As part of the multiple regression analysis of the data, the correlations presented in Table 14 were generated. The items are identified on the page following the table. The highest correlations were between the participants age, grade, and years in school as would be expected. Since the object of this analysis was mainly to determine the relation between the various items and reading gains (Item 19,) the correlation of .197 between reading gains and attitude change was the most significant. Teachers sex was also positively related to grading games ($r = .158$) as well as the participants grade level ($r = .103$).

There seemed to be a slight indication that the higher the family income the less absences the student had. However, attitude change did not seem to be related to absences or income. Nor did the size of the instructional group, hours in the program or the preparation of Title I teachers seem to have a relationship to reading gains in this sample.

The use of games appeared to have a positive influence on attitude with a correlation of .124. " Attitude was also positively related to the years of teaching experience ($r = .101$) and negatively related to years in school ($r = -.115$). It seemed to be more difficult to effect positive attitude changes in older participants.

TABLE 14
Table of Intercorrelations

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
-.241	.611	-.302	-.434	.107	.006	-.071	.220	.202	.199	-.079	.072	-.030	.012	-.243	.322	.307	.005	.082	
					.216	-.205	-.029	.023	-.022	-.062	.088	.121	-.121	.030	-.151	.000	-.058	.003	
				.516	-.041	-.095	-.037	-.020	-.033	-.151	.037	.122	-.094	.089	-.118	.033	.049	.036	
					.110	-.008	-.189	-.201	-.205	.001	-.123	.061	-.103	.158	-.158	-.101	.124	-.091	
						.088	.015	-.012	-.008	.065	.015	-.016	-.045	.115	-.001	.058	.057	.158	
							.103	.147	.129	.010	.061	.024	.006	.045	.098	-.044	.012	.047	
								-.073	-.051	-.063	-.011	-.028	-.022	.010	.072	-.171	-.011	.101	.010
									.939	.963	-.223	.136	.000	.039	.079	.143	.424	-.097	.076
										.969	-.210	.140	-.004	.072	.077	.121	.399	-.103	.103
											-.208	.141	.003	.049	.067	.121	.430	-.115	.078
												-.037	-.039	-.047	.047	-.148	-.081	-.005	-.068
												.442	-.101	-.020	.015	.092	-.052	-.034	
													-.130	-.039	-.083	-.026	-.028	.008	
														.035	.042	-.058	.060	.017	
															.093	-.007	.002	.008	
																.051	.037	.030	
																	-.051	-.036	
																			.197

Item Identification for Inter-Correlation Table

1. Cost/pupil
2. Use of Reading Machines in the Program
3. Use of Programmed Materials in the Program
4. Use of Games in the Program
5. Teachers Sex
6. Teachers Preparation
7. Years of Teaching Experience
8. Participants age
9. Participants grade
10. Participants years in school
11. Public or non-public school
12. Days absent previous year
13. Days absent this year
14. Family Income
15. Size Instructional Group
16. Hours in Program
17. Years in Similar Activity
18. Attitude Change
19. Reading Gains

Using reading gains as the dependant variable, multiple regression analysis was completed on the sample data with the remainder of the items listed on the previous page used as independent variables. This analysis produced a multiple correlation of .353 accounting for 12.5 per cent of the variation in reading gain scores. In other words, the variables used did not account for a great deal of the differences in reading gains.

Analysis of variance for the regression is reported in Table 15. The F value of 10.20 was found to be significant at the .01 level.

TABLE 15
Analysis of Variance for the Regression

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value
Attributable to Regression	18	8777.25	487.62	10.20
Deviation from Regression	1290	61648.75	47.79	
TOTAL	1308	70426.00		

Using the step-wise regression analysis to eliminate the variables contributing the least to the prediction of reading gains, it was found that the change in attitude was the best predictor. The use of games in the project, years of teaching experience, and the participants age, grade and years in school were also predictors.

When the pre-reading test score was introduced as an additional independent variable, the multiple correlation increased to .425. A multiple correlation of .40 remained when the following variables were used in the prediction run: use of programmed materials, use of games, teacher sex, participant grade, previous years in Title I programs, pre-reading score, and attitude. Below are listed the variables in the order of importance in the prediction of reading gains. The multiple correlation is also reported as each independent variable was eliminated.

<u>Variable</u>	<u>R</u>
All variables	.42454
Cost/pupil	.42448
Size of Instructional Group	.42445
Hours in the program	.42431
Teacher experience	.42419
Pupil age	.42401
Family income	.42372
Teacher degree	.42303
Days absent this year	.42191
Public or non-public school	.41897
Use of reading machines	.41447
Days absent last year	.40859
Number of years in school	.39752
Use of programmed materials	.38328
Years in Title I programs	.36075
Use of games	.33687
Teacher sex	.31523
Pre-reading score	.23266
Pupil grade	.19657
Attitude change	

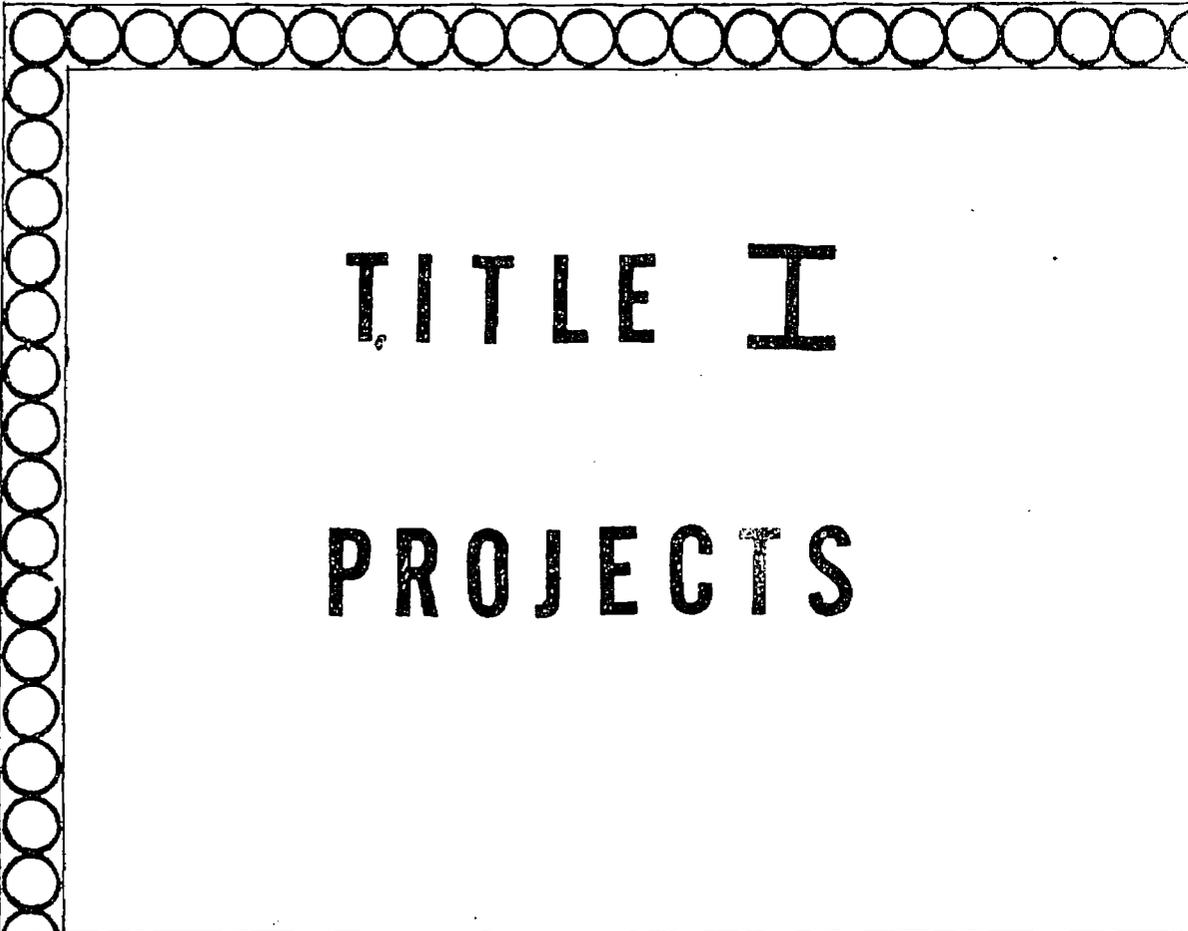
HIGHLIGHTS OF THE ANALYSIS OF THE SAMPLE:

1. Improved attitudes were found with 69.3% of the total sample.
2. Nearly 70% of the participants in the reading program gained more than one-half a grade level in reading.
3. More than 40% of the reading participants achieved greater than a one year gain in reading.
4. The average reading gain of the total sample was .78 grade equivalent and .89 for the participants in the reading programs.
5. Participants in arithmetic programs gained an average of .99 grade equivalents on arithmetic sub-tests.
6. Improvement in attitude was accompanied by an improvement in reading.
7. The cost per pupil, size of instructional group, hours in the program, and preparation of teachers had little relationship to reading gains.
8. The best predictors of reading gains were attitude change, use of games, and years of teaching experience.

A P P E N D I X A

REGULATIONS AND GUIDELINES

FOR EVALUATING



TITLE I

PROJECTS

IN NORTH DAKOTA



DEPARTMENT OF PUBLIC INSTRUCTION
M. F. PETERSON, SUPERINTENDENT
BISMARCK, NORTH DAKOTA

TABLE OF CONTENTS

	Page
Preface.....	3
Title I Evaluation Requirements at a Glance.....	4
Legal Responsibility.....	6
A Local Evaluation Plan - Necessary for Project Approval.....	9
State and Federal Title I Evaluation.....	16
Appendix A - Evaluation Designs.....	25
Appendix B - Evaluation Devices.....	32

PREFACE

This document is designed to provide assistance to North Dakota educators at the local level in satisfying Title I evaluation requirements at the national, state, and local levels. Title I laws and regulations require that an evaluation procedure be submitted with each proposal submitted. Therefore, each local educational agency preparing an application must consider, prior to its initiation, the evaluation procedure to be employed in the proposed project. Where more than one activity or service is included in the project application, the applicant is required to describe his plans to evaluate each activity or service, or set of related activities or service.

Much confusion has existed at all levels in the area of evaluation concerning the testing time frame and requirements, information collection needs, and performance objectives, among others. It is hoped that this document will serve to inform all concerned of the procedures which are being recommended or required in the administration of Title I. However, if there are evaluation questions which remain unanswered after reading this document, the Department of Public Instruction welcomes any questions or problems which you may have.

TITLE I EVALUATION AT A GLANCE

ALL PROJECTS:

- A. Every project director must submit an evaluation plan (Form I-A) with his project prior to approval of that project. Columns 1-4 of the form illustrated on page 10 must be used for this purpose.
- B. Every project director must submit a final evaluation of progress toward the objectives of the project. Column 5 on page 10 and the questions on page 11 must be used for this purpose. The due date is 10 days after completion of the project.

SAMPLE PROJECTS ONLY:

- A. A sample of about 40-50 schools will be required, in addition to A and B above, to complete the forms which are illustrated on pages 18 through 21. The objective test data, when fall testing is required, will be from the State-Wide Testing Program in which either the ITBS or SRA test is given at a time specified by the Director of Guidance of the Department of Public Instruction. Post-testing must be done with the same test as the pre-test. The due date is 10 days after post-test data becomes available. The following schedule will be maintained for testing in the various types of projects:

<u>Type of Project</u>	<u>Pre</u>	<u>Post</u>
Regular Term Project Only	Fall	Spring
Regular and Summer Term Program	Fall	Following Fall
Summer Term Project Only	Beginning of Project	End of Project

- B. A sample of schools will be required to participate in the Belmont Project. Descriptions of these forms are given on pages 22 through 24.

LEGAL RESPONSIBILITY

The congress of the United States recognized the crucial importance of evaluating educational programs when Title I of the Elementary and Secondary Education Act of 1965 (Public Law 89-10) was approved. Evaluation of local programs and statewide and nationwide evaluations were mandated. The regulations concerning the specifics of Title I evaluation have been revised, but such changes have been within the framework of the law, which is stated in the Title I legislation which follows:

"SEC. 141. (a) A local educational agency may receive a grant under this title for any fiscal year only upon application therefore approved by the appropriate State educational agency, upon its determination (consistent with such basic criteria as the Commissioner may establish)-

(6) That effective procedures, including provisions 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;

(7) 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 (which in the case of reports relating to performance is in accordance with specific performance criteria related to program objectives), 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;

(8) That the local educational agency is making the application and all pertinent documents related thereto available to parents and other members of the general public and that all evaluations and reports required under paragraph (7) shall be public information;

(10) 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;

SEC. 142. (a) Any State desiring to participate under this title (except with respect to the program described in section 141(c) relating to migratory children of migratory agricultural workers) shall submit through its State educational agency to the Commissioner an application, in such detail as the Commissioner deems necessary, which provides satisfactory assurance-

(3) that the State educational agency will make to the Commissioner (A) periodic reports (including the results of objective measurements required by section 141(a) (6) and of research and replication studies) evaluating the effectiveness of payments under this title and of particular programs assisted under it in improving the educational attainment of educationally deprived children, and (B) such other reports as may be reasonably necessary to enable the Commissioner to perform his duties under this title (including such reports as he may require to determine the amounts which the local educational agencies of that State are eligible to receive for any fiscal year), and assurance that such agency will keep such records and afford such access thereto as the Commissioner may find necessary to assure the correctness and verification of such reports.

SEC. 404. (a) No later than January 31 of each calendar year, the Secretary shall transmit to the respective committees of the Congress having legislative jurisdiction over any applicable program and to the respective Committees on Appropriations a report evaluating the results and effectiveness of programs and projects assisted thereunder during the preceding fiscal year, together with his recommendations (including any legislative recommendations) relating thereto.

(b) In the case of any such program, the report submitted in the penultimate fiscal year for which appropriations are then authorized to be made for such program shall include a comprehensive and detailed review and evaluation of such program (as up to date as the due date permits) for its entire past life, based to the maximum extent practicable on objective measurements, together with the Secretary's recommendations as to proposed legislative action.

(c) Unless the Congress-

(1) in the regular session in which a comprehensive evaluation report required by subsection (b) is submitted to Congress, has passed or formally rejected legislation extending the authorization for appropriations then specified for any title, part, or section of law to which such evaluation relates, or

(2) prior to July 1, 1973, by action of either House approves a resolution stating that the provisions of this subsection shall no longer apply,

such authorization is hereby automatically extended, at the level specified for the terminal year of such authorization for one fiscal year beyond such terminal year, as specified in such legislation."

The federal regulations, derived from the law, read as follows:

"Each application shall include a description of the performance criteria by which the local educational agency will evaluate the program or projects

proposed in the application. The State educational agency shall not approve a program or project for the improvement of educational performance unless it finds that performance criteria consistent with the objectives of the program or project have been set forth in the project application. The purpose of such criteria shall be to establish by reference to appropriate objective measures the change in educational achievement or performance the local educational agency desires to bring about through the implementation of one or more activities or services set forth in the application.

The local educational agency shall submit annually to the State educational agency a report on the evaluation of its program or projects. Such report shall include the performance criteria as set forth in the application and appropriate data showing whether or not the performances of the children involved has been raised to the levels specified by such criteria.

Each local educational agency shall submit to the State educational agency at least annually a report including the evaluation of its program or projects, the results of research carried out by the local educational agency into the incidence, nature, and scope of educational deprivation in its district, and the results of projects which were designed to replicate projects carried on by other agencies. The results of such replicated projects shall be compared with the results in the project selected for replication."

A LOCAL EVALUATION PLAN - NECESSARY FOR PROJECT APPROVAL

Detailed procedures for evaluation should be described according to the format suggested in the project application instructions for Title I. The evaluation procedure should be selected during the planning stage to insure the proper collection of necessary data both prior to and during the project. Preparation for the evaluation of each project should begin by listing the need or needs, the objectives arising therefrom in behavioral terms, and parallel listings of instruments to be used in evaluating progress toward each objective.

Although defining activities and educational experiences that will fulfill the stated needs will not enter directly into the evaluation activities, it is obvious that such activities must grow from the objectives. Further, if the activities are well chosen and carried out, the outcomes will be achieved. If the activities are not well chosen and carried out, the time, energy, and money spent on the project will be wasted. Educational activities must bear a rational relationship to the need the project is designed to fill.

The summary chart (Form I-A) which is required for Title I has been reproduced on page 10 and is a summary of your previously-submitted project description. The examples used are fictitious and incomplete and are used for illustrative purposes in this book. The plan for evaluation should include a brief description of the instruments or techniques (method of evaluation) which will be used to measure each outcome, the

(Text continued on Page 12)

NAME OF SCHOOL DISTRICT _____

SIGNATURE OF AUTHORIZED REP. _____

PROJECT NUMBER _____

EVALUATION SUMMARY SHEET

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Identified Need	General Goal	Behavioral Objective	Method (Means) of Evaluation	Results	On Site Rating	Performance rating
Reading ability below grade level	To improve word attack skills	Pronounces words not previously read	Teacher-made tests			
Too many students not graduating from high school	To retain able students in school until graduation	Higher proportion of students graduate each year	School records			
Students reflecting poor attitude toward school and activities	To improve student perception of value of classes and activities	1-Students do not deface property 2-Students attend activities regularly 3-Students say they like school	1-Survey of equipment, materials, and building 2-Count of those in attendance at activities			
Children with reading problems	To improve reading of selected children	Children will gain one grade equivalency in the various skill areas of reading	Pre- and post-testing with Gates-McGinnity Reading Test			

THIS FORM MUST BE SUBMITTED IN TRIPLICATE

schedule for applying the techniques, and any other information that might be of use in describing the nature of the techniques and objectives.

The first four columns of this summary sheet are to be filled out at the time of application for the project, the fifth column will be submitted by the school after the project is completed, and the final two columns are for use by Department of Public Instruction personnel for rating projects in terms of success in achieving locally developed objectives. Both on-site visitations and ratings based on reported results will be used.

In rating the projects, State personnel will use the following rating scale:

1. -- Effective evaluation procedures are used and the project is achieving its objectives with a high degree of success.
2. -- Effective evaluation procedures are used and the project is achieving some measure of success in meeting its objectives.
3. -- Effective evaluation procedures are used, but the objectives are not being achieved. Some modifications appear to be indicated.
4. -- Changes are suggested in the formulation of objectives and/or the means or method of evaluation.
5. -- Evaluation procedures as described in the evaluation plan were not effectively implemented.
6. -- Project should be revised to be more consistent with Title I emphases, guidelines, and regulations.

It is assumed, then, that evaluation is the process of determining the extent to which specified objectives have been reached. Stated in another way, evaluation is the process of assessing the extent and direction of

change resulting from an educational experience. The steps in filling out Form I-A are as follows:

Column 1. Identification of an educational need in terms of a deficiency, a gap in required competencies, or the absence of some desired behavior.

Column 2. Definition of general goals to be achieved through the experience to be evaluated. These goals should reflect the need which the educational experience is designed to alleviate.

Column 3. Translation of the educational objectives into behavior which will be displayed if the objectives are achieved.

Column 4. Selection and consequent application of an evaluation device or devices to all those participating in the educational experience. (See Appendix B for discussion of evaluation devices)

Column 5. Analysis of results and a statement of conclusions regarding effectiveness in terms of the extent to which objectives were achieved.

An Example

To illustrate the foregoing steps, let it be assumed that one of the objectives of a reading class is to be evaluated. Let it be assumed also that all pupils are unable to read aloud with a minimum of three errors at the start of the class and their inability to read constitutes the "educational need" referred to in Step 1.

General Goal: To teach pupils enrolled in the class to read new material at their instructional level.

Behavioral Objective: Students who have reached this objective will be able to read aloud a paragraph of new material of 100 words, making fewer than three errors.

Method of Evaluation: After an instructional period, each pupil will be given a chance to read 100 words of new material at his instructional level without making more than three errors.

Results: 24 out of 32 pupils reached or exceeded the standard and, based on these results, the project was deemed a success in this regard.

In addition to evaluating the final outcomes of an activity or project, continuous evaluation throughout a Title I project period is essential. Continuous evaluation means the process of making day-to-day observations and adjustments in the operation of a project to keep it functioning smoothly. Such observations and adjustments are usually a necessary part of the project, since it is literally impossible to anticipate the myriad of detailed decisions involved in a project until it is in actual operation. Obviously, these decisions and the solutions to unanticipated problems must occur within the framework of the overall objectives of the project. These decisions, often made on the basis of little or no available evidence, usually represent the best judgment of the teacher or project director in the light of the primary objective of the project. Reports of such decisions and problem solutions frequently have implications for utilizing the practice concerned in other situations.

Questions 1 and 2 on the back page of Form I-A are to be answered for each project and attempt to gather some subjective data concerning your project.

Questions 3 and 4 address themselves to the 1970 amendments to Title I which provide that research into the incidence, nature, and scope of educational deprivation in local districts should be reported. In other words, local districts are to report any research results which

have reference to the extent and types of educational deprivation in local districts. This type of research enables local districts to identify the educationally deprived child upon whom the money should be spent. The Office of Education supplies the following explanation concerning the term "educationally deprived child:"

"Title I, as the law now reads, is not designed solely to help poor children in school. It is designed to help what the law calls "educationally deprived children," who may or may not be poor. Perhaps the clearest expression of congressional intent on this point is the following:

No means test is required by the law and none should be imposed on public or nonpublic school children. /The mistaken idea that such a test is required/ undoubtedly originates from the fact that funds are distributed to school districts on the basis of the relative number of children coming from low-income families residing in the district. This device of distributing funds is used solely for the purpose of placing funds where the educational needs are greatest. ...The committee wishes to make clear...that though funds are distributed to districts on the basis of the relative numbers of children from low-income families, once appropriate public and nonpublic schools have been selected for programs, any child in attendance at such school who is in need of the special services is eligible to participate without regard to any financial needs test. (Elementary and Secondary Education Amendments of 1966: Supplemental Report of the Committee on Education and Labor, House of Representatives, Aug. 22, 1966.)"

The 1970 amendments also provide that the results of projects which were designed to replicate projects carried on by other agencies should be reported. Further, the results of such replicated projects shall be compared with the results in the project selected for replication. In other words, if a local district's project has been patterned after a successful and innovative project already completed elsewhere, the results should be compared with the results in the original and reported. Space is allowed on the second page of the Evaluation Summary Sheet for the purpose of both of these reports.

STATE AND FEDERAL TITLE I EVALUATION

Two evaluation programs are administered at the state and national levels. The first is the required annual evaluation report from each participating state; the second is the Belmont evaluation program, which is designed to provide evaluative data on a large number of federally-sponsored educational programs.

Annual State Evaluation Report

Each state which participates in Title I is required to submit an annual evaluation report of its projects to the U. S. Office of Education, said report has been collected through the use of the forms found on pages 18 through 21. In the past these forms have been completed by all projects. In the future, however, these forms will only be completed by a random sample of 40 to 50 school districts. The sample will also be changed frequently so that the same schools will not be involved every year.

The information in columns 20 through 26 of the form on page 20 should be from either the Iowa Test of Basic Skills (ITBS) or the SRA Achievement Test at the elementary level and the Iowa Test of Educational Development at the secondary level. The fall test, when fall testing is required, should be given as a part of the State-Wide Testing Program and at the time specified by the Director of Guidance with the Department of Public Instruction. The same tests should also be used as the post-test. The schools which have been selected for the sample will be

informed prior to or at the beginning of the school year of the responsibilities which will be expected to fulfill. The state annual evaluation report will then be developed using the data collected with these forms and a summary of the major findings, conclusions, and recommendations will be disseminated to each project director.

GENERAL INSTRUCTIONS

Only a sample of about 40-50 schools will be required to fill out the following forms. One form titled Project Information requests items of information concerning the project as a whole. This form must be completed in its entirety for each project. A second form, Participant Information, requests data about each pupil participating in academic programs or programs being evaluated by means of standardized achievement tests. This form must be completed only if the project has an academic component.

These evaluations are due ten days after the post-test data becomes available. Those with Summer Projects are to complete the enclosed forms at the end of the Summer Project and need not complete the forms until then. The following schedule will be maintained for testing in the various types of projects:

<u>Type of Project</u>	<u>Pre</u>	<u>Post</u>
Regular Term Project Only	Fall	Spring
Regular and Summer Term Program	Fall	Following Fall
Summer Term Project Only	Beginning of Project	End of Project

The final Title I payment will be withheld until an acceptable evaluation is received. If you have questions, please call Title I Evaluation, 255-4681, in Bismarck, North Dakota.

Please keep one copy and return three copies of all forms to:

Mr. Warren Pederson, Coordinator
 Title I, ESEA
 410 East Thayer Ave. Suite 21
 Bismarck, North Dakota 58501

TITLE I, ESEA EVALUATION REPORT

PROJECT INFORMATION

1. Project Number _____ 2. District Name _____
Address _____
3. Name of Authorized Representative _____ Tele. _____
4. Name of Project Evaluator _____ Tele. _____
5. Title of Project _____

6. Unduplicated Count of Participants: Public _____ Non-Public _____ Total _____
7. Total funds expended for this project: \$ _____ Cost per Pupil: \$ _____
8. If this project includes more than one phase (e.g., Reading and Physical Education), complete the following for each phase:

Phase	Total Cost	Participants			Cost per Pupil
		Public	Non-Public	Total	

INSTRUCTIONS FOR PROJECT INFORMATION FORMS

1. Insert the project number assigned by the Department of Public Instruction.
- 2-5. Provide the information asked concerning the administering district.
6. Enter an unduplicated count of participants in the Title I Project.
7. Enter the total amount of funds expended for this project and calculate the per pupil cost by dividing the total cost by the total number of participants from Item 6.
8. If your project included more than one phase, please list each phase; estimate the portion of the total funds expended for that phase; list the number of public, non-public, and total school participants; and calculate the cost per pupil for each. The total of the costs for all phases should equal the total reported in Item 7.

INSTRUCTIONS FOR TITLE I TEACHERS

You should receive sufficient copies of this form for you to keep one copy for your files. Please furnish the information requested as completely as possible. Make "best estimate" judgments when you are not sure. Specific instructions for each item follow:

1. Enter your name.
2. Indicate your sex.
3. Enter the number of full years of full-time teaching experience which you have had including this year.
4. List your highest degree.
5. List the majors for all your degrees.
6. List the credentials you have and/or any special preparation which you have which makes you better qualified to carry on this Title I activity, such as Provisional Reading Credential, reading workshops, graduate work in special education, etc.
7. Enter the name of the Title I students with whom you work. If another Title I teacher also works with these students, the information requested in Items 6 through 10 and 16 through 25 need only be provided once. However, all of the names, as well as Items 11 through 15, should be completed by each teacher and the other information must be listed once.
8. Enter the age of the participant to his nearest birthday.
9. List the participant's grade level.
10. Enter the number of years that this pupil has been in school. This will correspond to the grade unless the pupil has failed a grade.
11. Indicate whether the participant is a public or non-public school pupil by placing P or NP in this column.
12. Enter the number of days that this pupil had been absent from school last year (1968-69).
13. Enter the number of days that this pupil has been absent from school this year (1969-70).
14. Estimate the family income level by entering the appropriate code number from the following list:
 1. Poverty (less than \$3,000 family income)
 2. Poorer than average, but not poverty level
 3. Average
 4. Reasonably well off
 5. Very well off
15. List the type(s) of program in which this pupil participated by entering the appropriate code from the list below:
 1. Reading (Include Basic Skills Limited to Reading)
 2. Arithmetic
 3. English Usage
 4. Other Academic Program (Include Basic Skills which are not limited to Reading)
 5. Cultural Enrichment
 6. Physical Health
 7. Pupil Personnel Services
16. Indicate the average size of the Title I instructional group in which this pupil generally participated under your supervision. For example, if the group in which this pupil received help generally consisted of three students, enter 3.
17. Enter the number of hours that this pupil participated in the program listed in Item 15. If the pupil was in the program two hours per week for 18 weeks, enter 36.
18. List the number of years that this student has participated in similar Title I programs excluding this year.
19. Enter the code of the test administered using the following codes: (Both pre and post testing must be done with the same test.)
 1. Iowa Test of Basic Skills
 2. Iowa Test of Educational Development
 3. SRA Achievement Series
 4. Gates MacGinitie Reading Test
 5. Other test (please specify)
- 20-22. Enter the pretest scores in grade equivalents for Reading (20), Arithmetic (21), and Composite (22). If the test scores are not reported exactly as the categories above, enter those that are most similar to the above scores.
- 23-25. Enter the post test scores as explained in Items 20, 21, and 22.
26. Enter the number of months that have elapsed between the administration of the pre and post tests. For example, if the pretest was administered on September 21, 1969 and the post test on April 15, 1970, seven (7) months would have elapsed between tests. If the post test will be administered in the fall of 1970, please insert the month and year that the pretest was given.
 1. Deteriorated a great amount during the project.
 2. Deteriorated some during the project.
 3. About the same at the start of the project.
 4. Improved some during the project.
 5. Improved greatly during the project.
27. From the following list, code the change in attitude toward school during the project shown by each child:
 1. Deteriorated a great amount during the project.
 2. Deteriorated some during the project.
 3. About the same at the start of the project.
 4. Improved some during the project.
 5. Improved greatly during the project.
28. Do not write in this column.

THE BELMONT PROJECT

The Belmont instrumentation is also required of a sample of North Dakota schools. In 1966-1970 the sample was made up of about 50 of the larger school systems in the state. At the present time two instruments are operational and will be filled out at different times of the year. The instruments are the Consolidated Program Information Report (CPIR) and the Pupil Centered Instrument (PCI). Descriptions of the forms are given below. Schools in the sample will be so informed prior to the time of the distribution of the forms and assistance will be provided by the Department of Public Instruction.

Consolidated Program Information Report

The CPIR is designed to serve three broad purposes: (1) to permit State and Federal program officers to determine the extent to which Federal/State programs and services reach pupils and schools as intended; (2) to assess the broad elements of program effectiveness and efficiency at the local district level; and (3) to satisfy Federal statistical reporting requirements for Federal Funds. The CPIR will replace many of the 123 statistical reports that were previously required by U.S.O.E. It is tentatively planned to have vocational data needs merged into the FY 1972 CPIR. In replacing these various reporting requirements, the CPIR and its central analysis, together with the capability for feedback to all management levels, will provide the capability for direct output of summary and raw data to LEA's, and the SEA's as well, which have been

previously unavailable. It is presumed that these data availabilities will increase the capability of Agency and Grants Managers to monitor and improve the management activities for which they are responsible.

Among the data that will be collected by this instrument are:

- (1) Dollars expended by source of funding.
- (2) Services and programs provided by these funds.
- (3) Identification of the number of children by target group needing services and number benefiting from the programs and services.
- (4) Staffing patterns by programs and services.
- (5) In-service education by source of funding.

The instrument will for the first time provide a coordinated look at the various Federal funding programs impacting on local school districts.

Pupil Centered Instrument (PCI)

The PCI consists of four parts designed to gather data on the school district, the school, the teacher, and the pupil. Part of the Pupil Centered Instruments will be aimed at determining the extent to which individual students participate in the various project and activities described through the Project Descriptor. In addition, the Pupil Centered Instruments will gather data on the background of the students participating in the projects, and their school achievement.

The School District Questionnaire collects the following types of data:

- (1) general information (including salary data and number of schools in the district);
- (2) test data information;
- (3) parent involvement information;
- and (4) personnel training information.

The Principal Questionnaire collects data of the following types:

- (1) general school information (including location, membership, and attendance data);
- (2) instructional organization;
- (3) school facilities;
- and (4) student body description.

The Teacher Questionnaire collects the following types of data: (1) teacher background; (2) class characteristics and organization; (3) teaching method and program of instruction; and (4) teaching concerns.

The Pupil Questionnaire collects data as follows: (1) general information (including grade, sex, age, and absences); (2) pupil background characteristics; (3) academic program participation; (4) ancillary service participation; (5) pupil behavior; (6) pupil performance.

This instrument will be completed by a sample of schools, and the teacher and pupil questionnaires will be completed on a sample basis within these schools.

A P P E N D I X A

EVALUATION DESIGNS

Many different designs have been developed for purposes of educational evaluation, but most projects can be evaluated satisfactorily using one of the following types of design. Although these designs vary considerably in complexity, careful study of them reveals that they can be differentiated according to the source of the comparative data with which changes in the project group are contrasted. Two sources for comparison are immediately apparent: (1) data derived from within the project group itself and (2) data obtained from pupils or groups outside the project. Within each of these two major categories are three designs arranged in approximate order of complexity.

Comparison Data Derived Within the Project Group

When characteristics of a project group are measured at the start and at the end of a project, the initial measurement can be used as a point of comparison whenever more interpretative data are unavailable. In effect, change in these designs is a matter of moving away from the original position. The value of the change in such an instance must be derived from description only, from statistical analysis, or from an absolute standard, such as complete mastery of some task.

Design A. Title I Project Group Characteristics Compared with An Absolute Standard (100%). Basic data consist of simple numerical counts with the project data.

Example 1. Proportion of eligible tenth, eleventh, and twelfth grade students enrolled in a work study program.

Example 2. Proportion of former students enrolling in selected post-secondary educational programs.

Example 3. Proportion of parents accepting and participating in conferences with teachers.

Example 4. Proportion of students retained in school between the eleventh and twelfth grades.

In all these examples it is assumed that the standard is 100 percent and that the closer the results are to 100 percent, the more effective the experience has been.

Design B. Final Measurement of a Title I Project Group Compared with Initial Measurements. Basic data consist of raw scores, derived scores, ratings, or ratios within the project group.

Example 1. To evaluate a first grade reading project, a comparison can be made of scores earned on a standardized reading test administered in the fall, when the project began, and again at the end of the project year.

Example 2. To assess change in social competence associated with a Title I project, ratings of observers made at the start and at the end of the project can be compared. Each pupil's post-test deviation from his pre-test position is then noted and overall differences are tested for statistical significance.

Design C. Final Measurement in a Title I Project Group Compared with Projected or Hypothesized Measurement Based on Past Progress of the Group. Basic data required at least one measurement made prior to the start of the project and one measurement at a later date.

Example 1. If an educationally handicapped group at grade level 4.0 is achieving at 2.0 at the start of a project, then the projection for achievement one year later will be 2.5 if

proportional growth is assumed. Actual growth in the Title I group would then be compared with the "projected growth."

Example 2. Average intelligence quotients of 97, 93, and 89 were recorded in grades one, three, and five respectively for members of a Title I group. In the seventh grade, the projected average would be 85. (Often, the attainments of socially disadvantaged children have been recorded progressively further below average as yearly evaluations have been made.)

Example 3. Numerical values based on the physical condition of elementary school pupils participating in a Title I project had been 28, 29, and 28 on three consecutive years prior to the commencement of the project. At the start of the project, the mean score was 29, and at the end of the project, the mean score was 34. On the basis of the previous trends, the projected score would be 28. When the projected score is used as a point of comparison, the effectiveness of the project activity can be estimated by comparing obtained and expected outcomes.

In Design C, the results can be analyzed statistically by considering the obtained results as a sample and the projected standard as a population parameter.

Comparison Data Derived Outside the Project Group

In addition to the three foregoing designs in which data for comparison were obtained from within the project group, many designs exist for making comparisons with data external to the project itself. Three of these are described in this section.

Design D. Change in Title I Project Group Compared with a Designated

Norm. Basic data are expressed as project group scores obtained at the start and at the end of a project and scores of a comparable group.

Example 1. When a nationally standardized achievement test is administered to a project group, the change in achievement of students in the project can be compared with expected change based on published norms. The percentage of the project group falling at or below the same point in the standardization group distribution (such as the median or 25th percentile) permits an especially meaningful comparison. Local conditions should be considered in specifying the most useful point of comparison.

Example 2. A norm is obtained from a different evaluation device administered to the same group: When ability and achievement tests are given to the same students, a comparison of pairs of standard scores or ranked positions can be made. Or, correlations between ability and achievement can be computed both at the start and at the end of the project period. In this instance, it is assumed that the norm for achievement is indicated by the ability displayed by the student.

Example 3. A norm is obtained from a different evaluation device administered to a different group. When achievement and ability tests are administered to a group, it is possible to make meaningful comparisons by converting the performance on the two tests to similar units, such as standard scores.

Design E. Change in Title I Project Group Compared with Change in

Previous Class. Basic data are expressed in any type of unit. A previous

year's class may be designated as the source for a standard, provided the pupils have comparable backgrounds and that the same evaluation devices were used to measure change at the appropriate times. The data from the Title I projects are, then compared with the data collected earlier.

Example 1. Following a nine-month reading improvement project, pupils in a project group showed a gain of 1.2 grade levels in reading. Gain for the previous year's class in the same school on the same test over the same period was .8 grade levels. Because of differences in the size of units along the grade placement scale, however, increments of gain expressed as months or grade levels should be interpreted very carefully. For example, two gains in reading score are comparable only if the pupils started from the same level. In general, standard scores provide a more meaningful comparison than grade placement units, since standard score units are more nearly equal throughout the range of the distribution.

Example 2. Scores on a vocabulary test increased from 65 to 84 for a Title I project group. This compares with a gain from 65 to 81 for lastyear's group. If desired, statistical significance can be determined by contrasted the two distributions.

Design F. Change in Title I Project Group Compared with Change in a Current Control Group. Basic data are expressed in any type of unit and consist of scores for two groups. A control group, as used here, is one similar to the Title I group with respect to the variables important to the specific activity or project, such as ability, socioeconomic level, etc. Ideally, the students are assigned randomly to the Title I and the control groups. However, such assignment is not necessary when it can be assumed

that the students in both groups are equally prepared for the project's educational experience. The control group can be drawn from students outside the Title I project area who have the same type of deprivation.

Example 1. Both groups are required to take a comprehensive achievement test in October to establish a baseline and are required to repeat the test in May. Percentage in each group falling below the national median provides the comparison.

Example 2. Change in attendance record and holding power in a project school can be compared and contrasted with change in a control school during the same period.

Example 3. Change in kinds and severity of adjustment problems reported in a project group may be compared and contrasted with control group data obtained during the same period.

A P P E N D I X B

EVALUATION DEVICES

A comprehensive evaluation program will go well beyond testing for the mere acquisition of specific skills, facts, and knowledge of the cognitive domain. Comprehensive evaluation will extend into the measurement of the student's ability to interpret, to evaluate, and/or to extrapolate information to solve real problems. In fact, the purpose of American education goes far beyond student achievement in the cognitive domain to include concern for areas such as:

- the affective domain - attitudes, motivations, interests, adjustment, anxieties,
- social development - acceptance, recognition, belonging, leadership, interaction,
- physical development - general health and ability, speech, motor skills, dexterity, and
- academically related problems - reaction of employers, continuing professional development of teachers.

Attitude scales, personal evaluation, sociometric devices, speech pathology surveys, audiological surveys, physical examinations, participation in recreation program surveys, and many other instruments and devices may be used with professional observations of behavior to collect evidence about the total educational endeavor.

Standardized Tests

Whenever possible, "objective measures of educational achievement" will be used for the evaluation of Title I projects. In most instances this will

mean nationally standardized tests. Extreme care must be taken, however, to assure that the standardized tests are valid measures of the objectives. For example, if an objective involves spelling words correctly while writing, the typical standardized spelling test wherein the pupil is asked to judge the correctness of printed words will not suffice for evaluation of this objective. This is another way of saying that the evaluation devices must be direct outgrowths of the objectives.

Supplementary Devices

Some local educational agencies may have difficulty reporting significant changes in educational attainment for a project group, because the nature of the project is such that conclusive results will not be available for two or three years. In the interim, however, individual cases may serve to demonstrate meaningful increases in educational attainment.

Case Studies: Appraisals by teachers or Title I project directors of changes in attitudes and behavior must be well documented to be reliable. Each teacher in the course of observing and testing his students, as well as in numerous other ways, acquires many important facts about them. For reporting purposes under Title I, it would be helpful if the accumulated facts were presented in terms of some specific aspect of the participant's development. Such appraisals should be based on more than mere "feeling," for a "feeling" can not be replicated or checked. This is not to say that a "feeling" is not useful, but that, to be of convincing value, it must be supported by a carefully marshalled, detailed description of cases and observations. Observations are a more reliable evaluative device if made by skilled "outside" observers not connected with the project or program.

Anecdotal Records: Anecdotal records may be employed by teachers and counselors to evaluate Title I projects. An anecdotal record consists of an accumulation of a series of observations on a significant aspect of a

student - his leadership qualities, reading achievement, socialization. The individual report of each incident should be a brief, clear, objective statement of what took place. Interpretation or recommendations may be included, but on separate sections of the anecdotal card or form. The observations must be objectively recorded and taken at periodic intervals in order to show individual development. Teachers and other project personnel may need to train themselves to observe incidents and to record them at a later time.

Related Devices: Attitudinal scales, personal evaluations, teacher rating forms, pupil self-rating inventories, audiological surveys, physical examinations, participation in recreation program surveys, and many other instruments and devices may be used along with professional staff observations to collect evidence about the total impact of Title I projects.

A P P E N D I X B

STATEMENT OF AGREEMENT BETWEEN PUBLIC AND NON-PUBLIC
SCHOOLS FOR COORDINATION OF PROJECTS TO BE FUNDED
UNDER TITLE I, E.S.E.A.

THIS AGREEMENT entered into this _____ day of _____, 19____,
between the _____ district, a local educational agency
within the meaning of Title I, Elementary and Secondary Education Act of 1965
(P.L. 89-10, 79 State. 29), hereinafter referred to as the LEA, and the non-
public school(s) within the LEA and named below in paragraph one (1) for
the purpose of implementing the provisions of said Act relating to aid to
educationally deprived children, with provisions, terms conditions, and
mutual agreements, as follows:

1. Parties to agreement:

- A. _____
(Official Name of Local Educational Agency)
- _____ (Mailing Address of LEA) _____ (Phone Number of LEA)
- _____ (Name of Authorized Representative of LEA) _____ (Title of Auth. Rep.)

B. Legal name(s) of all non-public school(s) enrolling pupils residing
in eligible LEA attendance centers:

- 1. _____ (Name of Non-Public School) _____ (Address of Non-Public School)
- _____ (Name & Title of Authorized Rep. of Non-Public School) (Phone #)
- 2. _____
- _____
- 3. _____
- _____
- 4. _____
- _____
- 5. _____
- _____
- 6. _____
- _____

2. The duration of the agreement shall be from _____ to _____.

3. The activities covered by this agreement shall be administered and supervised by the LEA through its authorized representative.
4. The purpose of the agreement is to provide educational services for educationally deprived children enrolled in the non-public schools.
5. All activities covered by this agreement shall be financed by Title I funds allocated to the LEA and approved for use in a Title I project by the State Educational Agency.
6. This agreement may be terminated by mutual consent of the signers at any time during the school year except that any one or more of the non-public schools listed in paragraph one (1) may withdraw from the program by an agreement executed by such a school or schools and LEA. Title to all property purchased for use in Title I projects is vested in the LEA and shall be removed from the premises of the non-public school(s) at the completion of project activities.
7. All Title I project applications covered by this agreement must be in accordance with provisions of the Federal Act P.L. 89-10, implementing pertinent state statutes and pertinent opinions of the Attorney General.
8. The parties hereto shall cooperate with existing Community Action Agencies prior to the preparation and filing of the Title I application.
9. Before entry into force, this agreement must be approved by the State Department of Public Instruction.
10. \$ _____ Total amount of money allocated to LEA this current year.

11. LEA ATTENDANCE CENTERS ELIGIBLE FOR TITLE I PROJECTS

	Name of the School	Total Enroll.	# Educ. Deprived
1.			
2.			
3.			
4.			
5.			
6.			

12. NON-PUBLIC SCHOOLS ENROLLING PUPILS RESIDING IN ELIGIBLE LEAS ATTENDANCE CENTERS

	Name of the School	Total # Residing in LEA	# Educ. Deprived
1.			
2.			
3.			
4.			
5.			
6.			

13. TITLE OF PROJECT OF LEA DURING CURRENT YEAR. NUMBER OF JOINT MEETINGS WITH NON-PUBLIC SCHOOL IN PLANNING THE PROJECT

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14. The following services will be made available to non-public school children residing in eligible public school attendance areas.

Name of Service	Provided in		Hours or Extent of Service
	Public School	Non-Pub. School	
1.			
2.			
3.			
4.			
5.			

15. Yes No. Will movable equipment and materials be loaned to non-public schools during the length of the project?

	Name of Major Items	No. Items	Approximate Cost
1.			
2.			
3.			
4.			
5.			
6.			
7.			

16. If services (remedial, therapeutic, health, welfare, guidance, and counseling) are offered in the non-public schools or if equipment is loaned, such schools agree to:
- Provided available facilities for implementation of project activities.
 - Limit participation to those children identified as eligible for the stated activity.
 - Cooperated in evaluation procedures set up by the LEA.
 - Comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) as attested by completing and filing with the LEA for HEW-441.
17. Comments pertinent to this project affecting the agreement:

18.

AFFIDAVIT: The terms of this agreement are understood and mutually acceptable.

(Signature of Authorized LEA Rep.) (Date Signed)

(Signature of Auth. Non-Public Rep.) (Date Signed)

Note: In case of Catholic Non-Public Schools, this agreement is signed by the Superintendent of Schools of the Diocese in which the LEA is located.

FOR STATE USE ONLY:

Approved this _____ day of _____, 19____, State Department of Public Instruction

By _____