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ABSTRACT

Intended to improve language and reading skills of selected underachieving students, the 1988-89 Compensatory Language Experiences and Reading Program (CLEAR) of the Columbus, Ohio, public schools served 4,902 pupils in grades 1-8 in 102 schools. The program featured individual and small group instruction arranged according to pupil needs, as well as projects utilizing computer-assisted instruction (CAI). The program was evaluated through administration of the Comprehensive Tests of Basic Skills as pretest and posttest. Test results indicated that of 2,352 pupils with good attendance records who were native speakers of English, average test score gain was 5.9 Normal Curve Equivalent (NCE) points for the 5.7 months of instruction, which met the program objective of 1.0 NCE per month of instruction. Analysis by grade revealed that the objective was met in grades 3 and 4. Average NCE gains for students using CAI were higher than those for the regular group in grades 2 and 3 and lower in the remaining grades. Recommendations include determining the cause for less growth at certain grade levels, continuing the Whole Language treatment group, encouraging more parent participation, and improving coordination with classroom teachers. (Fourteen tables of data are included; appendixes include four additional tables of data, and survey and evaluation instruments.) (RS)

Education Consolidation and Improvement Act - Chapter 1

FINAL EVALUATION REPORT
LANGUAGE DEVELOPMENT COMPONENT
COMPENSATORY LANGUAGE EXPERIENCES AND READING PROGRAM

July 1989

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Education Consolidation and Improvement Act - Chapter 1

FINAL EVALUATION REPORT
LANGUAGE DEVELOPMENT COMPONENT
COMPENSATORY LANGUAGE EXPERIENCES AND READING PROGRAM
1988-89

ABSTRACT

Program Description: The Compensatory Language Experiences and Reading (CLEAR) program served 4902 pupils. Funding of the component was made available through the Education Consolidation and Improvement Act--Chapter 1 of 1983.

The purpose of the Compensatory Language Experiences and Reading program (CLEAR) was to provide assistance to selected underachieving pupils in grades one through eight in order that they might attain more fully their potential for and improvement of language and reading skills. The program featured individual and small group instruction arranged according to pupil needs, as determined by continued cooperation between the program teacher and the classroom teacher. Various subgroups of program teachers were provided with a total of 18 inservice sessions.

Within the CLEAR program there were two projects utilizing Computer Assisted Instruction/Computer Management System (CAI/CMS), one at the elementary level and one operating in middle school. A variety of computer systems was used in the CAI/CMS projects.

Time Interval: For evaluation purposes, the CLEAR program started on October 3, 1988 and continued through April 7, 1989. This interval of time gave 114 possible days of program instruction. Pupils included in the final pretest-posttest analysis must have attended at least 91 days (80%) during the time period stated above.

Activities: Implementation of the program was accomplished through daily instructional activities to strengthen and extend regular classroom instruction without pursuing the basic reading textbooks. Instructional techniques and materials based on skill-centered objectives were applied to fit individual needs.

Achievement Objective: The average language/reading growth for the pupils who attended the program for at least 80% of the instructional period will be 1.0 Normal Curve Equivalent (NCE) point for each month of instruction. Growth will be measured by a nationally standardized achievement test of language/reading.

Evaluation Design: The major evaluation effort was accomplished through the administration of the Comprehensive Tests of Basic Skills, with the exception of grade 1, which received the Metropolitan Achievement Tests, Sixth Edition (MAT6). Analyses of the pretest to posttest data were primarily in terms of NCEs.

Major Findings/Recommendations: The information collected on the Pupil Census Forms indicated the program served 4902 pupils for an average of 3.7 hours of instruction per week. The average daily membership in the program was 4000.1

pupils. The average days of enrollment per pupil was 93.0 days and the average attendance per pupil was 83.5 days. The average number of pupils served per teacher was 45.7.

The attendance criterion was met by 2897 pupils, which was 59.1% of the 4902 pupils served. The evaluation sample consisted of 2352 pupils who met the attendance criterion, took the pretest and posttest, and were English-speaking.

Analysis of pretest-posttest achievement data for the grade 2-8 evaluation sample indicated an average gain of 5.9 NCE points for the 5.7 month treatment period, or 1.0 NCE point per month of measurable instruction. Grade 1 scores have not been reported in the narrative or included in the total program averages due to the inappropriateness of the pretest and posttest levels. The MAT6 results may not reflect true pupil performance for certain programs and groups of pupils. The program (excluding grade 1 results) attained the 1.0 NCE point per month criterion score for the program's performance objective. When data were analyzed by grade, it was noted that the evaluation criterion was met or exceeded in grade 3 (2.1 NCEs per month) and grade 4 (1.3 NCEs per month). The evaluation criterion score was not met at grades 2, 5, 6, 7 or 8. Comparisons of achievement test data were also made between pupils in the CAI/CMS projects and pupils in the same grade levels of the regular treatment projects. At the regular primary level (grades 2-3), the average NCE gains for the year were 9.4 for the CAI/CMS group and 6.9 for the regular group. At the intermediate level (grades 4-5), the average gains for the year were 6.6 for the regular group and 5.1 for the CAI/CMS group. At the middle school level the average NCE gains for the year were 4.1 for the regular project and 3.6 for the CAI/CMS project. Additional comparisons of NCE scores were made among three teaching methods at the primary level for grades 2 and 3. Gains in NCE scores for the year among the three teaching methods were as follows: grade 2—regular group 3.6, Whole Language group 2.9, and CAI/CMS group 1.4; and grade 3—Whole Language group 12.3, regular group 12.2, and CAI/CMS group 10.7.

Process evaluation at the primary level focused mainly on implementation of the CLEAR-Primary pilot Whole Language units of the CLEAR-Elementary project. Data obtained from on-site observations indicated strong evidence that the program was being implemented at the time of the visits. One concern expressed by some teachers in the pilot group involved how to coordinate with classroom teachers given program scheduling problems.

Interviews conducted with regular and CAI/CMS middle school teachers indicated problems in the following areas: parent involvement, joint planning with classroom teachers, temperature/ventilation in reading labs, testing environment during the posttest, delays in receiving test results, and delays in getting work-orders filled. The area of class scheduling received high ratings at the middle school level.

A questionnaire distributed to teachers in CAI/CMS labs indicated that a variety of computer systems was used in the CAI/CMS portion of the program. The most prevalent computer system was Prescription Learning which was used at the elementary level. For the most part, pupils worked at a computer station between 40 and 50 percent of their program instructional time.

Based on evaluation results, it is recommended that the CLEAR program be continued during the 1989-90 school year. In addition, program recommendations include: (a) try to determine cause for less growth at certain grade levels; (b) continue the Whole Language treatment group (c) actively encourage more parent involvement; (d) send home reading materials for pupils to read at home and involve parents in the process; and (e) improve coordination with classroom teachers.

Education Consolidation and Improvement Act - Chapter 1

FINAL EVALUATION REPORT
LANGUAGE DEVELOPMENT COMPONENT
COMPENSATORY LANGUAGE EXPERIENCES AND READING PROGRAM

July 1989

Program Description

The purpose of the Compensatory Language Experiences and Reading (CLEAR) program was to provide assistance to selected underachieving pupils in grades one through eight in order that they might attain more fully their potential for and improvement of language and reading skills. To accomplish this purpose the program featured individual and small group instruction arranged according to pupil needs, as determined by continued cooperation between the program teacher and the classroom teacher. Instructional techniques and materials based on whole-language techniques and skill-centered objectives were applied to fit individual needs. Inservice was provided for program teachers.

The CLEAR program first operated in 1978-79 when previous Primary and Intermediate Language Development Programs were combined to achieve greater continuity and consistency of service for elementary school pupils. The first Computer Assisted Instruction/Computer Management System (CAI/CMS) unit in the CLEAR program was piloted in the second semester of the 1981-82 school year in one elementary school. In 1988-89 the CLEAR program was staffed by 128 teachers serving 102 public and seven non-public Chapter 1 eligible schools. Of the 102 public schools, 26 were middle schools. Of the 128 teachers in the program, 36 utilized computers in their instruction, and 48 primary teachers participated in a pilot group utilizing a whole-language approach. Twenty-four of the 36 CAI/CMS teachers served in both the CLEAR program and the Mathematics Improvement Component. Evaluation of the Mathematics Improvement Component is reported separately (Thomas, 1989). Eight of the primary teachers served in both the CLEAR pilot group and in the CLEAR-Reading Recovery project. Evaluation of CLEAR-Reading Recovery will be reported in a separate report. In terms of full-time equivalency (FTE), the CLEAR program was staffed with 107.25 teachers. Each teacher provided services to a maximum of 40 elementary pupils or to a maximum of 56 middle school pupils at any given time, with the exception of the CAI/CMS units. Since the use of microcomputers was intended to expand the number of pupils served, elementary and middle school CAI/CMS teachers served a maximum of 60 pupils. Those serving both reading pupils and mathematics pupils served a maximum of 28 to 32 pupils in each project.

Within the CLEAR program three projects (elementary, middle, and non-public) received regular reading instruction and two projects utilizing Computer Assisted Instruction/Computer Management System (CAI/CMS) operated at the elementary and middle school levels. The elementary CAI/CMS project, serving grades 1-5, operated with 29 teachers in 26 schools, and the middle school CAI/CMS project operated with seven teachers in seven schools. A variety of computer systems was used in the CAI/CMS projects. In addition to

providing a technique for reading and language instruction, the use of CAI/CMS was also intended to enable participating teachers to serve more pupils than would be possible in the regular CLEAR projects. The use of CAI/CMS was also intended to be a cost-effective alternative to replacing badly worn conventional equipment.

The CLEAR program served a total of 4902 pupils (4756 public and 146 non-public school pupils). These numbers included the two major kinds of program projects—regular and CAI/CMS. Of the 4902 total, 3510 pupils were served in the regular CLEAR projects (grades 1-8), and 1392 pupils were served in the CAI/CMS projects (grades 1-7). At the primary level (grades 1-3), a total of 2365 public and non-public pupils received regular CLEAR treatment (whole language pilot group included in this census) while 407 pupils received CAI/CMS treatment for a total of 2772 primary grade pupils. At the intermediate level (grades 4-5), 182 public and non-public pupils received regular CLEAR treatment while 671 received CAI/CMS treatment for a total of 853 intermediate grade pupils. In middle school (grades 6-8) a total of 1277 pupils was served, which included 963 public and non-public pupils in the regular CLEAR project and 314 pupils in the CAI/CMS project.

Evaluation Objective

The evaluation objective for the CLEAR program was as follows:

> The average language/reading growth for the pupils who attended the program at least 80% of the instructional period will be 1.0 normal curve equivalent (NCE) point for each month of instruction. Growth will be measured by a nationally standardized achievement test of language/reading.

The program time period established for evaluation purposes was 114 days beginning October 3, 1988, and ending April 7, 1989. This time period (114 days divided by an average of 20 school days per month) is equal to 5.7 possible months of instruction. Analysis of pretest-posttest performance was contingent on pupil attendance for 91 days (80%) of the 114 day period.

Evaluation Design

The evaluation design provided for the collection of data in five areas of operation for the overall program. The instruments used to collect the data are found in Appendix B, with the exception of the standardized achievement tests.

1. ECIA Chapter 1 Pupil Census Information

   A locally developed Pupil Census Form (page 39, Appendix B) was completed by program teachers for each pupil served, to provide the following information: days of program enrollment, days of program attendance, and hours of instruction per week. The form also included information regarding the pupil's grade and sex, provided for identifying those pupils who were non-English speaking, provided for identifying any pupil who left the ECIA program because he or she qualified for a special education program, and included a question regarding a pupil's progress which required a subjective response from the program teacher. Collection of these forms was completed in May 1989.

2. Standardized Achievement Test Information

Except at the first grade, program pupils were administered the Comprehensive Tests of Basic Skills (CTBS, 1981). This test series, which is published by CTB/McGraw-Hill, has empirical norms for fall and spring, established October 6-10, 1980, and April 27 to May 1, 1981. First grade pupils were administered the Metropolitan Achievement Tests, Sixth Edition (MAT6, 1985). The form, subtest, and test levels used for each grade level are listed below:

		Pretest			Posttest		
Grade	Test	Form	Level	Subtest	Form	Level	Subtest
1	MAT6	PR	L	Total Reading	PR	L	Total Reading
2	CTBS	U	D	Comprehension	V	D	Comprehension*
3	CTBS	U	E	Comprehension	V	E	Comprehension
4	CTBS	U	F	Comprehension	V	F	Comprehension*
5	CTBS	U	G	Comprehension	V	G	Comprehension
6	CTBS	U	G	Comprehension	V	G	Comprehension
7	CTBS	U	H	Comprehension	V	H	Comprehension*
8	CTBS	U	H	Comprehension	V	H	Comprehension

*Estimated by administration of customized Form V

All testing was done on level. At posttest time, grades 2, 4, and 7 were administered customized tests that provided norm-referenced as well as criterion-referenced scores. The customized tests were developed by Columbus Public Schools personnel in cooperation with CTB/McGraw Hill to match the Columbus Public Schools Graded Course of Study.

The achievement tests were administered as follows: Program teachers in grades 1-8 normally administered the pretest except in schools where schoolwide testing occurred. Posttests for grades 1-8 were administered as part of Districtwide Testing. Program teachers in the seven non-public schools (grades 1-8) had to administer their own pretests and posttests. During schoolwide or Districtwide Testing, tests were administered by classroom teachers with program teachers serving as proctors. Pretesting occurred during the week of September 26-30, 1988; posttesting occurred April 10-14, 1989.

3. ECIA Chapter 1 Teacher Census Information

The locally developed Teacher Census Form (pages 40-41, Appendix B) was designed to provide information regarding characteristics of program personnel. Information collected included total years of teaching experience, years of Chapter 1 teaching experience, college degree level attained, and certificate in reading. The form was completed by Chapter 1 program teachers in September 1988.

4. Parent Involvement Information

The Parent Involvement Form (Appendix B, pages 42-44) was constructed locally to collect data on the level and nature of parental involvement in Chapter 1 programs. Data were reported by program teachers on a monthly basis, September 1988 through June 1989. Monthly data included number of parents and number of hours involved in five categories of parent involvement, including a monthly unduplicated count of parents involved. In addition, a yearly unduplicated count of parents was collected at the end of the school year.

5. Inservice Evaluation Information

The locally developed General Inservice Evaluation Form (page 47, Appendix B) was designed to obtain teacher perceptions regarding each inservice session. The form was administered to participants at the close of inservice sessions held for Chapter 1 staffs. A modified version of the form (pages 45-46, Appendix B) was used for the orientation meeting of September 6, 1988. Dates and topics of inservice meetings conducted by Chapter 1 in which CLEAR teachers participated are shown in Table 1. Teachers completed inservice evaluation forms for all of the 18 inservice meetings except those occurring on the following dates: August 31 (Pilot Primary), September 2 (Elementary CAI and Middle School CAI), and February 22 (Elementary CAI).

In addition to the types of data specified in the evaluation design, three types of process evaluation were obtained. Observations were conducted in 14 (29.2%) of the 48 units that piloted the Whole Language approach in the regular CLEAR primary grades. The purpose of these observations was to determine the extent to which guidelines for the Whole Language approach were implemented. The observations were conducted by a program evaluator using a locally constructed instrument, the Evaluator's Visitation Log. At the middle school level on-site visits were used to conduct teacher interviews using a locally developed instrument, the Evaluator's Interview Log. Interviews centered on teachers' ratings of various aspects of the program and on calculating the amount of time used in various instructional activities. One additional locally constructed instrument, informally referred to as a computer census form, was used as a questionnaire in the CAI/CMS portions of the CLEAR program. This instrument had two purposes: to delineate and describe the various computer systems used in CAI/CMS labs, and to determine the percent of program time pupils worked at the computer in the different computer systems.

All three process evaluation instruments are found in Appendix B (pages 48-56). Findings from the collection of data from these instruments are summarized in this report in the section, Process Evaluation Information, page 23. The full interim reports are on file at the Department of Evaluation Services, Columbus (Ohio) Public Schools (Chamberlain, 1989; Chamberlain and Lore, 1989; and Lore, 1989).

Major Findings

Pupils were selected for the program on the basis of previous achievement test scores which indicated they were achieving at or below the 36th percentile in reading skills. Selection testing occurred prior to the program pretest.

Table 1

Dates and Topics of the 18 Inservice Meetings Conducted by Chapter 1 for School Year 1988-89

Date	Title of Inservice	CLEAR-Elementary				CLEAR-Middle	
		Regular (Grades 1-5)	Pilot (Primary)	CAI (Grades 1-5)	CAI Aides	Regular	CAI
August 31	"Housekeeping"		X				
September 2	CAI Training			X			
September 6	Opening Conference	X	X	X	X	X	X
October 6	Early Strategies Instruction		X				
October 7	Early Strategies		X*				
October 19	Early Reading Strategies		X*				
October 20	Principles of Effective Instruction					X	X
November 11	Language, Learning, and Literacy	X		X			
November 17	Whole Language Workshop	X		X			X
December 6	Developing Theme Units		X				
January 6 and 10	Teaching for Strategies		X				
February 8	Library Resources (AM), Motivation (PM)					X	X
February 10	Holt Impressions Materials	X	X	X			
February 14	Teaching for Fluency		X				
February 22	Learning Consultants, Inc.			X			

*Meeting also attended by five regular teachers (Grades 1-5) and one CAI teacher (Grades 1-5)

(Table Continued)

Table 1 (Continued)

Dates and Topics of the 18 Inservice Meetings Conducted by Chapter 1
for School Year 1988-89

Date	Title of Inservice	CLEAR-Elementary				CLEAR-Middle	
		Regular (Grades 1-5)	Pilot (Primary)	CAI (Grades 1-5)	CAI Aides	Regular	CAI
Februa · 24	Sharing Workshop	X					
April 17	Prescription Learning Spring Workshop			X	X		
May 3-5	End-of-Year Procedures		X				
Total Number of Inservice Sessions Provided For Each Group Of Program Personnel		5	10	7	2	3	4

Pupil Census Information

A total of 4902 pupils, including 4756 pupils in public schools (grades 1-8) and 146 in non-public schools (grades 1-8), was served by the ECIA Chapter 1 CLEAR program during the 1988-89 school year for an average of 3.7 hours of instruction per week. Of the 4902 pupils, 3625 were in grades 1 through 5 and 1277 attended middle schools. Of the 4902 pupils, 2547 elementary pupils (grades 1-5) and 963 middle school pupils (grades 6-8) received regular CLEAR instruction, and 1078 elementary pupils (grades 1-5) and 314 middle school pupils (grades 6-7) received CAI/CMS instruction. The 146 non-public elementary and middle school pupils were all served in the regular CLEAR projects and were included in the regular CLEAR pupil census.

The average daily membership in the overall program was 4000.1 pupils. The average days of enrollment per pupil was 93.0 days, and the average attendance per pupil was 83.5 days. The average number of pupils served per teacher during the school year by the 107.25 FTE teachers was 45.7, although the average number of pupils enrolled per teacher at any given time was 37.3 (Average Daily Membership divided by number of FTE teachers). The attendance criterion was met by 2897 pupils, or 59.1% of all program enrollees. Data pertaining to enrollment and attendance are presented in Table 2.

The evaluation sample was limited to pupils who had both pretest and posttest administrations of the standardized achievement test, were English-speaking, and met the attendance criterion of at least 80% of the 114 program days (91 or more program days).

Of the 4902 pupils served, 25 (0.5%) were non-English speaking. An additional 2525 were excluded from the evaluation sample due to incomplete test data and/or not attainment of the attendance criterion. The evaluation sample was comprised of the remaining 2352 pupils, which was 48.0% of the 4902 pupils served. Data from testing are presented in Tables 3 and 4.

Pupil census information also included each teacher's rating of individual pupil progress. Of the 4902 pupils served in the program, 1693 (34.5%) were rated by their program teachers as making much progress, 2248 (45.9%) as making some progress, 782 (16.0%) as making little progress, and 179 (3.7%) as making no progress.

Standardized Achievement Test Information

Included in the standardized achievement test information on the following tables--but not in the narrative--are results from grade 1 testing. Caution is advised in the interpretation of grade 1 test scores because the test scores obtained from the administration of the MAT6 at grade 1 may not reflect true pupil performance in all cases due to the inappropriateness of the test levels used at the time of the pretest and posttest. The pretest level was found to be too difficult for low-achieving pupils, while the posttest level was found to be too easy for the average and above-average pupils.

Normal curve equivalents (NCEs) are generally considered to provide the truest indication of pupil growth in achievement since they provide comparative information in equal units of measurement. Data for normal curve equivalents are presented in Table 3. The overall average NCE change for the CLEAR program

Table 2

Number of Public and Non-public Pupils Served; Averages for Days of Enrollment, Days of Attendance, Daily Membership and Hours of Instruction Per We k; and Pupils Attending 80% of Days Reported by Grade Level 1988-89

Grade	Pupils Served	Girls	Boys	Average Days of Enrollment	Average Days of Attendance	Average Daily Membership	Hours of Instruction per Pupil per Week	Pupils Attending 80% of Days
1	755	333	422	82.0	74.0	543.3	3.6	351
2	1178	9	659	93.5	85.1	966.5	3.8	735
3	839	416	423	93.1	84.5	685.0	3.7	515
4	518	235	283	97.2	86.5	441.6	3.7	320
5	335	168	167	95.7	86.8	281.2	3.7	225
6	1082	468	614	97.5	85.5	925.4	3.6	635
7	155	69	86	90.8	79.4	123.5	3.5	90
8	40	17	23	95.8	85.7	33.6	3.7	26
Total	4902	2225	2677	93.0	83.5	4000.1	3.7	2897

Table 3

Minimum, Maximum, Average, and Standard Deviation of the
Pretest and Posttest Normal Curve Equivalents (NCE)
Reported by Grade Level
1988-89

Grade	Pupils in Sample	Pretest				Posttest				Average Change (Criterion = 5.7)
		Min.	Max.	Average NCE	Standard Deviation	Min.	Max.	Average NCE	Standard Deviation	
1	200	10.4	72.8	30.6	9.7	1.0	99.0	31.1	23.0	0.5
2	513	23.0	79.0	33.0	10.3	1.0	91.0	36.0	16.4	3.1
3	484	1.0	64.0	28.8	14.0	2.0	79.0	40.6	11.9	11.8
4	292	14.0	68.0	32.1	13.0	4.0	71.0	39.4	11.6	7.6
5	214	18.0	66.0	33.3	11.2	11.0	59.0	36.0	11.1	2.7
6	576	1.0	69.0	32.5	13.2	2.0	89.0	36.4	10.5	3.9
7	60	15.0	52.0	34.7	9.0	11.0	67.0	39.8	10.8	5.1
8	13	11.0	60.0	29.6	13.5	2.0	54.0	31.0	15.9	1.4
(Excluding Grade 1) Total	2152			31.3	12.5			37.7	12.8	5.9

(excluding grade 1) was 5.9. In the following narrative the achievement test results from the grade 2-8 evaluation sample are discussed. The average NCE gain per month in the 5.7 month period between pretest and posttest was 1.0 NCE point per month, which met the evaluation criterion of 1.0 NCE point for each month of instruction. The evaluation criterion was met or exceeded at grades 3 and 4. The NCE gain in grade 3 was 11.8 overall, or 2.1 NCEs per month; the gain in grade 4 was 7.6 overall, or 1.3 NCEs per month. Smaller NCE gains were made at grade 2 (3.1 overall, 0.5 per month); grade 5 (2.7 overall, 0.5 per month); in grade 6 (3.9 overall, 0.7 per month); grade 7 (5.1 overall, 0.9 per month); and in grade 8 (1.4 overall, 0.2 per month).

It should be kept in mind that NCEs are based on percentiles which compare the pupil's performance in relation to the general population. For a pupil's NCE score to remain the same at posttest as at pretest does not denote a lack of absolute progress; on the contrary, it means that the pupil has maintained the same relative position in terms of the general population. Even a small gain in NCEs indicates an advancement from the pupil's original level of achievement. For readers interested in percentile and grade equivalent statistics, see Tables 15-18 in Appendix A (pages 34-37).

Table 4 contains data related to the changes in NCE scores for the three ranges: (a) No improvement in NCE scores (0.0 or less), (b) some improvement in NCE scores (0.1 to 5.6), and (c) substantial improvement in NCE scores (5.7 or more). The data indicate that 1415 (65.8%) pupils made gains in NCE scores. This means that 65.8% of the pupils in the grade 2-8 evaluation sample progressed at a rate that was greater than normal for them. More specifically, 1063 (49.4%) made substantial improvement and 352 (16.4%) made some improvement in NCE scores, while 737 pupils (34.2%) of the evaluation sample made no improvement in NCE performance.

Tables 5-9 present comparisons between the projects (elementary and middle school levels) receiving computer assisted instruction/computer management system (CAI/CMS) in reading and those projects (elementary and middle school levels) receiving the regular program instruction. For the purpose of these comparisons "regular" refers to all pupils not in the CAI/CMS group.

As indicated in Table 5, 1392 pupils were served in two CAI/CMS projects (1078 pupils in the elementary project and 314 pupils in the middle school project). The total number of public and non-public school pupils in grades 1-8 who were served in the regular projects was 3510, which included 2547 pupils in grades 1-5, and 963 pupils in grades 6-8. The average daily membership totaled 1160.9 in the CAI/CMS projects (901.9 pupils in grades 1-5 and 259.0 pupils in the middle school project). Average daily membership in the CLEAR regular projects totaled 2839.2 (2015.7 pupils in grades 1-5 and 823.5 pupils in the middle school).

A census of the evaluation samples in the CLEAR elementary (grades 1-5) projects showed that they were comprised of 583 pupils who received CAI/CMS treatment and 1120 pupils in the regular treatment group. Middle school samples consisted of 151 pupils in the CAI/CMS instruction group, and 498 pupils in the regular instruction group. The total number of public and non-public school pupils in grades 1-8 in the evaluation sample was 2352. Although grade 1 is included in this census of the evaluation sample, grade 1 was not included in the summary statistics for achievement test information on the tables for reasons cited earlier in this report.

Table 4
Change Categories for NCE Scores for Total CLEAR
Program by Grade Level
1988-89

Grade	Pupils in Sample	Change Categories: No Improvement (0.0 or less)	Some Improvement (0.1 to 5.6)	Substantial Improvement (5.7 or more)
Grade 1				
Number of Pupils	200	103	25	72
% of Pupils	8.5%	51.5%	12.5%	36.0%
Grade 2				
Number of Pupils	513	216	61	236
% of Pupils	21.8%	42.1%	11.9%	46.0%
Grade 3				
Number of Pupils	484	88	71	325
% of Pupils	20.6%	18.2%	14.7%	67.1%
Grade 4				
Number of Pupils	292	94	44	154
% of Pupils	12.4%	32.2%	15.1%	52.7%
Grade 5				
Number of Pupils	214	80	47	87
% of Pupils	9.1%	37.4%	22.0%	40.7%
Grade 6				
Number of Pupils	576	232	117	227
% of Pupils	24.5%	40.3%	20.3%	39.4%
Grade 7				
Number of Pupils	60	20	10	30
% of Pupils	2.6%	33.3%	16.7%	50.0%
Grade 8				
Number of Pupils	13	7	2	4
% of Pupils	0.6%	53.8%	15.4%	30.8%
Total Group (Excluding Grade 1)				
Number of Pupils	2152	737	352	1063
% of Pupils	100.0%	34.2%	16.4%	49.4%

EVALSRVCS/P502/RPTFCLE89

Table 5
Number of Pupils Served, Averages for Days of Enrollment, Days of Attendance, Daily Membership and Hours of Instruction Per Week, and Pupils Attending 80% of Days Reported by Grade Level for Pupils Receiving Reading Instruction with Computers (CAI/CMS Groups) and Pupils Receiving Reading Instruction without Computers (Regular Groups) 1988-89

Grade	Pupils Served	Girls	Boys	Average Days of Enrollment	Average Days of Attendance	Average Daily Membership	Average Hrs. of Inst. Per Pupil Per Week	Pupils Attending 80% of Days
CAI/CMS Group								
1	22	12	10	75.7	71.3	14.6	3.6	10
2	103	46	57	92.1	80.5	83.2	3.7	41
3	282	126	156	91.5	82.9	226.3	3.6	158
4	397	179	218	98.4	87.5	342.6	3.7	249
5	274	141	133	97.8	88.2	235.2	3.7	187
6	305	136	169	94.5	82.5	252.9	3.7	166
7	9	3	6	76.9	67.6	6.1	3.4	2
8	0	0	NA	NA	NA	NA	NA	NA
Total	1392	643	749	95.1	84.7	1160.9	3.7	813
Regular Group								
1	733	321	412	82.2	74.1	528.7	3.6	341
2	1075	473	602	93.7	85.5	883.3	3.8	694
3	557	290	267	93.9	85.3	458.7	3.7	357
4	121	56	65	93.3	83.1	99.0	3.8	71
5	61	27	34	86.0	80.5	46.0	3.8	38
6	777	332	445	98.7	86.6	672.5	3.6	469
7	146	66	80	91.7	80.2	117.4	3.5	88
8	40	17	23	95.8	85.7	33.6	3.7	26
Total	3510	1582	1928	92.2	83.0	2839.2	3.7	2084

Achievement data comparisons of Normal Curve Equivalents for the grade 2-8 evaluation sample are presented in Table 6. In the regular CLEAR projects, grade 3 which was 23.8% of the 1427 pupils in the regular sample (grades 2-8) had the greatest positive change of 12.3 NCE points. In the CAI/CMS projects, grade 3 which was 19.9% of the 725 pupils in the grade 2-7 sample had the greatest positive change with an average change of 10.7 NCE points. Program criterion was met with 1.0 or more NCEs gained per month of instruction by the regular CLEAR grades 3 and 4. These grades comprised 28.2% of the regular CLEAR sample. Grades 2, 5, 6, 7 and 8, 71.8% of the regular CLEAR sample, did not meet the criterion. In the CAI/CMS projects grades 3 and 4 or 51.4% of the CAI/CMS sample met criterion while grades 2, 4, 5, 6, and 7 (48.6%) did not. Comparisons cannot be made between the middle school regular CLEAR project and the CAI/CMS project in grade 8 because there were no pupils in the sample for that grade in the CAI/CMS project. The average NCE change for the CAI/CMS group (grades 2-7) was 5.8 overall or 1.0 NCE per month of instruction and the average change for the regular CLEAR groups (grades 2-8) was 5.9 overall or 1.0 NCE per month. The program's criterion that there be 1.0 or more NCEs gained per month of instruction was met in both the CLEAR-CAI/CMS projects and the regular CLEAR projects for grades 2-7 and 2-8, respectively.

Further comparisons between CAI/CMS and regular CLEAR in other grades indicate that the regular CLEAR grade 2 group made a 3.2 NCE point change in comparison to a 1.4 for the CAI/CMS group. The regular grade 5 group made a 3.2 NCE point change in comparison to 2.6 for the CAI/CMS group. The regular grade 6 group made a 4.0 NCE point change compared to 3.7 in the CAI/CMS, and finally the regular grade 7 group made a 5.5 NCE point change compared to -6.5 in the CAI/CMS group.

As indicated earlier, NCE scores are generally considered to provide the most comparative information in equal units of measurement. Nevertheless, additional statistics (Percentile and Grade Equivalent Tables) are included in Appendix A (pages 34-37, inclusive) for those readers wanting more statistical data. Data in terms of NCE scores for the CAI/CMS projects and the regular instruction projects are presented by grade in Table 6 and were included in the discussion above. Another indicator of overall program effectiveness is presented in Table 7, the average NCE growth by group across grade level. At the primary level (grades 2-3) the average NCE change across grade levels was 9.4 NCEs for the CAI/CMS group and 6.9 for the regular group. At the intermediate level (grades 4-5), the average NCE change across grade level was 6.6 NCEs for the regular group and 5.1 for the CAI/CMS group. At the middle school level the average NCE change was 4.1 for the regular project and 3.6 for the CAI/CMS project. Grade 8 of the regular CLEAR project is included in these data.

Tables 8 and 9 compare (grades 2-8) of the CAI/CMS and regular projects in regard to numbers and percents of pupils who evidenced no improvement, some improvement, and substantial improvement, as previously defined. The data indicate that 65.9% of the regular project pupils made positive gains in NCE scores, while 65.4% of CAI/CMS projects did so. Positive gains in the regular projects included 50.2% who made substantial improvement and 15.8% who made some improvement. Positive gains in the CAI/CMS projects included 47.9% making substantial improvement, and 17.5% making some improvement.

The pilcting of the CLEAR-Primary Whole Language teaching approach made a further comparison of NCEs by teaching methods desirable. Three distinct teaching methods were possible: regular treatment method, pilot Whole Language method, and CAI/CMS treatment method. Comparisons of average NCE scores for the three treatment methods are presented in Table 10.

Table 6
Minimum, Maximum, Average, and Standard Deviation of the Pretest and Posttest Normal Curve Equivalents (NCE) Reported by Grade Level for Pupils Receiving Reading Instruction with Computers (CAI/CMS Groups) and Pupils Receiving Reading Instruction without Computers (Regular Groups)
1988-89

Grade	Pupils in Sample	Pretest				Posttest				Average Change (Criterion = 5.7)
		Min.	Max.	Average NCE	Standard Deviation	Min.	Max.	Average NCE	Standard Deviation	
CAI/CMS Group										
1	9	18.9	31.5	26.0	4.8	1.0	46.3	25.3	17.2	- 0.7
2	23	23.0	55.0	34.8	10.9	1.0	83.0	36.2	20.5	1.4
3	144	1.0	60.0	29.9	14.4	2.0	75.0	40.6	11.1	10.7
4	229	14.0	68.0	31.6	13.1	4.0	66.0	38.6	11.5	7.0
5	178	18.0	66.0	33.0	11.2	11.0	59.0	35.6	11.2	2.6
6	149	1.0	60.0	31.3	13.8	2.0	59.0	35.0	10.5	3.7
7	2	36.0	39.0	35.0	5.7	26.0	31.0	28.5	3.5	- 6.5
8	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total*	725			31.7				37.4		5.8
Regular Group										
1	191	10.4	72.8	30.8	9.8	1.0	99.0	31.4	23.2	0.6
2	490	23.0	79.0	32.9	10.3	1.0	91.0	36.0	16.2	3.2
3	340	1.0	64.0	28.4	13.8	2.0	79.0	40.7	12.3	12.3
4	63	14.0	60.0	33.7	12.6	4.0	71.0	42.2	11.6	8.6
5	36	18.0	63.0	34.9	11.1	11.0	57.0	38.1	10.2	3.2
6	427	1.0	69.0	32.9	12.9	2.0	89.0	36.9	10.4	4.0
7	58	15.0	52.0	34.7	9.1	11.0	67.0	40.2	10.7	5.5
8	13	11.0	60.0	29.6	13.5	2.0	54.0	31.0	15.9	1.4
Total*	1427			31.9				37.9		5.9

* (Excluding Grade 1)

Table 7

Minimum, Maximum, and Average of the Pretest and Posttest Normal Curve Equivalents (NCE) Reported Across Primary, Intermediate, and Middle School Grade Levels for Pupils in CAI/CMS Projects and Pupils in Regular Instruction Groups 1988-89

Grade and Treatment Group	Pupils in Sample	Pretest			Posttest			Average Change
		Min.	Max.	Average NCE	Min.	Max.	Average NCE	
Primary (Grades 2-3)								
CAI/CMS Group	167	1.0	60.0	30.6	1.0	83.0	40.0	9.4
Regular Group	830	1.0	79.0	31.0	1.0	91.0	37.9	6.9
Totals	997			31.0			38.3	7.3
Intermediate (Grades 4-5)								
CAI/CMS Group	407	14.0	68.0	32.2	4.0	66.0	37.3	5.1
Regular Group	99	14.0	63.0	34.1	4.0	71.0	40.7	6.6
Totals	506			32.6			38.0	5.4
Middle Grades (6-8)								
CAI/CMS Group	151	1.0	60.0	31.3	2.0	59.0	34.9	3.6
Regular Group	498	1.0	69.0	33.0	2.0	89.0	37.2	4.1
Totals	649			32.6			36.6	4.0

Table 8
Frequencies and Percents of Pupils in Normal Curve Equivalent (NCE)
Change Categories by Grade and Treatment Group
1988-89

Grade and Treatment Group	Pupils in Sample	Change Categories		
		No Improvement (0.0 or less)	Some Improvement (0.1 to 5.6)	Substantial Improvement (5.7 or more)
CAI/CMS Group				
Grade 1				
Number of Pupils	9	3	3	3
% of Pupils		33.3%	33.3%	33.3%
Grade 2				
Number of Pupils	23	10	1	12
% of Pupils		43.5%	4.3%	52.2%
Grade 3				
Number of Pupils	144	28	24	92
% of Pupils		19.4%	16.7%	63.9%
Grade 4				
Number of Pupils	229	79	31	119
% of Pupils		34.5%	13.5%	52.0%
Grade 5				
Number of Pupils	178	67	41	70
% of Pupils		37.6%	23.0%	39.3%
Grade 6				
Number of Pupils	149	65	30	54
% of Pupils		43.6%	20.1%	36.2%
Grade 7				
Number of Pupils	2	2	0	0
% of Pupils		100.0%	0.0%	0.0%
Grade 8				
Number of Pupils	0	NA	NA	NA
% of Pupils				
CAI/CMS Group Totals (Excluding Grade 1)				
Number of Pupils	725	251	127	347
% of Pupils	100%	34.6%	17.5%	47.9%

Table 8 (Continued)
Frequencies and Percents of Pupils in Normal Curve Equivalent (NCE)
Change Categories by Grade and Treatment Group
1988-89

Grade and Treatment Group	Pupils in Sample	Change Categories		
		No Improvement (0.0 or less)	Some Improvement (0.1 to 5.6)	Substantial Improvement (5.7 or more)
Regular Group				
Grade 1				
Number of Pupils	191	100	22	69
% of Pupils		52.4%	11.5%	36.1%
Grade 2				
Number of Pupils	490	206	60	224
% of Pupils		42.0%	12.2%	45.7%
Grade 3				
Number of Pupils	340	60	47	233
% of Pupils		17.6%	13.8%	68.5%
Grade 4				
Number of Pupils	63	15	13	35
% of Pupils		23.8%	20.6%	55.6%
Grade 5				
Number of Pupils	36	13	6	17
% of Pupils		36.1%	16.7%	47.2%
Grade 6				
Number of Pupils	427	167	87	173
% of Pupils		39.1%	20.3%	40.5%
Grade 7				
Number of Pupils	58	18	10	30
% of Pupils		31.0%	17.2%	51.7%
Grade 8				
Number of Pupils	13	7	2	4
% of Pupils		53.8%	15.4%	30.8%
Regular Group Totals (Excluding Grade 1)				
Number of Pupils	1427	486	225	716
% of Pupils	100%	34.1%	15.8%	50.2

Table 9
Frequencies and Percents of Pupils in Normal Curve Equivalent (NCE) Score Improvement Categories Across Primary, Intermediate, and Middle School Grade Levels by Treatment Group
1988-89

Grade and Treatment Group	Pupils in Sample	Change Categories		
		No Improvement (0.0 or less)	Some Improvement (0.1 to 5.6)	Substantial Improvement (5.7 or more)
Primary (Grades 2-3)	997			
CAI/CMS Group				
Number of Pupils	167	38	25	104
% of Pupils	16.8%	22.8%	15.0%	62.3%
Regular Group				
Number of Pupils	830	266	107	457
% of Pupils	83.2%	32.0%	12.9%	55.1%
Intermediate (Grades 4-5)	506			
CAI/CMS Group				
Number of Pupils	407	146	72	189
% of Pupils	80.4%	35.9%	17.7%	46.4%
Regular Group				
Number of Pupils	99	28	19	52
% of Pupils	19.6%	28.3%	19.2%	52.5%
Middle (Grades 6-8)	649			
CAI/CMS Group				
Number of Pupils	151	67	30	54
% of Pupils	23.3%	44.4%	19.9%	35.8%
Regular Group				
Number of Pupils	498	192	99	207
% of Pupils	76.7%	38.6%	19.9%	41.6%
Totals for Grades 2-8	2152			
CAI/CMS Groups				
Number of Pupils	725	251	127	347
% of Pupils	33.7%	34.6%	17.5%	47.9%
Regular Groups				
Number of Pupils	1427	486	225	716
% of Pupils	66.3%	34.1%	15.8%	50.2%

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Table 10

Average Normal Curve Equivalent (NCE) Scores
in Grades 1-3 by Treatment Group
1988-89

Treatment Group	Pupils in Sample	Average NCE		
		Pretest	Posttest	Change (Criterion = 5.7)
Grade 1				
Regular	20	27.3	22.3	- 4.9
Whole Language	171	31.2	32.4	1.2
CAI/CMS	9	26.0	25.3	- 0.7
Grade 2				
Regular	181	33.9	37.5	3.6
Whole Language	309	32.3	35.2	2.9
CAI/CMS	23	34.8	36.2	1.4
Grade 3				
Regular	178	30.4	42.7	12.2
Whole Language	162	26.1	38.4	12.3
CAI/CMS	144	29.9	40.6	10.7
Total (Grades 1-3)	1197			

As can be seen in Table 10, grade 3 had the largest average NCE changes for all methods of teaching. The regular treatment group at second grade had an average change of 3.6 NCEs (0.6 average NCE per month), the Whole Language group had an average change of 2.9 NCEs (0.5 average NCE per month), while the CAI/CMS group had an average change of 1.4 (0.2 average NCE per month). The results from grade 1 testing are not discussed in this narrative for reasons previously stated.

Using the data from the Pupil Census Forms, a comparison was also made using teachers' ratings of individual progress of CLEAR-Primary pupils in the evaluation sample as they exited the program. The percent of sample pupils rated in the highest of four progress categories was as follows for each of the treatment groups: CAI/CMS treatment 60.8%, regular treatment 55.7%, and Whole Language treatment 45.5%. The four progress categories included the following descriptors: Much Progress, Some Progress, Little Progress and No Progress.

ECIA-Chapter 1 Teacher Census Information

Teacher Census Forms were completed in September 1988 by the 128 teachers assigned to ECIA Chapter 1 CLEAR units. In terms of full-time equivalence (FTE), the program was staffed with 107.25 teachers. All 128 teachers had at least a bachelor's degree, 68 teachers (53.1%) had a master's degree, and one teacher (0.8%) had a doctoral degree. The number of teachers having certification in reading as a subject area was 64, or 50.0% of the program's teachers. The average number of years of teaching experience was 20.8 overall, and 9.4 in Title I/Chapter 1 teaching experience. Of the 128 program teachers, 121 had assignments in public schools, and seven in non-public units. Thirty-six teachers in public schools were assigned to CAI/CMS units and 85 were assigned to the regular program. All 128 program teachers were full-time employees of the Columbus Public Schools with 24 serving two projects (CAI/CMS reading and CAI/CMS mathematics), and an additional eight primary teachers from the 128 program teachers serving in both the CLEAR-Primary Whole Language pilot group and in the CLEAR-Reading Recovery project.

Although 128 teachers served in the CLEAR program during the school year, two were replacements for teachers who left the program during the year: one in the regular middle school project and one in the non-public project. The actual number of teaching positions in the program was 126. Teacher census data are based on the full roster of 128 teachers.

Parent Involvement Information

The Parent Involvement Form provided information from teachers at the end of each month (September 1988 through June 1989) concerning program activities involving parents who had children in the program. These data are presented by month in Table 11. Because teachers in the CAI/CMS projects served part time in the CLEAR program and part time in the MIC program, parent involvement data from this subset of CLEAR teachers had to be prorated between their two programs. This accounts for the statistical oddity of the fractional parents encountered in Table 11. The month showing the most parent involvement was October with a total of 1821.5 contacts in 1230.4 parent hours. Individual parent conferences accounted for more parent contacts (4753.2) than any other activity. Yearly totals for the other activities were: group meetings with parents, 2018.6 contacts in 2220.6 parent hours; parent classroom visits or field trips, 1060.6 contacts in 847.0 parent hours; planning, operation, and/or evaluation, 798.7 contacts in 356.1 parent hours; and visits by teacher to parents' homes, 73.5 contacts in 44.7 parent hours. The yearly totals for all five types of parent activity were 8704.6 parent contacts in 5327.4 parent hours. Since a parent could have involvement in more than one contact, a yearly unduplicated count was also obtained from program teachers in June. This count indicated a total of 3333.3 parents of program pupils had one or more contacts with the program during the school year.

Table 11
Number of Parents Involved
and Total Parent Hours
Reported by Month
1988-89

Items	Months										Totals for Year
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
1. Parents involved in the planning, operation and/ or evaluation of your unit											
Number of Parents	64.4	143.6	118.5	49.0	60.4	121.6	36.1	84.5	62.1	67.4	798.7
Total Parent Hours	23.5	60.8	45.2	19.2	23.8	53.1	21.3	28.8	49.0	31.4	356.1
2. Group meetings for parents											
Number of Parents	190.1	640.9	141.4	87.4	57.9	193.9	192.0	112.0	299.9	103.2	2018.6
Total Parent Hours	202.0	658.6	120.0	137.7	38.1	205.4	216.5	149.0	334.5	158.9	2220.6
3. Individual parent conferences											
Number of Parents	328.9	685.8	1009.6	277.0	397.5	832.1	373.1	361.6	321.4	166.1	4753.2
Total Parent Hours	111.0	261.7	409.8	110.5	140.2	355.2	140.3	132.0	133.1	65.2	1859.0
4. Parental classroom visits or field trips											
Number of Parents	64.8	343.0	88.7	79.7	62.8	122.7	82.1	61.5	87.9	67.5	1 0.6
Total Parent Hours	29.5	245.1	81.6	46.2	41.0	111.2	47.8	41.9	91.3	111.4	8 0
5. Visits by teacher to parents' homes											
Number of Parents	7.4	8.2	7.7	12.0	6.3	3.8	10.0	8.4	8.0	1.6	73.5
Total Parent Hours	3.3	4.2	5.8	6.7	3.3	7.7	4.1	3.9	4.5	1.1	44.7
Total Parent Contacts	655.7	1821.5	1366.0	496.1	584.9	1274.0	693.3	628.0	779.3	405.8	8704.6
Total Parent Hours	369.3	1230.4	662.5	320.4	246.4	732.6	430.0	355.6	612.4	367.9	5327.4

A separate end-of-the year teacher survey was used to determine program involvement by non-program parents. This survey indicated that an additional 643.4 parents who did not have children in the program were involved in 852.2 contacts with the program in 901.0 parent hours over the school year.

Inservice Evaluation Information

The General Inservice Evaluation Form was completed by program teachers for 15 of the 18 inservice sessions which occurred from September 1988 through May 1989. Respondents rated four statements about the inservice on a five-point scale ranging from Strongly Agree (5) to Strongly Disagree (1). See Appendix B, page 47.

Generally, workshop participants rated Chapter 1 inservice meetings positively. Overall ratings by participants are summarized in Table 12.

Table 12
Average Response and Percent of Response
For Reactions to Inservice Statements

1988-89

Statements	Number Responding	Average Response	Percent SA (5)	A (4)	U (3)	D (2)	SD (1)
1. I think this was a very worthwhile meeting.	542	4.5	57.9	39.1	2.4	0.4	0.2
2. The information presented in the meeting will assist me in my program.	540	4.5	58.1	38.5	2.6	0.4	0.4
3. There was time to ask questions pertaining to the presentation.	534	4.5	53.9	41.4	3.2	0.9	0.6
4. Questions were answered adequately.	532	4.5	54.7	40.2	4.3	0.2	0.6

Note: The anchors for the rating scale are as follows: SA = Strongly Agree, A = Agree, U = Undecided, D = Disagree, and SD = Strongly Disagree.

Open-ended comments on the General Inservice Evaluation Form asked participants to comment about the most and least valuable parts of the meetings and about information they would like to have covered in future meetings. Only those open-ended comments which were made by five or more participants at any single session will be summarized here. However, the evaluation reports on individual sessions have been forwarded to the Department of Federal and State Programs and are available on request from the Department of Evaluation Services.

In regard to the most valuable parts of the inservice meetings, the following items were notable from the opening conference in which teachers from all projects of the program were present: the main speaker, Mrs. C.J. Prentiss; Dr. Etheridge's speech; the commercial exhibits; the program coordinators' mini-sessions; and the entire meeting. In other meetings during the school year, which were provided to various subgroups within the CLEAR program, the following items received five or more favorable comments in a meeting: a visit by elementary CAI teachers to the Integrated Language Arts (ILA) computer lab at West Broad Street Elementary school; information about the Library Resource Center at Seventeenth Avenue, and also touring the stacks and selecting books during an inservice at that facility provided for middle school regular and CAI teachers; sharing of ideas and materials by program teachers at a regular elementary inservice, and idea-sharing presentations by program teachers at an inservice for middle school regular and CAI teachers; hands-on activities with computers at an elementary CAI inservice; Dr. Thrope's presentation to middle school regular and CAI teachers; Sue Hundley's presentation to primary teachers; Sandy Snide's presentation to primary teachers on making books; and making a book at an inservice for elementary regular and CAI teachers.

The question regarding the least valuable parts of meetings elicited one critical comment with a frequency of five or more at a meeting for primary teachers: too much time spent on questions dealing with individual problems. In two other meetings, the opening conference and a meeting for elementary regular and CAI teachers, the only response to this question with a frequency of five or more was that nothing was least valuable or that all was valuable.

The question dealing with suggestions for future meetings elicited suggestions in only one area with a frequency of five or more: parent involvement or parent meetings.

Process Evaluation Information

In addition to the types of data specified in the evaluation design, process evaluation data were obtained in a series of on-site visits to CLEAR units at the primary and middle school levels and by means of a mailed questionnaire to the CAI/CMS projects. Of the 71 (65 public and six non-public) teachers in the regular 1988-89 CLEAR-Elementary projects, 48 primary teachers piloted a Whole Language approach to reading. Of these, 14 (29.2%) were randomly selected to be visited. This year visits were a continuation of the monitoring begun during the first year of the Whole Language pilot program to document implementation. In addition, the process evaluation served to increase the program evaluator's familiarity with the operation of the projects by on-site observation. The visits were conducted by the program evaluator during the period from February 23 to March 7, 1989. The purpose of the visits was to determine to what degree guidelines for whole-language techniques, management, and environment were implemented in these units.

For these visits, a locally developed instrument, Evaluator's Visitation Log (pages 48-51, Appendix B), was constructed to gather information about 30 artifacts which were indicative of an implemented program. These items were categorized into the following seven major facets: Literate Environment for Pupils, Administrative Procedures and/or Record Keeping, Materials and Facilities, Lesson Management, Instructional Efficiency and Monitoring, Classroom Climate, and Parent Involvement.

The evaluator was to look at each item listed under each major facet of implementation and rate it on a three-point scale where the anchors No Evidence was rated as (0), Some Evidence was rated as (1), and Compelling Evidence was rated as (2). To determine which response choice to make, the observer was to look for a predetermined kind of evidence which was indicated in parentheses next to the item. If the preselected evidence were not found, then the observer was instructed to look for one of the other kinds of evidence. Evidence was of three kinds: Physical Evidence (PE), Observational Evidence (OE), and Testimonial Evidence (TE).

As can be seen from Table 13, it is apparent that implementation was being accomplished at the time of the visits. The lowest Overall Average Rating was 1.9 which approached the maximum rating of 2.0.

Table 13
Overall Average Ratings for the Process Evaluation Facets
of the CLEAR-Primary Whole Language Units
of the Regular CLEAR-Elementary Project
1988-89
(N=14)

Facet	Overall Average Rating Across Units/Across Items
Literate Environment for Pupils	1.9
Administrative Procedures and/ or Record Keeping	2.0
Materials and Facilities	*
Lesson Management	*
Instructional Efficiency and Monitoring	1.9
Classroom Climate	2.0
Parent Involvement	1.9

*It should be noted that all items in the facets, "Materials and Facilities" and "Lesson Management," were not rated for every teacher; therefore, an Overall Average Rating could not be given those facets.

The only facets not having an Overall Average Rating were Materials and Facilities and Lesson Management because some items were discretionary and dependent upon each program teacher's lesson plans. Consequently, all items under these facets were not rated. To meet the set criterion for Lesson Management, units had to display at least two of the eight activities listed. The actual number the observer rated was 4-8 items in every unit. The average number for the 14 units was 5.8. Therefore, all units met criterion. For two of the items under the facet, Materials and Facilities, teachers could use either Holt materials and/or supplemental materials. There was no Overall Average Rating given this facet because all three items were not always rated.

A specific concern of teachers involved Item 24 of the Instructional Efficiency and Monitoring facet. This item dealt with coordination with classroom teachers as indicated by lesson plans. Comments were centered around program teachers' concerns that classroom teachers wanted all of their pupils to go to CLEAR at one time—no matter what basal readers the pupils were reading. Another concern involved the number of different classrooms represented in each CLEAR class period. How to coordinate with classroom teachers given these problems continued to be a concern of program teachers who wanted help in meeting this requirement of the program. Several relatively minor administrative problems were reported to the appropriate Department of Federal and State Programs (DFSP) personnel.

On-site visitations at the middle school level were conducted by two program evaluators in March 1989 and featured teacher interviews based on a locally developed instrument, the Evaluator's Interview Log (Appendix B, pages 52-55). Seven (36.8%) of the 19 regular CLEAR-Middle teachers and all seven CLEAR-Middle-CAI teachers were interviewed. Of the 19 regular CLEAR-Middle labs, it was found that one had been converted mid-year to a CAI/CMS lab. For evaluation purposes this lab has been counted according to its original project status, with the exception of the computer census data summarized later in this report. The interview instrument consisted of 30 items using a five-point rating scale and a final item involving time spent on various instructional activities. Rating scale items were grouped by area of concern. Average ratings were dichotomized as high (4.0 or higher) and low (less than 4.0).

Ratings indicated problems in both middle school projects in the following areas or aspects: parental response to efforts at parent involvement, joint planning with classroom teachers, temperature/ventilation in the reading labs, problems attendant to testing, and the length of time it takes to get evaluation feedback.

The area of class scheduling received high average ratings in both projects. Materials received high ratings in both projects with the exception of condition of materials in the regular CLEAR-Middle project. Group pupil progress received high ratings as perceived by CLEAR-Middle-CAI teachers, but a lower rating by regular CLEAR-Middle teachers. Other areas received mixed ratings in regard to project and/or specific aspects.

In addition to the rating scale items, the instrument addressed the percent of instructional time devoted to various types of activities. Computer activities accounted for the largest allotment of time (38.0%) in the CAI/CMS project. The largest non-computer activitiy in both projects was sustained silent reading, at 18.6% in regular CLEAR-Middle, and 13.7% in CLEAR-Middle-CAI. Other activities using 10% or more of instructional time were individual seatwork in regular CLEAR-Middle (15.7%) and listening to a lecture or a story (12.9%) in regular CLEAR-Middle.

Open-ended comments from program teachers were also recorded. Some of the specific concerns expressed were the following: lack of student number and full first name on the fall 1988 selection printout which made it harder to use; poor testing environment during the posttest, when test is given as part of Districtwide testing; delays in getting work-orders filled; and delays in receiving test results.

One additional locally constructed instrument, informally referred to as a computer census form, was used in the CAI/CMS projects of the CLEAR program. This instrument had two purposes: to delineate and describe the various computer systems used in the CAI/CMS labs, and to determine the percent of program time pupils worked at the computer in the different computer systems. This questionnaire was completed by program teachers in February 1989 (see page 56, Appendix B).

Twenty-two elementary labs have Apple microcomputers and are served by Prescription Learning Company. Prescription Learning (PL) elementary labs are equipped with six Apple microcomputers, one of which is used for the teacher's in-lab management system and for hands-on testing. Additional teaching machines are also utilized in these labs. Nineteen of the twenty-two PL labs are also used a half day in the CLEAR program, and a half day in the Mathematics Improvement Component (MIC).

An additional Prescription Learning lab of another type was piloted this year in one school. This is known as an Integrated Language Arts (ILA) lab. It consists of ten Apple microcomputers joined in a network system with an Acer microcomputer used as the teacher's management station. This lab serves pupils in the CLEAR program only.

Two elementary labs have Tandy TRS-80 color microcomputers, serviced by the B&B Company. Each of these labs is equipped with six computers for pupil use but do not have a command module/teacher management system. These labs serve pupils in the CLEAR program only.

One elementary lab uses the Sperry Network System and is serviced by Wasatch. The Wasatch lab networks four Sperry microcomputers and one AT&T microcomputer as student stations, plus a fifth Sperry microcomputer which is limited to teacher use as a command module. The elementary Wasatch lab serves pupils in the reading/language program and the math program. A second Wasatch lab was added in the same school in January. The second Wasatch elementary lab networks eight Tandy 1000-SL microcomputers as student stations, and a Tandy-4000 used as the teacher station. The Wasatch Tandy lab is used only in the CLEAR program.

Two labs in one school are served by Computer Curriculum Corporation (CCC). A central CCC microhost is hooked up to the individual microcomputers in the two labs. Each lab has a total of eight microcomputers for pupil use: four Apple and four Atari. In addition, each lab has a fifth Atari which is used as a teacher management system. Pupils in both the CLEAR program and the MIC program are served in these labs.

Three middle school labs use Dolphin minicomputers. A Dolphin lab consists of a Dolphin minicomputer with seven pupil terminals, plus a command module terminal which can also be used as another pupil station. The central minicomputer is hard-programmed with educational and management routines. The Dolphin labs were originally serviced by Houghton-Mifflin Company, but the service contract this year is with B&B Company. The Dolphin labs are used in the CLEAR program only.

A Wasatch lab operates in one middle school. The Wasatch lab networks four Sperry microcomputers, three Tandy microcomputers, and one AT&T microcomputer for a total of eight pupil stations, plus an additional Sperry microcomputer which is limited to teacher use as a command module. The middle school Wasatch lab is used in both the CLEAR program and the MIC program.

Three middle school labs use Tandy 1000-SL microcomputers. These labs are serviced by Educational Systems Corporation (ESC) for software, and by Tandy Corporation for hardware. A middle school Tandy lab networks eight Tandy 1000-SL microcomputers as pupil stations and one Tandy 3000 microcomputer as a teacher station, all linked to a central host. All three middle school Tandy labs are used in the CLEAR program, and one is used also in the MIC program.

In January one of the conventional labs in the CLEAR-Middle School project was converted to a CAI/CMS lab. The new lab uses Wicat Systems, and is serviced by the Wicat Systems Company. The Wicat Systems lab uses a central processing unit, a host, eight pupil terminals, and a teacher station. The lab is used in the CLEAR program only.

The average time pupils worked at a computer station, compared with average pupil time in a program, is summarized in Table 14 by computer system and program. Time is reported as average minutes per week.

Table 14

Average Pupil Time at Computer Compared to Average Pupil Program Time in Chapter 1 CLEAR Labs Using Computer-Assisted Instruction 1988-89

Type of Lab	Number of Labs	Average Minutes Per Week: At Computer	Average Minutes Per Week: In Program	Percent Computer Time
Elementary				
PL (Apple)	22	93.4	214.1	43.6
PL (ILA)	1	125.0	225.0	55.6
TRS-80	2	112.5	237.5	47.4
Wasatch (Tandy)	1	75.0	200.0	37.5
Wasatch (Sperry)	1	90.0	225.0	40.0
CCC	2	150.0	225.0	66.7
Total Elem.	29	93.8	209.0	44.9
Middle School				
Dolphin	3	91.7	203.3	45.1
Wasatch (Sperry)	1	100.0	200.0	50.0
ESC (Tandy)	3	86.7	208.3	41.6
Wicat	1	100.0	200.0	50.0
Total MS	8	91.9	204.4	45.0
Program Totals	37	93.4	208.0	44.9

Table 14 indicates that, overall, pupils in CLEAR CAI/CMS labs received a bit less than half (between 40 and 50 percent) of their instruction at the computer stations. Previous observations and interviews indicate that a variety of individual and group teacher directed activities would account for the remaining program time. Three exceptions to the general range of 40 to 50 percent can be seen at the elementary level. The average percent computer time for the one Wasatch Tandy lab was slightly below this range, at 37.5%. The range was exceeded in the one Prescription Learning ILA lab, at 55.6%, and in the two CCC labs at an average of 66.7%.

The reader will note that at the middle school level there was a small discrepancy in the overall percent of time pupils work with computers as measured by the Evaluator's Interview Log (38.0%) and the computer census form (45.0%). The percent derived from the computer census form is probably the more accurate because it was computed directly from average minutes per week at the computer compared to average minutes per week in the program, with no further variables to consider. The Evaluator's Interview Log, on the other hand, asked teachers to compute percent of instructional time for 14 activities, which may in practice overlap and intertwine.

Summary

A total of 4902 pupils was served by the CLEAR program during the 1988-89 school year. Average daily membership in the overall program was 4000.1.

The evaluation sample consisted of 2352 pupils who met the program attendance criterion, were English-speaking and received both the pretest and posttest. Grade 1 scores were not reported in the narrative or included in the total program averages due to the inappropriateness of the pretest and posttest levels. The MAT6 results may not reflect true pupil performance for certain programs and groups of pupils. Analysis of pretest-posttest achievement data for the grade 2-8 evaluation sample indicated an overall average gain of 5.9 NCE points for the 5.7 month treatment period, or 1.0 NCE point per month of measurable instruction. This met the performance objective of an average growth of 1.0 NCE point per month for the overall program. When data were analyzed by grade, it was noted that the evaluation criterion was met or exceeded in grade 3 (2.1 NCEs per month) and in grade 4 (1.3 NCEs per month). The remaining grades missed the criterion of 1.0 NCE per month with average monthly gains of 0.9 in grade 7, 0.7 in grade 6, 0.5 in grades 2 and 5, and 0.2 in grade 8. It was evident that there were some problems meeting the program's objective of 1.0 NCE average gain per month at most grade levels, which depressed the NCE point change for the overall program.

The 1988-89 CLEAR program included two projects utilizing Computer Assisted Instruction/Computer Management System (CAI/CMS). In 26 elementary schools 1078 pupils were served in CAI/CMS labs by 29 teachers. In middle school CAI/CMS labs 314 pupils in seven schools were served by 7 teachers. Evaluation sample sizes were 583 in elementary school and 151 in middle school.

Both the CAI/CMS projects and the regular CLEAR projects met the program objective of an average gain of 1.0 NCE for every month of instruction. Grade 3 in both elementary projects had the greatest positive change in NCEs: regular 12.3 NCEs overall or 2.2 per month, and CAI/CMS 10.7 NCEs overall or 1.9 per month. The other grade which met criterion in both CLEAR elementary projects was grade 4: 8.6 NCEs overall, 1.5 per month in regular CLEAR and 7.0 NCEs overall, 1.2 per month in the CAI/CMS project. The overall average change for

grades 2-7 in the CAI/CMS projects was 5.8 NCE points (grade 8 was not in the sample); in regular CLEAR (grades 2-8) the overall average change was 5.9 NCE points.

An additional comparison of treatment groups was made at the primary level where three distinct teaching methods were possible. For reasons previously stated scores for grade 1 were not included in these comparisons. At grade 2 the Whole Language pilot group made an overall NCE change of 2.9 NCEs (0.5 NCE per month); CAI/CMS group 1.4 NCEs (0.2 NCE per month); and regular treatment group 3.6 NCEs (0.6 NCE per month). Grade 3 in all teaching method groups met criterion. The average overall changes in NCE scores for grade 3 for the three teaching methods were as follows: Whole Language pilot group 12.3 NCEs (2.2 NCEs per month); CAI/CMS group 10.7 NCEs (1.9 NCEs per month); and regular treatment group 12.2 NCEs (2.1 NCEs per month).

As already noted, NCE scores are based on percentiles, which compare the pupil's performance in relation to the general population. Even a small gain in percentile or NCE score indicates that a pupil has progressed over the school year at a somewhat greater rate than would be expected from the pupil's original position in terms of the general population.

The total number of program teachers was 128.0. The total number of full-time equivalency teachers (FTE) was 107.25. The number of teachers having master's degrees was 68, or 53.1% of the teaching staff and one teacher (0.8%) had a doctoral degree. The number of teachers having reading certification was 64, or 50.0% of the program teachers. CLEAR teachers reported an average of 9.4 years of Title I/Chapter 1 teaching experience, and an average of 20.8 years of overall teaching experience.

CLEAR teachers reported a total of 8704.6 contacts with 3333.3 parents of program pupils involving 5327.4 parent hours. An additional 852.2 contacts were made with 643.4 parents who did not have children in the program involving 901.0 parent hours.

Positive ratings were given by CLEAR teachers to the Chapter 1 inservice sessions in which they participated. Inservice features receiving positive comments by program teachers included presentations by specific speakers, displays of new materials, coordinators' mini-sessions at the orientation meeting, a visit to a new type of CAI/CMS lab, a presentation by the Library Resource Center, sharing ideas and materials, hands-on activities with computers, and making books. The only item receiving five or more negative comments in a meeting concerned taking too much time answering questions dealing with individual problems. The only suggestion for future inservice topics with a frequency of five or more at a meeting was the area of parent involvement.

Process evaluation was conducted in a series of on-site observations to the CLEAR-Primary pilot Whole Language units of the regular CLEAR-Elementary project. On-site observations indicated strong evidence that the program was being implemented at the time of the visits. Program teachers expressed concern about how to coordinate with classroom teachers given program scheduling problems. Of the five facets of program implementation that could be given an overall average rating, three had an average rating of 1.9 and two

had an average of 2.0 on a three-point scale where Compelling Evidence was rated (2), Some Evidence (1) and No Evidence (0). Several relatively minor problems were reported to the appropriate Department of Federal and State Programs (DFSP) personnel.

Interviews conducted with regular and CAI/CMS middle school teachers indicated problems in the following areas: parent involvement, joint planning with classroom teachers, temperature/ventilation in reading labs, testing environment during the posttest, delays in receiving test results, and delays in getting work-orders filled. The area of class scheduling received high ratings at the middle school level.

A survey of CLEAR CAI/CMS teachers indicated that a variety of computer systems was used in the CAI/CMS segments of the program. The most prevalent computer system was Prescription Learning, which is used at the elementary level. For the most part, pupils worked at a computer station between 40 and 50 percent of their program instructional time.

The findings above indicate that the 1988-89 CLEAR program attained the program performance objective in terms of NCE points. The overall average change for grades 2-8 was 5.9 NCE points or 1.0 NCE point per month. Grades making the most progress in terms of NCE points were grades 3 and 4. Other grades made 0.9 NCE points per month or less. Comparisons were also made in regard to treatment group. The overall gain for the regular projects was 5.9 NCE points (0.9 per month), while the overall gain in the CAI/CMS projects was 5.8 NCE points (1.0 per month). Additional comparisons were made among three teaching methods in grades 2-3. Overall gains in NCE scores over the three different methods of teaching for the year were 7.3 NCEs or 1.3 NCEs per month.

Given the overall findings for the program it is interesting to note how teachers rated their pupils' progress as students exited the program. When teachers were asked their opinion about whether their pupils had progressed while in the CLEAR program, program teachers felt that 80.4% of their pupils had made much or some progress. Only 19.7% of their pupils were rated as having made little or no progress in CLEAR.

Recommendations

It is recommended that the CLEAR Program be continued during the 1989-90 school year, with special consideration given to the following:

1. Selection procedures, instructional methods, class size, test content, and test norms should be reviewed to determine why pupils at some grade levels did not show desired growth, while pupils in other grades (3-4) showed disproportionately high growth. One course of action might be to concentrate program resources in those grades that showed the most success. A more honest approach, however, would be to examine the appropriateness of norms and content of the test to the target group. Should the norms or content of the present test not be deemed appropriate, alternative achievement tests should be considered.

2. The primary group using the Whole Language approach achieved results roughly comparable to the other two teaching methods used at that level. The Whole Language approach has demonstrated in its second year that it is a viable option within the program and should be continued.

3. Methods for encouraging parent involvement need to be actively sought and successful methods shared.

4. Reading materials should be sent home for the pupil to practice reading. Parent involvement should be elicited in this process.

5. Efforts need to be made to improve coordination with classroom teachers and provide inservice and supervision to assure that this is occurring. Administrators and staff at the building level should develop a plan to insure that joint planning with program teachers is possible.

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Appendix A

Additional Tables

Table 15

Minimum, Maximum, Median, and Standard Deviation
of the Pretest and Posttest Percentiles
Reported by Grade Level
1988-89

Grade	Pupils in Sample	Pretest				Posttest			
		Min.	Max.	Median Percentile	Standard Deviation	Min.	Max.	Median Percentile	Standard Deviation
1	200	3.0	86.0	18.0	12.8	1.0	99.0	15.0	27.7
2	513	10.0	91.0	23.0	15.0	1.0	97.0	24.0	22.3
3	484	1.0	75.0	16.0	14.6	1.0	92.0	31.0	17.4
4	292	4.0	80.0	21.0	16.7	1.0	84.0	31.0	16.3
5	214	7.0	78.0	21.0	15.6	3.0	67.0	24.0	15.3
6	576	1.0	82.0	22.0	15.2	1.0	97.0	25.0	14.9
7	60	5.0	54.0	24.0	11.9	3.0	79.0	33.0	16.4
8	13	3.0	68.0	15.0	17.9	1.0	57.0	21.0	17.3

Table 16

Minimim, Maximum, Median, and Standard Deviation
of the Pretest and Posttest Grade Equivalents
Reported by Grade Level
1988-89

Grade	Pupils in Sample	Pretest				Posttest			
		Min.	Max.	Median Grade Equivalent	Standard Deviation	Min.	Max.	Median Grade Equivalent	Standard Deviation
1	200	0.0	1.6	0.4	0.3	0.2	4.9	1.3	0.6
2	513	1.4	3.9	1.6	0.3	1.3	5.7	2.1	0.7
3	484	1.5	3.9	2.0	0.5	1.5	5.7	3.0	0.7
4	292	2.0	5.2	2.7	0.8	1.7	7.8	3.9	0.9
5	214	2.1	7.9	3.6	1.1	2.1	7.9	4.3	1.2
6	576	2.1	9.7	4.4	1.3	2.1	10.9	4.9	1.3
7	60	4.0	7.7	5.0	0.8	2.5	9.9	5.8	1.5
8	13	4.0	9.3	4.7	1.5	4.0	9.1	5.9	1.7

Table 17
Minimum, Maximum, Median, and Standard Deviation
of the Pretest and Posttest Percentiles Reported by Grade Level
for Pupils Receiving Reading Instruction with Computers (CAI/CMS Groups)
and Pupils Receiving Reading Instruction without Computers (Regular Groups)
1988-89

Grade	Pupils in Sample	Pretest				Posttest			
		Min.	Max.	Median Percentile	Standard Deviation	Min.	Max.	Median Percentile	Standard Deviation
CAI/CMS Group									
1	9	7.0	49.0	14.0	4.5	1.0	43.0	15.0	16.3
2	23	10.0	59.0	23.0	16.1	1.0	94.0	27.0	26.3
3	144	1.0	68.0	19.0	16.0	1.0	89.0	34.0	15.9
4	229	4.0	80.0	21.0	16.7	1.0	78.0	30.0	15.8
5	178	7.0	78.0	21.0	15.5	3.0	67.0	24.0	15.4
6	149	1.0	69.0	20.0	14.5	1.0	66.0	25.0	13.7
7	2	18.0	31.0	24.5	9.2	13.0	19.0	16.0	4.2
8	0	NA	NA	NA	NA	NA	NA	NA	NA
Regular Group									
1	191	3.0	86.0	18.0	13.0	1.0	99.0	15.0	28.1
2	490	10.0	91.0	23.0	15.0	1.0	97.0	24.0	22.2
3	340	1.0	75.0	16.0	13.9	1.0	92.0	31.0	18.1
4	63	4.0	68.0	24.0	16.7	1.0	84.0	35.0	17.3
5	36	7.0	73.0	22.5	16.2	3.0	73.0	28.0	14.6
6	427	1.0	82.0	22.0	15.5	1.0	97.0	25.0	15.2
7	58	5.0	54.0	24.0	12.1	3.0	79.0	33.5	16.3
8	13	3.0	68.0	15.0	17.9	1.0	57.0	21.0	17.4

Table 18
Minimum, Maximum, Median, and Standard Deviation
of the Pretest and Posttest Grade Equivalents Reported by Grade Level
for Pupils Receiving Reading Instruction with Computers (CAI/CMS Groups)
and Pupils Receiving Reading Instruction without Computers (Regular Groups)
1988-89

Grade	Pupils in Sample	Pretest				Posttest			
		Min.	Max.	Median Grade Equivalents	Standard Deviation	Min.	Max.	Median Grade Equivalent	Standard Deviation
CAI/CMS Group									
1	9	0.1	0.4	0.3	0.1	0.3	1.6	1.3	0.5
2	23	1.4	2.3	1.6	0.3	1.3	4.9	2.2	0.8
3	144	1.5	3.7	2.1	0.5	1.5	5.4	3.1	0.7
4	229	2.0	5.2	2.7	0.8	1.7	6.3	3.8	0.9
5	178	2.1	7.9	3.6	1.1	2.1	7.9	4.3	1.2
6	149	2.1	8.6	4.3	1.2	2.1	8.7	4.9	1.2
7	2	4.6	5.4	5.0	0.6	4.4	4.9	4.7	0.4
8	0	NA	NA	NA	NA	NA	NA	NA	NA
Regular Group									
1	191	0.0	1.6	0.4	0.3	0.2	4.9	1.3	0.6
2	490	1.4	3.9	1.6	0.3	1.3	5.7	2.1	0.7
3	340	1.5	3.9	2.0	0.5	1.5	5.7	3.0	0.8
4	63	2.0	4.7	2.9	0.8	1.7	7.8	4.1	1.0
5	36	2.1	6.7	3.7	1.1	2.1	7.3	4.5	1.1
6	427	2.1	9.7	4.4	1.3	2.1	10.9	4.9	1.3
7	58	4.0	7.7	5.0	0.8	2.5	9.9	5.9	1.5
8	13	4.0	9.3	4.7	1.5	4.0	9.1	5.9	1.7

Appendix B

Instruments

COLUMBUS PUBLIC SCHOOLS - Columbus, Ohio

PUPIL CENSUS FORM

LAST NAME _____ FIRST NAME _____ M I _____ SEX _____ TEACHER NUMBER _____

SCHOOL _____ H R _____ GRADE _____

USE A NUMBER 2 PENCIL. ERASE COMPLETELY WHEN MAKING CORRECTIONS.

TEACHER NUMBER	PROGRAM CODE

STUDENT	SCHOOL	GRADE	SEX
			MALE ○ FEMALE ○

TOTAL DAYS OF PROGRAM ENROLLMENT (1 2 3)	TOTAL DAYS OF PROGRAM ATTENDANCE (4 5 6)	HOURS OF INSTRUCTION PER WEEK

WAS THIS A "NON-ENGLISH SPEAKING" STUDENT?
YES * NO *

DID THIS PUPIL BECOME QUALIFIED FOR A SPECIAL ED. PROGRAM?
YES * NO *

HOW DID YOU FEEL THIS PUPIL PROGRESSED WHILE IN YOUR PROGRAM?
MUCH PROGRESS * SOME PROGRESS * LITTLE PROGRESS * NO PROGRESS *

NCS Form No. 08 8153 32

1988-89
Teacher Census Form

Social Security Number ___ ___ ___-___ ___-___ ___ ___ ___

Name_____ Program Code_____

School Assignment_____ Cost Center ___

Circle only the program(s) you are in:

ECIA Chapter 1 Programs:
(1) ADK
(2) CLEAR-Reading Recovery
(3) CLEAR-Elementary (1-5)
(4) CLEAR-Elementary-CAI
(5) CLEAR-Middle (6-8)
(6) CLEAR-Middle-CAI
(7) MIC-Elementary-CAI
(8) MIC-Middle-CAI
(9) Math-Pilot (3-8)

DPPF Programs:
(10) Secondary Reading (Regular)
(11) Secondary Reading (CAI)
(12) HSCA

Other (Specify)
(13) _____

[a]Number of Years of Teaching Experience_____

[b]Number of Years of Title I/Chapter 1 Teaching Experience_____

[c]I am certified in reading as indicated by the subject area on my teaching certificate.

_____Yes _____No

Highest College Degree Received_____

Full-Time Employee_____

or

Part-Time Employee_____

DIRECTIONS:

[a]Total all years of experience, including those which may have occurred outside of Columbus Public Schools. Please include present school year. The timeline on the back of this page will help you in determining total number of years.

[b]1. For every full year taught in Title I/Chapter 1 give yourself 10 months experience. Please include the present school year. The timeline on the back of this page will help you in determining the number of full years taught in Title I/Chapter 1.

2. For every summer term you taught in Title I/Chapter 1 give yourself two months experience.

3. Add in any miscellaneous experience, a part-year perhaps.

4. Add the totals for 1, 2, and 3 and divide by 10. Place the resulting quotient in the blank for question b above.

[c]Certification is defined as having one of the following.

1. reading specified on Bachelor degree.

2. reading specialist certificate.

3. M.A. in reading as a subject.

Timeline for Fifty Years of Continuous Teaching Experience

School Year	Total Years	Assignment
1939-40	50	
1940-41	49	
1941-42	48	
1942-43	47	
1943-44	46	
1944-45	45	
1945-46	44	
1946-47	43	
1947-48	42	
1948-49	41	
1949-50	40	
1950-51	39	
1951-52	38	
1952-53	37	
1953-54	36	
1954-55	35	
1955-56	34	
1956-57	33	
1957-58	32	
1958-59	31	
1959-60	30	
1960-61	29	
1961-62	28	
1962-63	27	
1963-64	26	
1964-65	25	
1965-66	24	
1966-67	23	
1967-68	22	
1968-69	21	
1969-70	20	
1970-71	19	
1971-72	18	
1972-73	17	
1973-74	16	
1974-75	15	
1975-76	14	
1976-77	13	
1977-78	12	
1978-79	11	
1979-80	10	
1980-81	9	
1981-82	8	
1982-83	7	
1983-84	6	
1984-85	5	
1985-86	4	
1986-87	3	
1987-88	2	
1988-89	1	

CHAPTER 1 EVALUATION
PARENT INVOLVEMENT SURVEY

mailing label
goes here

Name _____

School _____

For the month of MAY, 1989

	(A) Number of Parents	(B) Total Number of Hours
1. Parents involved in the planning, operation, and/or evaluation of your unit	____	____.__
2. Group Meetings for Parents	____	____.__
3. Individual Parent Conferences (include phone conferences)	____	____.__
4. Parental Classroom Visits or Field Trips	____	____.__
5. Visits by you to Parent Homes	____	____.__
6. Totals	____	____.__
7. Estimated Unduplicated Count of Parents	____	

DIRECTIONS:

1. Complete all information, fold over so back is showing, staple, and place in school mail.

2. Place a parent in only one activity for any one meeting.

3. Total hours equals the number of parents times the number of hours spent, e.g., a group meeting for 10 parents which lasts 3 hours would result in 10 parents (Column A) and 30.0 hours (Column B), 15 parent conferences each for 30 minutes would result in 15 parents and 7.5 hours. Please round all figures in Column B to the nearest half hour. Enter half hours as .5, no fractions please.

4. Item 7 - This is the number of different parents seen, not the total in 6A. If you had 16 parent conferences but 10 conferences were with the same parent, the unduplicated count is 7 parents - you saw 7 parents but had 16 conferences. Do not count a parent more than once. The figure in Item 7A can never exceed the figure in Item 6A.

Please return by Friday, June 2, 1989.

CHAPTER 1 EVALUATION
PARENT INVOLVEMENT SURVEY

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IMPORTANT

ANNUAL UNDUPLICATED COUNT

Enter on the line to the left the annual unduplicated count of parents you had involved in any of the Activities 1-5 below. COUNT EACH PARENT ONLY ONCE FOR THE YEAR. If you have questions regarding this count, please call Jane Williams at 365-5167.

COMPLETE THE REST OF THIS REPORT FOR JUNE ONLY*

Activities	(A) Number of Parents	(B) Total Number of Hours
1. Parents involved in the planning, operation, and/or evaluation of your unit	_____	_____.__
2. Group Meetings for Parents	_____	_____.__
3. Individual Parent Conferences	_____	_____.__
4. Parental Classroom Visits or Field Trips	_____	_____.__
5. Visits by you to Parent Homes	_____	_____.__
6. Totals	_____	_____.__
7. Estimated Unduplicated Count of Parents	_____	

DIRECTIONS:

1. Complete all information, fold over so back is showing, staple, and place in school mail.

2. Place a parent in only one activity for any one meeting.

3. Total hours equals the number of parents times the number of hours spent, e.g., a group meeting for 10 parents which lasts 3 hours would result in 10 parents (Column A) and 30.0 hours (Column B), 15 parent conferences each for 30 minutes would result in 15 parents and 7.5 hours. Please round all figures in Column B to the nearest half hour. Enter half hours as .5, no fractions please.

4. Item 7 - This is the number of different parents seen, not the total in 6A. If you had 16 parent conferences but 10 conferences were with the same parent, the unduplicated count is 7 parents - you saw 7 parents but had 16 conferences. Do not count a parent more than once. The figure in Item 7A can never exceed the figure in Item 6A.

RETURN RIGHT AWAY BUT NOT LATER THAN _____

*Parent involvement data for the month of June must be estimated in order to meet the deadline.

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CHAPTER 1 EVALUATION
PARENT INVOLVEMENT SURVEY
SCHOOL YEAR ESTIMATE OF PARENTS
NON-CHAPTER 1 STUDENTS

Name _____

School _____

Activities	(A) Number of Parents	(B) Number of Parent Hours
1. Parents involved in the planning, operation, and/or evaluation of your unit (Do not include Parent Advisory Council members.)	_____	_____.__
2. Group Meetings for Parents (Do not include Parent Advisory Council meetings.)	_____	_____.__
3. Individual Parent Conferences (include phone conferences)	_____	_____.__
4. Parental Classroom Visits or Field Trips	_____	_____.__
5. Visits by you to Parent Homes	_____	_____.__
6. Estimated Unduplicated Count of Parents	_____	

DIRECTIONS: Please complete all information. Indicate a 0 if the number of parents or hours is actually zero--otherwise enter the number.

Column A (Number of Parents) lines 1-5: Please place a parent in only one activity for any one meeting.

Column B (Number of Parent Hours) lines 1-5: Indicate the sum of the hours each parent spent in an activity. For example, a group meeting with 10 parents which lasted 3 hours should result in a 10 on line 2, Column A and a 30.0 on line 2, Column B (each parent met with the teacher 3 hours and there were 10 parents). Please round all figures in Column B to the nearest half-hour. Enter half hours as .5, no fractions please.

For the Estimated Unduplicated Count of Parents do not count a parent more than once (even if a parent is listed in more than one activity).

After completing all the information on this survey, fold it so the back is visible, staple, and place it in the school mail.

Thank you.

EVALSRVCS/P513/FRMPRINVL

ECIA CHAPTER 1 AND DPPF
ORIENTATION INSERVICE EVALUATION FORM
September 6, 1988

Circle only the program(s) you are in:

ECIA Chapter 1 Programs:
(1) ADK
(2) CLEAR-Reading Recovery
(3) CLEAR-Elementary (1-5)
(4) CLEAR-Elementary-CAI
(5) CLEAR-Middle (6-8)
(6) CLEAR-Middle-CAI
(7) MIC-Elementary-CAI
(8) MIC-Middle-CAI
(9) Math-Pilot (3-8)

DPPF Programs:
(10) Secondary Reading (Regular)
(11) Secondary Reading (CAI)
(12) HSCA

Other (Specify)
(13) _____

Circle the number that indicates the extent to which you agree with statements 1-4, in rating the overall day of inservice.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. I think this was a very worthwhile inservice.	5	4	3	2	1
2. The information presented in this inservice will assist me in my program.	5	4	3	2	1
3. There was time to ask questions pertaining to the presentations.	5	4	3	2	1
4. Questions were answered adequately.	5	4	3	2	1

Circle the number that indicates how you would rate each of the following portions of today's inservice in regard to interest and usefulness of presentations.

	Superior	Excellent	Good	Fair	Poor
5. Large Group Session					
a. Interest	5	4	3	2	1
b. Usefulness	5	4	3	2	1

****
*
* Please turn over for questions 6-12 *
*
****

	Superior	Excellent	Good	Fair	Poor
6. Commercial Exhibits					
a. Interest	5	4	3	2	1
b. Usefulness	5	4	3	2	1
7. Mini-session with Main Speaker					
a. Interest	5	4	3	2	1
b. Usefulness	5	4	3	2	1
8. Program Coordinators' Mini-session					
a. Interest	5	4	3	2	1
b. Usefulness	5	4	3	2	1
c. Clarity of instructions	5	4	3	2	1
9. Evaluation Presentation					
a. Interest	5	4	3	2	1
b. Usefulness	5	4	3	2	1
c. Clarity of instructions	5	4	3	2	1

10. What was the most valuable part of this meeting?_____

_____

11. What was the least valuable part of this meeting?_____

_____

12. What additional information or topics would you like to see covered in future meetings?

_____

_____

_____

GENERAL INSERVICE EVALUATION FORM
1988-89

Inservice Topic: _____

Presenter(s): _____

Date: ____ / ____ / ____ (e.g., 03/05/89)
MM DD YY

Session (Check only one) ____ all day ____ a.m. ____ p.m.

Circle only the program(s) you are in:

ECIA Chapter 1 Programs:
(1) ADK
(2) CLEAR-Reading Recovery
(3) CLEAR-Primary (Special Treatment)
(4) CLEAR-Elementary-Regular (1-5)
(5) CLEAR-Elementary-CAI
(6) CLEAR-Middle-Regular (6-8)
(7) CLEAR-Middle-CAI
(8) MIC-Elementary-CAI
(9) MIC-Middle-CAI
(10) MIC-Elementary-Pilot (3-5)
(11) MIC-Middle-Pilot (6-8)

DPPF Programs:
(12) Secondary Reading Program (Regular)
(13) Secondary Reading Program (CAI)
(14) HSCA

Other (Specify)
(15) _____

Circle the number that indicates the extent to which you agree or disagree with statements 1-4.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. I think this was a very worthwhile meeting.	5	4	3	2	1
2. The information presented in this meeting will assist me in my program.	5	4	3	2	1
3. There was time to ask questions pertaining to the presentation.	5	4	3	2	1
4. Questions were answered adequately.	5	4	3	2	1

5. What was the most valuable part of this meeting? _____

_____

6. What was the least valuable part of this meeting? _____

_____

7. Please list any additional information or topics you would like to see covered in future meetings. _____ _____

_____ _____

_____ _____ _____

Columbus Public Schools
Department of Evaluation Services

EVALUATOR'S VISITATION LOG

Instructions for Using the Rating Scale
and for Determining Kind of Evidence

There are three response choices for rating the items on the instrument: (2) = Compelling Evidence, (1) = Some Evidence, and (0) = No Evidence. Evidence is of three kinds:

(PE)=Physical Evidence - Examples of physical evidence are lesson plans, instructional materials, pictures of pupils on field trips, and a schedule of intramural activities.

(OE)=Observational Evidence - This is evidence obtained from observing the interactions among and between people and people, and people and things. Examples of these interactions are teachers with pupils, teachers with teachers, and pupils with instructional materials.

(TE)=Testimonial Evidence - Examples of testimonial evidence are teachers' and pupils' verbal and/or written comments regarding instructional activities that have been carried out.

When you read each item on the Evaluator's Visitation Log, please note the letters in parentheses which follow each item. These letters represent the most compelling kind of evidence available to the evaluator for that item. The designated evidence accompanying each item will help the evaluator determine the degree of evidence available for that item.

If the designated compelling evidence is found, circle number (2). If compelling evidence is not found, look for one of the other kinds of evidence. If one of the other kinds is found, circle number (1). If no evidence is found, circle (0).

The following description of response choices is designed to provide some uniformity to the rating process.

(2) = Compelling Evidence	The evidence found is the designated one in parentheses following the item. It is substantial and conclusive. The evidence indicates that the item was being fully implemented during the visit.
(1) = Some Evidence	Evidence is found, but it is not the designated evidence that is considered compelling. The evidence indicates that the item was being partially implemented during the visit.
(0) = No Evidence	No physical observational, or testimonial evidence is found. The evidence indicates that the item was not being implemented during the visit.

Columbus Public Schools
Department of Evaluation Services
ECIA-Chapter 1 Primary Program

EVALUATOR'S VISITATION LOG

School: _____ Program Teacher: _____

Observer: _____ Date: _____ Time: from ___ to ___

Grade(s) Observed: _____ Number of Pupils in Class: _____

Directions: Read each item. Notice which evidence in parentheses is considered compelling. If Compelling Evidence is found, circle (2). If Compelling Evidence is not found, look for one of the other kinds of evidence. If you find other evidence, circle the (1). Circle (0) if you find no evidence.

To what extent is there evidence that:	Compelling Evidence	Some Evidence	No Evidence
Literate Environment for Pupils			
1. Pupil writings are displayed (PE).	2	1	0
2. Other reading materials - charts, experience stories, etc. - are placed where children can read them (PE).	2	1	0
3. Room arrangement facilitates many reading options (PE).	2	1	0
4. Reading materials - books, etc.- are accessible to pupils (PE).	2	1	0
Comments: _____			
Administrative Procedures and/or Record Keeping			
5. Running records are maintained for at least one class and are available for inspection (PE).	2	1	0
6. Pupil personal data and attendance are recorded on the DFSP Student Data Form and are available for inspection (PE).	2	1	0
7. Data from program selection tests are recorded and are available for inspection (PE).	2	1	0
8. Class schedules are available and are up-to-date (PE).	2	1	0
Comments: _____			

CNN ____

To what extent is there evidence that:	Compelling Evidence	Some Evidence	No Evidence
Materials and Facilities			
9. Holt materials are used for reading experiences (PE).	2	1	0
10. Facility can accommodate flexible grouping for instruction (PE).	2	1	0
11. Reading experiences are provided through the use of supplemental materials (PE).	2	1	0

Comments: _____

Lesson Management (Activities, Variety, Direct Teaching Techniques)

Lesson involves reading or writing of continuous text and includes at least two of the following:

12. Discussion or questioning of pupils relates to concepts, development of new information, or prior knowledge (OE).	2	1	0
13. Teacher reads story to pupils (OE).	2	1	0
14. Guided reading includes questioning for reading strategies (OE).	2	1	0
15. Teacher and pupils are involved in group writing activity (OE).	2	1	0
16. Teacher administers a Running Record (OE).	2	1	0
17. Teacher and pupils read together (OE).	2	1	0
18. Pupils are involved in independent writing activities (OE).	2	1	0
19. Pupils are involved in independent reading activities with a partner or alone (OE).	2	1	0

Comments: _____

CNN: ____

To what extent is there evidence that:	Compelling Evidence	Some Evidence	No Evidence
Instructional Efficiency and Monitoring			
20. Lesson plans are available (PE).	2	1	0
21. Instruction begins within three minutes after pupils are in room (OE).	2	1	0
22. Routines are established so pupils do not waste time waiting (OE).	2	1	0
23. Positive feedback (verbal or written) is task specific (OE).	2	1	0
24. Instruction is coordinated with at least one classroom teacher as indicated by lesson plans (PE).	2	1	0
25. A system is used for monitoring pupil progress of daily lessons such as writing samples, running records, anecdotal notes, etc. (PE).	2	1	0

Comments: _____

Classroom Climate

26. Verbal interactions are respected by teacher and pupils (OE).	2	1	0
27. In general pupils are attentive to the task (OE).	2	1	0
28. All pupils are given the opportunity to respond (OE).	2	1	0

Comments: _____

Parent Involvement

29. Reading materials are sent home for the student to practice reading (TE).	2	1	0
30. A system is used for communicating with parents, on a regular basis, about their child's motivation and achievement: notation(s) on Student Data Form, newsletters, notes, etc. (PE).	2	1	0

Comments: _____

Columbus Public Schools

DPPF-SRP and ECIA Chapter 1 Programs

EVALUATOR'S INTERVIEW LOG

☐ CLEAR-Elem (1-5)
☐ CLEAR-Mid (6-8)
☐ DPPF-SRP (9-10)

School _____ Date _____

Program Teacher _____ Evaluator _____

Record Keeping

	Adequate				Inadequate
1. DFSP Student Data Sheet	5	4	3	2	1

General Comments about Record Keeping

_____
_____
_____

Pupil Progress

	Much				None
2. Group Progress	5	4	3	2	1

General Comments about Pupil Progress

_____
_____
_____

Communication with Classroom Teacher

	Very Frequent				Very Infrequent
3. Frequency	5	4	3	2	1

General Comments about Communication with Classroom Teacher _____

_____
_____

Coordination with Classroom Teacher

4. Share Progress of Pupils	Always 5	4	3	2	Never 1
5. Joint Planning	Always 5	4	3	2	Never 1

General Comments about Coordination with Classroom Teacher _____

_____

_____

Parent Involvement

6. Responce to Efforts to Involve	Large 5	4	3	2	Small 1

General Comments about Parent Involvement

_____

_____

_____

Selection of Pupils

7. Problems	None 5	4	3	2	Many 1
8. Selection Test Choice	Good 5	4	3	2	Poor 1
9. Procedures	Simple 5	4	3	2	Complex 1
10. Time Required	Reasonable 5	4	3	2	Unreasonable 1

General Comments about Selection of Pupils

_____

_____

_____

Class Scheduling

11. Administrative Cooperation	Good 5	4	3	2	Poor 1
12. Teacher Cooperation	5	4	3	2	1
13. Class Size	5	4	3	2	1

General Comments about Class Scheduling

_____

_____

_____

Testing

14.	Choice of Test	Good 5	4	3	2	Poor 1
15.	Problems	None 5	4	3	2	Many 1
16	Procedures	Simple 5	4	3	2	Complex 1
17.	Test Scheduling	Easy 5	4	3	2	Difficult 1
18.	Time Required	Reasonable 5	4	3	2	Unreasonable 1

General Comments about Testing _____

Evaluation Feedback

19.	Amount	Much 5	4	3	2	None 1
20.	Information	Useful 5	4	3	2	Useless 1
21	Time Factor	Timely 5	4	3	2	Untimely 1

General Comments about Evaluation Feedback

Materials

22.	Amount	Adequate 5	4	3	2	Inadequate 1
23.	Levels	Appropriate 5	4	3	2	Inappropriate 1
24.	Condition	New 5	4	3	2	Old 1

General Comments about Materials _____

Facilities

	Good				Poor
25. Space	5	4	3	2	1
26. Light	5	4	3	2	1
27. Temperature/Ventilation	5	4	3	2	1
28. Noise Level	5	4	3	2	1
29. Furniture	5	4	3	2	1
30. Storage	5	4	3	2	1

General Comments about Facilities _____

Activities in Lab

31. Percent of Student Time Spent in the Following Activities:

a. Sustained Silent Reading	_____ %
b. Listening to a Lecture or a Story	_____ %
c. Listening to a Lecture and then Discussing	_____ %
d. Role Playing	_____ %
e. Participating in a Small Group Discussion	_____ %
f. Working at Learning Centers	_____ %
g. Giving Individual Student Reports or Reading Aloud	_____ %
h. Watching Demonstrations or Doing Experiments	_____ %
i. Debating	_____ %
j. Participating in a Play or Skit	_____ %
k. Doing Individual Seatwork	_____ %
l. Test Taking	_____ %
m. Doing Computer Activities	_____ %
n. Other	_____ %
Total Student Time	100%

MEMO

TO: CLEAR, MIC, and SRP Teachers Using Computer-Assisted Instruction (CAI)

FROM: Ed Chamberlain (CLEAR-CAI and SRP-CAI evaluations)
Phyl Thomas (MIC-CAI evaluations)

SUBJECT: Computer Systems Used in CAI Classrooms

DATE: February 15, 1989

Since there is a variety of different computer systems used in program classrooms, it is necessary for us to periodically assess the distribution and use of these computer systems. Please take a few minutes to complete the form below, fold and staple with the return mailing label showing, and return it in the school mail no later than February 28, 1989.

Teacher _____ School _____

1. Please give the number of Computers or Terminals in your lab, by Type

___Apple
___TRS-80
___Microhost
___Sperry
___Dolphin
___PET
___Other _____

2. Please check the company servicing the computers

___Prescription Learning
___B&B
___CCC
___Wasatch
___Houghton-Mifflin
___None
___Other _____

3. Does your computer system include a command module/teacher management system? ___Yes ___No

4. How many computers (or terminals) are available in your lab for student work (do not include the Command Module)? _____

5. The average number of minutes per week a pupil is served in the program

_____ (Reading program pupils) _____ (Math program pupils)

6. The average number of minutes per week a pupil works at a computer

_____ (Reading program pupil) _____ (Math program pupil)

7. Additional comments: _____

_____

cc: Dick Amorose
Rose Carbol
John Hilliard
Pat Huggard
Dick Snide
Jane Williams
Dorothy Wilson

EVALSRVCS/P506/CAICENSUS
02/10/89