DOCUMENT RESUME

ED 112 354 88 CS 002 138

AUTHOR Pyatte, Jeff A.; Mathews, Samuel R., III
TITLE New Adventure in Learning--Evaluation Report.
INSTITUTION University of West Florida, Pensacola. Educational Research and Development Center.
SPONS AGENCY Bureau of School Systems (DHEW/OE), Washington, D.C.
PUB DATE Jun 75
NOTE 49p.

EDRS PRICE MF-$0.76 HC-$1.95 Plus Postage
DESCRIPTORS *Demonstration Projects; *Diagnostic Teaching; Grouping (Instructional Purposes); *Individualized Reading; Inservice Teacher Education; *Language Development; Open Education; Positive Reinforcement; Primary Grades; *Program Evaluation; Reading Diagnosis; Reading Instruction; Reading Research; Team Teaching
IDENTIFIERS Elementary Secondary Education Act Title III; ESEA Title III

ABSTRACT

An ESEA Title III project in language arts, this program emphasizes instruction tailored to the individual learner's needs. In the fall of 1974, Southside Elementary School, Crestview, Florida, adopted the program which is described and evaluated in this paper. Program components include team teaching in an open space classroom; the use of informal inventories and careful observation to diagnose each learner's language needs; a written reading prescription for each learner; assignments in programed materials, reading kits, basal readers, listening stations, workbooks, and learning games; and inservice teacher training. While the program was received enthusiastically, the results of the evaluation showed no significant gains in reading achievement when compared with the previous year. In fact, all gains were lower for the project year than for the year before. Another finding was differences in reading achievement gains for different ability levels. Higher ability learners achieved larger gains. (MKM)

EVALUATION REPORT

NEW ADVENTURE IN LEARNING

AN ESEA TITLE III

DEMONSTRATION PROJECT

AT

Southside Elementary School
Crestview, FL 32536

Barbara Morgan, Project Coordinator
Willie Jackson, School Principal

Prepared by
Dr. Jeff A. Pyatte, Project Evaluator
Mr. Samuel R. Mathews II, Evaluation Coordinator

The Educational Research and Development Center
The University of West Florida
Pensacola, FL 32504

June 15, 1975

ACKNOWLEDGEMENTS

The evaluation team of the Educational Research and Development Center, The University of West Florida, would like to express its appreciation to: Willie M. Jackson, Principal, Southside Elementary School; Barbara K. Morgan, Project Coordinator, NAIL, Southside; and the teachers of project NAIL at Southside for their cooperation during the evaluation activities.

We would also like to express our thanks to the administrative staff of the Okaloosa County School Board, and the staff of the Educational Research and Development Center for their assistance in collecting and maintaining data on the students of Southside.

INTRODUCTION

Project Description

"New Adventure in Learning" (NAIL) is an ESEA Title III project in language arts which places a heavy emphasis on instruction tailored to the individual learner's needs. Developed at the W. T. Moore Elementary School in Leon County, Florida, the program is directed at learners in kindergarten through grade 3 and includes a comprehensive teacher training component. In pre program training, teachers learn to study characteristics of each learner before selecting objectives, materials, activities, and procedures for directing his learning. Teachers are trained to manage learners by using techniques of positive reinforcement for desirable learner behaviors. They focus on developing on-task learner behavior and responsible classroom conduct by rewarding desirable responses and behaviors and ignoring undesirable ones.

The setting for learning in project NAIL is an open-space classroom where a positive, congenial learning environment is created through the use of learning centers and a multiplicity of instructional materials. Different student learning styles are accommodated by using different grouping patterns and a teamed approach to teaching, enhanced by the use of teacher aides.

Oral language development is emphasized as a means of developing parallel skills in verbal communication and thought processes. Through a combination of auditory, aural, and visual stimulation, instruction is focused on reading improvement. Prescriptions, based on extensive diagnosis of learner needs, assure that learning tasks are appropriate.

Through the ESEA dissemination program, project NAIL has been designated as an exemplary program and is being adopted by several schools throughout the nation. Southside Elementary School, Crestview, Florida, is one of those adopting the program.

Program Description

The program and curriculum design at Southside are essentially the same as those developed at W. T. Moore. For learners in formal reading, the teacher uses informal inventories and careful observation to diagnose each learner's language needs. A reading prescription is then written for each learner. Work in programmed materials, reading kits, basal readers, listening stations, workbooks, and learning games is assigned to reinforce reading skills identified in the prescription. The learner can use these materials independently, with minimal teacher assistance.

Direct instruction is given by teachers bringing together in small groups those learners with common needs. Some groups are highly flexible, and learners move in and out for help with particular skills. Other groups, such as those using basal readers, are more stable. Oral language lessons for small groups as well as for total classes, are structured around specific objectives

utilizing discussion. Discussions are designed to improve vocabulary development, concept development, skills reinforcement, problem solving, and thinking strategies.

The teachers are given specific instruction in the use of the Illinois Test of Psycholinguistic Abilities for diagnostic and prescriptive purposes. (See the appendix for a complete list of in-service training activities.) Those learners who are tested and found to have specific deficit areas are aided through the use of special teaching strategies developed around the diagnosed deficit. This instruction is conducted on a daily basis throughout the program.

The development of oral language proficiency is accomplished via a planned program designed to increase the learner's ability in the areas of listening, thinking, and speaking. Once the learner acquires proficiency in oral language commensurate with the demands of everyday living, the emphasis is switched to the use and understanding of printed symbols. As the learner acquires the skills of dealing with printed symbols, the specific areas of reading, spelling, and writing are attacked.

Instruction in these areas is personalized for each learner, and designed to meet the diagnosed needs of the individual. This personalized instruction is conducted in a classroom which is managed through the use of positive reinforcement. This provides the learner with a positive atmosphere in which to operate, both in academic and social situations.

EVALUATION APPROACH AND DESIGN

Evaluation of educational programs is a necessary but often difficult task. Justification of program evaluations can be deceptive, for often claims are made for evaluations which ignore the wide discrepancy between what is ideal in a program and what can in reality be achieved. The most carefully devised evaluation plans can easily be laid waste by unanticipated events which commonly occur in what is often referred to as the "real world" of the public school. To insist that evaluation plans be carried out without revision in light of evolving program needs, as is frequently done when research design is equated to evaluation design, often renders evaluation results useless to those who need them most - personnel in the public school.

Nevertheless, evaluations must be carefully planned and executed, for to insist otherwise is as unwise as to insist that evaluations be done as planned, ignoring changes brought about by unanticipated events. Furthermore, evaluation of project NAIL is both necessary and desirable from the standpoint of the ESEA dissemination program, the project developer, and the project adopter.

The present evaluation was designed primarily to provide the staff of Southside with information about the effectiveness of the NAIL project as implemented at this school. This evaluation is also meant to allow the developer school, W. T. Moore, to examine the impact of NAIL on the student populations of Southside School. The ESEA Title III grant program requires that programs funded by ESEA be evaluated, thus not only is the present evaluation meant to provide the developer and adopter schools with feedback, but it is also part of the grant requirements.

Evaluation Approach

Evaluation of project NAIL implemented at Southside is characterized by three factors: 1) it was directed at program goals, 2) it has been flexible enough to accommodate program changes, and 3) it was the usability of evaluation results for the Southside program that was considered most important throughout the evaluation.

The evaluation was designed to provide information for determining whether program goals were achieved either during the year or by the end of the year. For the most part, the evaluation was objectives-based. Procedures, instruments, and analyses were planned and responsibility for completing each required activity was assigned early in the year. (See the appendix for details on the evaluation plan.)

Evaluation was viewed as an activity to supplement the program at Southside, not as a separate activity. Consequently, when changes occurred in the program which made it necessary to revise the evaluation plan, the plan was revised. Close contact was maintained between the evaluation team and the program staff at Southside. Communication was established to encourage the staff to provide information about the effectiveness of the evaluation. At the same time, the team provided information about evaluation results as these results became

available. As a consequence, several changes were made in both the program and the evaluation during the course of the year.

PROJECT OBJECTIVES

NAIL at Southside Elementary School was designed to improve the learner's reading skills; to correct psycholinguistic deficiencies of language handicapped learners; to improve the learner's vocabulary; and to improve the spelling, mechanics, and study skills of selected learners. Further, the learner's skills in making appropriate instructional choices, engaging in self-directed learning, as well as his attitudes toward his peers and his school were to be improved. Learning centers were an integral part of the teaching approach employed to achieve these goals.

Objectives

The following program objectives pertained to the Southside program.

1. Learners in grades 1-3 will score at or above an expected level in reading.
2. A sample of language handicapped learners will increase their verbal learning ability.
3. Learners in grades 1-3 will show improvement in vocabulary.
4. Learners in third grade will achieve at or above an expected level in reading, spelling, mechanics of writing, and study skills.
5. Learners will employ self-directed individual and group learning.
6. Learners will interact without regard to individual achievement levels.
7. Teachers will demonstrate positive reinforcement in their interactions with students.
8. Teachers will show a reduction of reinforcement errors.
9. Teachers will plan and implement individual learner programs on a day-to-day basis.
10. Teachers will provide learning centers for activities in listening, arts and crafts, games, manipulation, and creative writing.
11. Teachers will use aides in managing instruction.

EVALUATION RESULTS

Objective 1

Given an instructional program based on assessed needs, first, second, and third grade learners will achieve at or above their expected levels in reading.

Procedures

Complete data on intelligence and achievement in reading was available for 36 of 45 first graders, 60 of 65 second graders, and 57 of 58 third graders who completed one full year of project NAIL at Southside Elementary School. (See the appendix for total counts by grade.) The Peabody Picture Vocabulary Test was administered to learners in all three grades by their teachers in September, 1974. Scores indicating intelligence were derived from measures of mental age from the PPVT and chronological age from school records.

Reading achievement was determined from the standard score on the reading total subtests of the California Tests of Basic Skills. Scores on the CTBS administered in September of 1974 were used to measure pre-achievement. Scores on an alternate form of the test administered in April of 1975 were used to measure post-achievement in reading.

The design previously used to evaluate project NAIL employed a comparison of actual to expected achievement in reading. Expected achievement in that design was determined by projecting each student's expected score using his mental ability as a measure to calculate that expected score. Scores on reading achievement tests were used as measures of actual reading achievement. Achievement "at or above" the expected level, then, indicated that the project objective had been achieved.

An examination of school records indicated that students at Southside Elementary were already achieving at or above expectation. For this evaluation it became more important to know whether the program was effecting any change in reading achievement gains for students at Southside.

The method of comparing the CTBS scores used in this evaluation is designed to reflect any difference in total gain scores between the school year 1974-75 and 1973-74. Other subtests of the CTBS can also be compared in this manner. The factors of grade level, ability level, and year were used in a 3 x 3 x 2 analysis of variance to examine program effects over the two-year time span. Grade levels were grades 1, 2, and 3; ability levels were high, middle, and low, determined by distributing IQ scores from the PPVT and dividing the distribution into thirds; and time consisted of the two years, one prior to implementing the program and the one of the program.

For deciding whether differences existed, a probability level of .01 was set. This means that for factors appearing in variance tables, a P greater than .01 indicates no significance for that factor.

Results

A summary of the analysis of variance for the data on reading achievement gain appears on Table 1.

It can be seen from Table 1 that there is no significant difference in reading achievement gains by grade level. There is a significant interaction by year and grade level. This means that students in the three grades for the same year are maintaining essentially the same achievement gains on the average, but students in the three grades for the different years are not.

Means for reading achievement gain are presented in Tables 2 and 3. It can be seen from Table 2 that the mean gain for grade 2 during the 1973-74 year is about the same as that for the 1974-75 year. This means, for the same two years for grades 1 and 3, however, are quite different. In both cases, the mean gain is lower for the 1974-75 year than for the 1973-74 year.

It can also be seen from Table 1 that there is a significant difference in mean gain on reading achievement by ability level. An examination of Table 3 will reveal that the difference is in favor of the high ability student. Generally, the more able students achieve the greater gains in reading.

The most obvious difference revealed by this analysis is the difference by year. An examination of Table 1 will show a very low probability level for this factor. The means which appear in Tables 2 and 3 are in every case lower for the 1974-75 year than for the 1973-74 year.

Discussion

While the evaluation has been designed to detect changes in student performance on tests of basic skills, in this instance on reading, the number of years used (2) is too small to establish a trend with certainty. Furthermore, when a new program is implemented one can expect a temporary drop in performance until learners and teachers have had time to adjust to changes necessitated by the new program.

Nevertheless, there is strong evidence to indicate that learner performance on reading, as measured by the CTBS tests, has fallen significantly during the project year. While there is abundant evidence that many desirable objectives are being achieved, a significant gain in reading achievement is not among them.

In addition to the fact that the evaluation design is not strong enough to detect trends this year, it does not permit a close look at grade and teacher differences. The fact that grade 2 performed at about the same level for the two years might be explained by many factors, none of which can be pinpointed with the present evaluation design. Even though the interaction between grade and ability level was not significant, means presented in Table 3 clearly indicate that differences for grade 2 are not as great as those for grades 1 and 3.

The fact that high ability students achieve the highest gains is to be expected. However, if a training program is highly individualized, one would certainly hope for equal gains in achievement, regardless of ability level.

Table 1

Analysis of Variance Summary Table for Reading Achievement Data

Source	MS	DF	F ratio	P
Total	1680.049	288		
Between	4808.633	17		
Year	36396.953	1	24.5297	.0000*
Grade	523.738	2	.3530	.7083
Ability	7700.852	2	5.1900	.0064*
Year x Grade	6308.188	2	4.2514	.0150
Year x Ability	1292.977	2	.8714	.4225
Grade x Ability	2167.275	4	1.4606	.2133
Year x Grade x Ability	1257.311	4	.8474	.4982
Within	1483.791			

* Significant at .01 level

Table 2

Mean Gain Scores for Reading Achievement
for the Years 1973-74, 1974-75 and Grades 1, 2, and 3

Year	First Grade	Second Grade	Third Grade
1973-74	76.6782	57.1231	59.4828
1974-75	20.2639	41.4207	30.7898

Table 3

Mean Gain Scores for Reading Achievement
Grades 1, 2, 3; School Years 1973-74, 1974-75

School Year 1973-74

Grade 1				Grade 2				Grade 3			
Ability			Total	Ability			Total	Ability			Total
Low	Med	High		Low	Med	High		Low	Med	High	
65.3	67.4	97.3	76.7	50.8	66.6	54.0	57.1	24.8	56.9	96.7	59.5

School Year 1974-75

Grade 1				Grade 2				Grade 3			
Ability			Total	Ability			Total	Ability			Total
Low	Med	High		Low	Med	High		Low	Med	High	
21.5	12.3	27.0	20.3	35.5	50.2	53.6	46.4	16.2	38.2	38.0	30.8

It is imperative that the temptation to overuse the results of this evaluation be avoided. The limitations of this year's evaluation should be corrected and another year or two spent in working out the program details so that the evaluation can be consistent with program operations before firm conclusions are drawn. Only after careful study over several years should one conclude that no gain in reading achievement is being achieved by the program.

Further, one should not be tempted to conclude that a decline in gain necessarily means a drop in reading achievement. In fact, there is some evidence that the reading achievement is about the same for the year of the project as for the year before when grade equivalents and test norms are used for comparison. (See the annual reports of school progress for 1974 and 1975.)

Objective 2

A sample of language handicapped learners will increase their verbal learning ability.

Procedures

Approximately 10% (23 learners) from the learner population of program NAIL at Southside Elementary School was identified as "language handicapped students" through teacher interaction and observation. The Illinois Test of Psycholinguistic Ability (ITPA) was then administered to those learners identified as handicapped.

These individuals were assigned remedial learning tasks based on deficit areas identified by use of the ITPA. These tasks took the form of discussion, oral language experience, and exercises in visual acquity.

After eight months of instruction in the areas found to be in need of remediation, the ITPA was again administered to the same learners. A correlated t-test was used to determine whether there was any significant improvement in the ITPA scores of this sample of learners.

Results

The t-test for correlated means indicated that there was a significant increase ($df=44$, $t=5.05$, $p<.01$) in the scores obtained on the ITPA by the learners previously identified as "language handicapped students".

Discussion

The data indicate that, given a properly diagnosed area, a prescriptive curriculum will allow the learner to improve significantly in the area of psycholinguistics. The nature of the NAIL classroom does in fact permit the learner to experiment with oral communication, which allows the experience necessary

for functional usage of oral and symbolic language. It might be expected that learners would improve in psycholinguistic ability. However, one must be cautious in attributing all gains to the program. The possibility that learners are simply learning to "take the test" should not be overlooked.

Objective 3

Learners in grades 1-3 will show improvement in vocabulary.

Procedures

Learners participating in program NAIL at Southside Elementary School were assessed in vocabulary skill using the Peabody Picture Vocabulary Test (PPVT). Those learners tested included 58 first graders, 73 second graders, and 68 third graders. Of those who took the test in September, 1974, 8 first graders, 4 second graders, and 4 third graders moved and did not complete the program. One first grader did not take the test.

Based on assessed needs derived from the initial administration of the PPVT, the learners were given personalized instruction. This instruction was conducted in both total class and individualized settings. In May, 1975, the PPVT was again administered as a posttest. A correlated t-test was used to determine whether there was a significant gain in PPVT scores.

Results

The t-test of correlated means indicated that there was a significant increase in raw scores on the PPVT in all three grades. (1st grade: $df=96$, $t=4.36$, $p<.01$; 2nd grade: $df=136$, $t=3.23$, $p<.01$; 3rd grade: $df=126$, $t=6.85$, $p<.01$). The mean raw scores by grade are given in Table 4.

Discussion

The data presented in Table 4 indicate that all learners participating in the program (NAIL) significantly increased their scores on the PPVT. The atmosphere of the NAIL classroom is no doubt partly responsible for this increase. That is, when oral language is encouraged and remedial instruction is accompanied by positive reinforcement, a situation is created which allows the learner to immediately utilize words added to his vocabulary.

Caution should be exercised in making the inferance that an increase in PPVT scores means that learners have improved their vocabulary. The design of this evaluation provided some cross-checks on such assumptions. The results of a variance analysis using grades 2 and 3, three ability levels, and the two years are presented under Objective 4, which follows. No significant differences were found on the vocabulary gain scores of the CTBS tests. This might mean that increases in PPVT scores during the year are a manifestation of either practice effects or "teaching to the test". In neither case would a genuine increase in vocabulary be indicated.

Table 4

Mean Raw Scores for the Peabody Picture Vocabulary Test by Grade

First Grade		Second Grade		Third Grade		Total Mean	
Pre	Post	Pre	Post	Pre	Post	Pre	Post
57.20	60.94	60.45	63.03	64.11	68.75	60.59	64.24

Objective 4

Learners in third grade will achieve at or above an expected level in reading, spelling, mechanics of writing, and study skills.

Procedures

Complete data on reading achievement was available for 57 third graders. Results of the analysis of reading achievement data can be found under Objective 1. It will be recalled that this analysis revealed a lower mean gain for third graders in the 1974-75 year than for the 1973-74 year.

Data on achievement gains for spelling, vocabulary, and mechanics was available for both second and third graders. Consequently, the analysis was done so that both grades could be included and so that achievement gain in vocabulary could also be analyzed. No data was available on study skills; therefore, this area is not included in the following analysis.

A summary of the analysis of variance for data on spelling, vocabulary, and mechanics appears in Tables 5, 6, and 7, respectively. It can be seen from these tables that no significant gains in achievement were found for either spelling, vocabulary, or mechanics. However, the interaction of ability and year was significant for spelling. This means that mean achievement gains were essentially the same on all three measures for the two years, for the three grades, and for the three ability levels. When the mean gains are broken down by ability level and year, however, differences do appear.

Mean gains for spelling, vocabulary, and mechanics are presented in Tables 8, 9, and 10, respectively. Mean gains on spelling for learners grouped by ability level and year appear in Table 11. It can be seen from Table 11 that the mean gain on spelling for low ability learners in 1974-75 is higher than for 1973-74. For high ability learners, however, the mean gain is higher for 1973-74 than for 1974-75. The mean gain for learners of middle range ability is essentially the same for the two years.

Table 5

Analysis of Variance Summary Table for Spelling Achievement Data

Source	M.S.	df	F-ratio	P
Total	2234.776	215		
Between	3110.311	11		
Year	3361.008	1	1.5364	0.2140
Grade	895.152	1	0.4092	0.5303
IQ	2856.773	2	1.3059	0.2723
Year x Grade	28.196	1	0.0129	0.9058
Year x IQ	10659.711	2	4.8729	0.0087 *
Grade x IQ	107.578	2	0.0499	0.9520
Year x Grade x IQ	1340.469	2	0.6128	0.5479
Within	2187.566	204		

* Significant at the .01 level.

Table 6

Analysis of Variance Summary Table for Vocabulary Data

Source	M.S.	df	F-ratio	P
Total	1840.432	212		
Between	1754.509	11		
Year	922.057	1	0.4997	0.4875
Grade	2003.577	1	1.0859	0.2990
IQ	5706.195	2	3.0926	0.0461
Year x grade	615.705	1	.3337	0.5712
Year x IQ	103.881	2	.0563	0.9451
Grade x IQ	943.680	2	.5114	0.6062
Year x Grade x IQ.	1125.369	2	.6099	0.5495
Within	1845.135	201		

Table 7

Analysis of Variance Summary Table for Mechanics Data

Source	M.S.	df	F-ratio	p
Total	3838.336	216		
Between	4279.793	11		
Year	68.513	1	0.0180	.8887
Grade	2752.169	1	.7215	.4013
IQ	2576.693	2	.6755	.5147
Year x Grade	3222.073	1	.8447	.3620
Year x IQ	11692.699	2	3.0652	.0473
Grade x IQ	3812.682	2	.9995	.3713
Year x Grade x IQ	2435.410	2	.6384	.5340
Within	3814.648	205		

Table 8

Mean Gain Scores for Spelling Achievement for Grades Two and Three, 1973-74, 1974-75

School Year 1973-74

Grade 2				Grade 3				TOTAL
Ability			Total	Ability			Total	
Low	Med	High		Low	Med	High		
18.07	58.61	71.60	49.45	21.36	47.52	59.00	42.63	46.03

School Year 1974-75

Grade 2				Grade 3				TOTAL
Ability				Ability				
Low	Med	High	Total	Low	Med	High	Total	
53.33	42.71	15.60	47.21	30.58	45.16	21.67	35.80	34.84

Table 9

Mean Gain Scores for Vocabulary Achievement for Grades Two and Three, 1973-74 and 1974-75

School Year 1973-74

Grade 2				Grade 3				TOTAL
Ability				Ability				
Low	Med	High	Total	Low	Med	High	Total	
40.9231	57.6800	46.7500	48.4510	22.2381	45.8518	65.5000	44.5300	46.4905

School Year 1974-75

Grade 2				Grade 3				TOTAL
Ability				Ability				
Low	Med	High	Total	Low	Med	High	Total	
37.5000	43.5789	61.000	47.3596	16.6250	40.0698	44.3333	33.6850	40.5223

Table 10

Mean Gain Scores for Mechanics Achievement for Grades Two and Three, 1973-74 and 1974-75

School Year 1973-74

Grade 2				Grade 3				TOTAL
Ability			Total	Ability			Total	
Low	Med	High		Low	Med	High		
69.0000	90.8571	17.4000	59.0857	24.2727	51.6071	38.2500	38.0433	48.5645

School Year 1974-75

Grade 2				Grade 3				TOTAL
Ability			Total	Ability			Total	
Low	Med	High		Low	Med	High		
39.8750	41.7632	67.6000	49.7461	31.2174	47.8387	72.6667	50.5743	50.1602

Table 11

Mean Gain Scores for Spelling Achievement for 1973-74 and 1974-75 by Ability Levels of 2nd and 3rd Graders

	Ability		
	Low	Med	High
1973-74	19.7175	53.0628	65.3000
1974-75	41.9583	43.9359	13.6333

Discussion

Interpretation of the significant interaction, mean gain scores by ability levels, is complicated by the fact that high ability students can be expected to gain less than low ability students simply because they tend to have high scores on pretests. In other words, they appear to regress, when actually their gains are not being adequately measured. Nevertheless, the possibility appears to exist that gains in spelling skill for high ability students are lower with the program while those for low ability students are higher.

Objective 5

Learners will employ self-directed individual and group learning.

Procedures

Fifty-one learners were randomly selected by the teachers in program NAIL to be observed for self-directed, on-task behavior. It was felt that specific behaviors should be observed to determine the nature of on-task behavior. The repeated observation of the same learner, over time, yielded a measurement for consistency of on-task, self-directed behavior.

Such behavior as: 1) selection of material consistent with diagnosed needs, 2) completion of tasks associated with diagnosed needs, 3) independent work, and 4) participation in total class and small group situations were observed and considered indicative of self-directed, on-task behavior. The behaviors listed above were recorded on the Checklist for Self-directed Learning. (See the appendix.) Observations were made weekly during the beginning of the program.

The observation of fifty learners each week proved to be inadvisable because of the amount of time involved in observing and recording the data. The decision to move to a bi-weekly observation was made, keeping in mind that the evaluation of project NAIL should be accomplished with project goals in mind, not with evaluation-specific tasks taking priority.

The teachers of project NAIL at Southside were also meeting some difficulty in observing and recording behaviors particular to one area of concern during the time allotted for observation when the learners to be observed were working in an alternate area. In order to facilitate the observation of a specific learner in more than one behavioral area, a revision was made on the Checklist for Self-directed Learning to provide for observation of the learner during prescribed task time, free time, and class sessions. (A copy of the revised checklist can be found in the appendix.)

Results

Learners not present during the day(s) of observation were not included in that reporting period. It was felt that in order to obtain a representative measure of the total learner population of project NAIL from a sample, situational variables should be as consistent as possible across the sample. The mean numbers of positive (self-directed) and negative (non-self-directed) responses are given by reporting period in Table.12. The discrepencies in the total number of responses are due to the absence of a learner during the observation. It is evident from these data that learners were engaging in self-directed, on-task behavior.

Discussion

In every period except two (1/15/75 and 2/4/75), the number of positive was greater than double the number of negative responses. Much of this behavior is no doubt due to the positive reinforcement given by the teachers for self-directed activities and on-task behavior of the learner. The nature of the activity centers and their relevance to learner needs provided the learner with instructional choices which covered a great range of ability levels and instructional areas.

The interaction of the variables of positive reinforcement, activity center diversity, and diagnostic personalized teaching appear to have contributed to an atmosphere for self-directed learning. Such interaction and reinforcement were repeatedly observed during on-site visits by the evaluators. There is little doubt that learners were engaging in self-directed, on-task behavior.

Objective 6

Learners will interact without regard to individual achievement levels.

Procedures

Teachers and aides observed the learners of project NAIL at Southside Elementary School and recorded whether or not the social groups were integrated by sex, race, and ability level. These observations were recorded on the Group Description Form (See appendix.) Groups were randomly chosen and observed

Table 12

Responses on Checklist for Self-directed Learning

by Reporting Period

	10/30/74	11/6/74	11/20/74	12/4/74	12/18/74	1/15/75	2/4/75	2/27/75	3/12/75	3/26/75	4/9/75	4/23/75	5/7/75	Mean
Positive**	140	142	143	147	110	114	119	118	83	82	108	102	125	118.23
Negative*	67	51	62	56	33	62	78	43	31	23	25	31	25	45.15

* Indicates non-self-directed activities = items 2,4,6, and 8 on checklist (See appendix.)

** Indicates self-directed activities = items 1,3,5, and 7 on checklist (See appendix.)

during the times of the school day when the learners had the freedom to interact without regard for ability grouping. Lunch, free classroom time, movies, and assemblies were chosen as some of the situations in which the learners were observed. Observations were originally to be made on a weekly basis but were reduced to a bi-weekly basis early in the program.

In order to establish some degree of reliability, external observers from the Educational Research and Development Center (ERDC) made on-site observations during lunch periods, free time, and during the time allotted for prescribed tasks.

Results

The results of the observations by the teachers indicate that groups observed during times in which the learners were free to choose their social peers were in fact integrated by sex, race, and ability level.

On-site observations by ERDC personnel were in agreement with teacher observations as to the stability of social groups in project NAIL at Southside. Observations made during prescribed task periods indicate that the groups formed after individual learners completed the task assigned were highly flexible. Those learners completing tasks after a group had been formed were readily accepted into groups previously formed.

Discussion

The group heterogeneity of project NAIL is likely due to the personalized procedure for instruction. That is, the learners are working at individual tasks which are not readily identified as being "above or below" tasks being accomplished by other learners.

Positive reinforcement by the teacher provides a model which is readily observable by the learner. This model is conducive to learner adaption of a positive reinforcement system of interaction and therefore creates the potential for productive interaction between learners. This positive atmosphere is reflected in group heterogeneity, by sex and race as well by achievement level.

In any case, there is little doubt that learner groups were effectively interacting without regard to any personal factors, such as achievement level, which could have acted as inhibitors.

Objective 7

Teachers will demonstrate positive reinforcement in their interactions with learners.

Procedures

The teachers of the first, second, and third grades were observed by the project coordinator, and data were collected as to the positive or negative nature of teacher-learner interaction. Observations were made bi-weekly.

The criterion for demonstration of positive reinforcement was a rate of positive reinforcement in learner-teacher interactions equivalent to 80% of the total number of interactions observed. Observations were recorded weekly for the months of October, 1974, through April, 1975.

Results

The results are shown in Table 13. It can be seen that when the yearly mean is considered, the teachers achieved the project NAIL objective, performing at the yearly rate of 85.5% positive reinforcement. As can be seen from Table 13, only one month, December, shows a drop below criterion.

The observations were not recorded in Table 13 for the months of March and April due to the fact that post-testing (CTBS, ITPA, PPVT) was done during those times. For the month of February, only three recordings were made. In the month of December, the Christmas vacation took up the final two weeks, and the missing observation in November was due to the absence of the program NAIL coordinator.

Discussion

The decline to below criterion level in positive reinforcement during the month of December perhaps illustrates the effect of seasonal variables on the teachers in program NAIL. The teachers appear to have improved in their rate of reinforcement as the year progressed. This trend is indicative of the more frequent use of positive reinforcement for classroom management and instructional purposes which was observed during visits by the evaluators.

Table 13

Mean Percentage of Positively Reinforced-Teacher-Student Interaction

Observation Number	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	
1	96.2	74.8	79.0	85.3	86.0	83.9	92.7	
2	85.4		74.1	80.9	86.1	91.0	93.1	
3	79.3	83.4		87.5	85.9	93.2	93.0	
4	86.8	86.7		87.8				Yearly Mean
Monthly Mean	86.9	81.6	76.6	85.4	86.0	89.4	92.9	85.5

Objective 8

Teachers will show a reduction of reinforcement errors.

Procedures

Nine teachers from program NAIL, Southside Elementary School, were observed by the project coordinator. Observations were made on a weekly basis. The number of incorrectly reinforced teacher-learner interactions was recorded and compared to the total number of interactions. A maximum of 1% reinforcement errors was established as a criterion for success. Some of those interactions judged incorrect include positively reinforcing inappropriate behavior and negatively reinforcing behavior which should have been ignored.

External evaluators observed the teachers periodically throughout the program. The chief area these observations attended to was the use of positive reinforcement in classroom management.

Results

With the exception of three instances, from the program outset teachers exhibited a rate of reinforcement errors less than or equal to 1% of the total number of interactions. The three exceptions occurred during October (22% and 25% errors during two observations), and December (14% error during one observation).

The observation by external evaluators indicated that the teachers were making use of positive reinforcement in situations such as getting ready for lunch, P.E., and in the movement of learners from one room to another.

Discussion

The data indicate that, with the exception of the three isolated instances, the teachers of Southside reached the criterion level of performance on reinforcement. It may be noted that the establishment of a positive, congenial atmosphere in the classroom enabled learners to cope with "outsiders" when they invaded their classroom. Their ability to continue learning without being distracted improved during the year. This is possibly due to the fact that teachers become more proficient in the use of behavior modification techniques, and thus in establishing a more positive learning atmosphere.

Objective 9

Teachers will plan and implement learner programs on a day to day basis.

Procedures

Diagnostic instruments such as informal reading inventories and phonics encoding surveys, along with teacher observations, were used to determine the needs of the learners in program NAIL. Based on diagnosed needs, the teachers wrote prescriptions for tasks in handwriting, phonics, oral language, listening, and composition skills on a daily basis for each learner. These prescriptions were maintained in individual folders placed within easy access of the learner.

The prescription folders were examined periodically by the Project Coordinator and members of the Educational Research and Development Center evaluation team.

Results

Inspection of the program NAIL learners' prescription folders revealed that the daily prescriptive assignment criterion was met. Learners were observed referring to the folders for daily assignments. The folders were also useful in supplying the learner with information about the quality of work previously completed.

Discussion

The personalized method of instruction provided learners a direct communication system between themselves and the teachers. This was accomplished by use of the prescription folder. Assignments made within the folder were made with a specific learner in mind, and feedback was given to the individual learner via the same prescriptive folder.

Folders of the nature used in program NAIL provide the teacher with a readily accessible record of learner progress and allow a continuous diagnosis of that progress.

Objective 10

Teachers will provide learning centers for activities in listening, arts and crafts, games, manipulation, and creative writing.

Procedures

The nature and number of learning centers within each of the program NAIL classrooms were observed by the Project Coordinator. The number of activity centers was recorded on a monthly basis, and the average number of centers in the classrooms was recorded.

The employment of the activity centers was verified during on-site visits by evaluation personnel from the Educational Research and Development Center

(ERDC), The University of West Florida. These on-site observations were conducted on the average of one visit per month. Visits occurred at various times during the day and week.

Results

The Project Coordinator determined from classroom inspection that, during the months of September, October, and December, there was an average of three activity centers per room. For the months of January, February, March, and May, the average number of centers per room was four.

The on-site observation by the ERDC personnel indicated that the activity centers were placed in readily accessible areas of the room (along the walls; on tables; in very conspicuous areas of the classroom). Learners utilized the centers during free time, after completion of prescribed tasks, and during small group sessions when they were not involved in group work.

Unique activity centers were also present in areas not covered by the specified objectives of project NAIL. These centers included a study of plant life, aquatic life, and mammal behavior.

Discussion

The activity centers of project NAIL at Southside and their physical placement in the classroom provided the learners with an opportunity to practice those skills diagnosed for remediation. When the results of the self-directed activity checklist are examined, it is easily seen that the learners made appropriate instructional choices. These choices were facilitated by the diversity of the activity centers in program NAIL at Southside Elementary School.

Objective 11

Teachers will use aides in management and instructional capacities.

Procedures

Six full-time teacher aides were involved with program NAIL at Southside Elementary School. The teacher aides were to be utilized in both management and instruction in the NAIL classrooms. In order to determine the degree to which the aides were assisting the classroom teacher and to procure some measure for professional conduct of the aides, the Aide Evaluation Form was used. (See appendix.)

Teacher aides were assessed on a monthly basis from October, 1974, through May, 1975. The aides were assessed by the classroom teachers with whom they had contact. Since the Aide Evaluation Form provided information from

predetermined areas, it was felt by the evaluation personnel that teachers could provide additional information about the activities of the aides during the school year. This information was obtained by asking the teachers to list tasks performed by the aides. The tasks were divided into the categories of management and instruction.

Results

The results of the Aide Evaluation Form were combined into three reporting periods: October and November, 1974; December, 1974, through February, 1975; and March, 1975, through May, 1975. These results are shown in Table 14. As can be seen, the ratings of the aides on the Evaluation Form improved radically after the first reporting period. All items showed a positive movement of ratings between the first and second reporting period and a relatively stable transition between the second and third reporting periods.

A list of tasks identified by the teachers as being completed by the teacher aides is presented in the appendix. It should be remembered that this list is a selection of the most common and frequently accomplished tasks, and by no means should it be considered as a list of all tasks completed by a specific aide.

Discussion

As the aides became more accustomed to working in program NAIL, their professional behavior and attitude moved in a positive direction. Learners were provided an additional resource person and, as can be seen in the results of the Aide Evaluation Form (Table 14), a working rapport was established. The aide evaluation data illustrates the professional stature of the aides, but a word on those tasks identified by the teachers is in order.

The aides provided the teacher with more time to attend to instruction by accomplishing many of the "housekeeping" tasks necessary for classroom management. The fact that the aides did a great deal of filing and record keeping, along with material construction, allowed the classroom teacher more time for planning, personalized instruction, and learner conferences.

During the time allotted for prescriptive work by the learner, the aides provide instructional support for the teacher. In total class situations, the aide was free to accomplish the "housekeeping" and management tasks mentioned above. While the small group sessions were going on, the aides were able to do supervisory work with the groups. It can be seen that the addition of teacher aides to the classroom provided both the teacher and the learner with vital assistance.

Table 14

Summary of Project NAIL Teachers Aide Evaluation
Part I

	10/74-11/74				12/74-2/75				3/75-5/75			
	Always	Some-times	Seldom	Never	Always	Some-times	Seldom	Never	Always	Some-times	Seldom	Never
Tardy	0	0	0	12	0	0	1	17	0	0	0	18
Negatively critical of other school personnel	0	0	2	10	0	0	2	16	0	0	0	18

Table 14 (continued)

Summary of Project NAIL Teachers Aide Evaluation
Part II

	10/74-11/74				12/74-2/75				3/75-5/75			
	Never	Rarely	Some-times	Always	Never	Rarely	Some-times	Always	Never	Rarely	Some-times	Always
Requests information or help when needed	1	1	0	10	0	0	2	16	0	0	0	18
Shows initiative in helping the classroom	0	1	2	9	0	0	0	18	0	0	0	18
Has good rapport with children	0	0	4	8	0	0	2	16	0	0	5	13
Accepts correction or constructive criticism	0	1	1	10	0	0	0	18	0	0	0	18
Displays positive work attitude	0	0	4	8	0	0	0	18	0	0	0	18
Treats confidential or sensitive information in proper manner	0	0	1	11	0	0	0	18	0	0	0	18

Table 14 (continued)

Summary of Project NAIL Teachers Aide Evaluation
Part III

	10/74-11/74					12/74-2/75					3/75-5/75				
	Poor	Below Average	Average	Above Average	Excellent	Poor	Below Average	Average	Above Average	Excellent	Poor	Below Average	Average	Above Average	Excellent
Quality of work is:	0	1	2	5	4	0	0	2	8	8	0	0	2	7	9
Operation AV equipment is:	1	1	5	3	2	0	0	12	2	4	0	0	10	7	1
Personal appearance is:	0	0	4	2	6	0	0	6	4	8	0	0	6	2	10
Cooperativeness is:	0	0	2	4	6	0	0	0	10	8	0	0	0	8	12

SUMMARY AND RECOMMENDATIONS

Summary

Reading Gain

1. Differences in reading achievement gains were found for grades 1, 2, and 3 when broken down by year. Gains for grades 1 and 3 were lower for the project year than for the previous year.

2. Differences were found in reading achievement gains for different ability levels. Higher ability learners achieved higher gains.

3. Differences were found in reading achievement gains for the two years. All gains were lower for the project year than for the year before.

Verbal Learning for Handicapped

Handicapped learners improved their scores on the ITPA, indicating that improved verbal ability may have taken place.

Vocabulary

Evidence was conflicting on the improvement of vocabulary. The PPVT indicated improvement for grades 1, 2, and 3. The CTBS vocabulary subtest scores were not significantly different for grades 2 and 3.

Reading, Spelling, Mechanics of Writing, and Study Skills

1. No data was available on study skills.

2. Differences were found in spelling gains when students were broken down by ability level and year. Low ability students made greater gains during the project; high ability students made greater gains the year before the project.

Learner Self Management

1. Learners achieved self-direction in learning, and they were able to stay on task during learning.

2. Learners were able to interact without regard to ability, sex, or race.

Teacher Behavior

1. Teachers were able to use reinforcement effectively when interacting with learners.

2. Teachers were able to achieve a 1% error level in using reinforcement.

3. Teachers were able to personalize learning on a daily basis for individual learners.

4. Teachers provided an increasing variety of learning centers for listening, arts and crafts, games, manipulation, and creative writing.

5. Teachers were able to use aides effectively in classroom management and instruction.

No differences were found in reading achievement gains for the three grades, and no differences were found for learners of varying ability for either the two years or the three grades.

Except for the difference in spelling gains for students of different ability for the two years, no differences were found on spelling gains. No differences on any factor were found for gains on vocabulary and mechanics subtests.

Recommendations

While the evaluation design used to appraise program NAIL suffers from several limitations, it nevertheless is fairly strong. The results of this evaluation point to some positive aspects of NAIL and at the same time raise several questions. The greatest strengths of the design are (1) the capability to isolate factors of ability and grade over a period of time from one year before the project to one year after the project when looking at skills gains and (2) the use of standard scores for measuring gains.

The utilization of grade equivalent scores in evaluating an innovative program provides normative data through which the program designer can observe some general effect of the program when compared to some national or state-wide norm. Once a program has been shown to have a positive effect in terms of normative, grade equivalent scores, and is distributed to adopter schools, a major question to be answered concerns the nature of the effect of the program on a specific population (adopter school). The use of normative data in evaluating the effect of a project on a specific population can only be interpreted in terms of comparison between that population and the normative population.

The students of program NAIL at Southside Elementary School achieved at or near grade level in the post administration of the CTBS. Utilization of this data for comparative study between school years however, is confounded by any change in the national norm over a year's time.

The nature of the evaluation designed and implemented for program NAIL at Southside Elementary School is intended to compare the gain in CTBS standard score of the individual learner participating in NAIL with the gain in CTBS standard score of individuals from Southside in grades 1, 2, and 3 in the year preceding project NAIL at Southside. A comparison of this nature is felt to reflect one aspect of the effect of program NAIL upon the population of

learners served by Southside. Reporting the results in a manner comparing individual learners from a relatively stable population provides the school personnel with a look at what the effect of a program previously shown to be effective in other schools has on the adopting school.

Nonetheless, two years is a short period of time and is by no means sufficient to establish a trend. Numerous factors could account for declines in gain scores where they have occurred during the project year. Consequently, it is recommended that the evaluation be repeated for a third year so that a larger time span can be encompassed. Further, it would be wise to expand the grade range to include grades 4, 5, and 6. Any drop in gains associated with the project could more readily be detected. Finally, new projects invariably are disruptive. Performance of learners can be expected to drop temporarily when changes are made. More time would make it possible to look for temporary drops in learner gains.

One would expect that in an individualized program emphasizing diagnostic instruction, gains would not be related to learner ability. There is clear evidence that this is not always the case in program NAIL. It is recommended that close attention be given to the learners in the low ability range to see if the same attention is given to them as is given to learners of high ability.

In cases where the ITPA and the PPVT are used to measure improvement, there is evidence that measured gains are due to practice with the test or teaching to the test. It is recommended that alternative, external measures of verbal learning ability and vocabulary be sought so that a check can be made on the validity of the ITPA and the PPVT for these measurements.

Clearly, both from the data and from observations made by the evaluators, program NAIL at Southside is enthusiastically received both by learners and teachers. Teachers and learners have achieved most of the project objectives, and attitudes are very positive. It is recommended that the program be continued but that revisions indicated by the evaluation results be made as early as possible.

APPENDIX

1) List of In-service Activities for Teachers of Program NAIL.

2) Evaluation Plan.

3) Total Counts of Learners by Grade for Program NAIL.

4) Checklist for Self-directed Learning.

5) Checklist for Self-directed Learning (Revised).

6) Group Description Form.

7) Aide Evaluation Form.

8) Tasks Completed by Teacher Aides in Program NAIL, Southside Elementary School.

In-service Activities for Teachers of Program NAIL

To implement the unique combination of diagnostic-prescriptive management strategies, in-service training will include:

1. Theory and application of behavior modification.

2. Use of informal diagnostic instruments, including interpretation of results and identification of strategies to improve pupil performance.

3. Techniques for screening and remediation of psycholinguistic skills.

4. Interpretation of standardized test scores, aimed at their use in planning and implementating instructional programs.

5. Record keeping and management techniques.

6. Oral language activities.

7. Planning and maintaining activity centers.

8. Analysis of available materials: purpose, scope, type of pupils and setting to which it is best suited, range of possibilities for its use, etc.

9. Use of teacher aides for both instructional and non-instructional tasks.

EVALUATION PLAN

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
1. Given the "New Adventures in Learning" program, students will demonstrate improvement in academic areas.	Pupils 1. Given an instructional program based on assessed needs, first and second grade students will achieve at or above their expected levels in reading.	Procedures: a) Test first and second grade students on intelligence and second grade students on preachievement in reading, b) test first and second grade students on postachievement in reading, c) perform analysis of variance on computed gain. Instruments: Intelligence - PPVT	by Oct. 1, '74	Teachers	To determine whether first and second graders' reading skills are substantially improved by their participation in the specially prescribed program.
		Preachievement - CTBS (2nd)	by Oct. 1, '74	Teachers	
		Postachievement - CTBS	by May 31, '75	Teachers	
		Subjects: First and second graders in project			
		Data: PPVT Intelligence Test Scores		Data kept in office	
		CTBS Preachievement Reading Scores		Data kept in office	
		CTBS Postachievement Reading Scores		Data kept in office	
		Analyses: Differences between pre and post achievement test score will be computed for 1973-74 and 1974-75	by June 15,'75	ERDC	
		A 3-way ANOVA will be conducted for the factors of grade level (1,2, 3); ability level (high, medium, low) and year (1973-4, 1974-5)	by June 15,'75	ERDC	

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
1. Given the "New Adventures in Learning" program, students will demonstrate improvement in academic areas.	2. Given an instructional program based on assessed needs, a sample of language handicapped students will increase their verbal learning ability.	Procedures: a) Select a 10% sample of language handicapped students, b) test each student in the sample on verbal learning ability before the program is started, c) test the same sample of students on verbal learning ability at the end of the program.			To determine whether the verbal learning ability of language handicapped students is substantially improved by their participation in the specially prescribed program.
		Instruments:			
		Verbal Learning Ability pre-ITPA	by Oct. 1, '74	--Barbara Morgan	
		Verbal Learning Ability post-ITPA	by May 31, '75	--Winnel Myers	
		Subjects:			
		10% sample of language handicapped students	by Sept. 15, 1974	--Teachers	
		Data:			
		ITPA verbal learning ability pre-scores for sample of language handicapped students		--Data Kept in office	
		ITPA verbal learning ability post scores for same language handicapped students		--Data Kept in office	
		Analyses:			
		Correlated t-test on vla pre-scores versus vla postscores	by June 15, 1975	--ERDC	

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
1. Given the "New Adventures in Learning" program, students will demonstrate improvement in academic areas.	3. Given an instructional program based on assessed needs, students will show improvement in vocabulary.	Procedures: a) Test all students (first, second, and third grades) on vocabulary before the program is started, b) test all students on vocabulary at the end of the program. Instruments: Prevocabulary - PPVT Postvocabulary - PPVT Subjects: All students in the program Data: PPVT Vocabulary prescores PPVT Vocabulary postscores Analyses: Correlated t-test on vocabulary prescores versus vocabulary postscores	by Oct. 1, '74 by May 31, '75 by June 15, 1975	--Aides --Data kept in office --ERDC	To determine whether the vocabulary of students is substantially improved by their participation in the specially prescribed program.

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
1. Given the "New Adventures in Learning" program, students will demonstrate improvement in academic areas.	4. Given an instructional program based on assessed needs, third grade students will achieve at or above their expected levels in reading, spelling, mechanics of writing, and study skills.	Procedures: a) Test third grade students on intelligence. b) test students on post-achievement in reading, spelling, mechanics of writing, and study skills. c) perform analysis of variance on computed gain. Instruments: Intelligence - CTMM Postachievement - CTBS Subjects: Third Grade students in project Data: CTMM Intelligence test scores CTBS Pre and Postachievement scores on reading, spelling, mechanics of writing, study skills Analyses: Differences between pre and post-achievement test score will be computed for 1973-74 and 1974-75 A 3-way ANOVA will be conducted for the factors of grade level (1,2,3); ability level (high, medium, low) and year (1973-4, 1974-5)	by Oct 1, '74 by May 31, '74 by June 15, '75 by June 15, '75	Teachers Data kept in office ERDC ERDC	To determine whether third graders' skills in reading, spelling, mechanics of writing, and study are substantially improved by their participation in the specially prescribed program.

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
1. Given the "New Adventures in Learning" program, students will demonstrate improvement in academic areas.	5. Given a positive classroom atmosphere and an instructional program based on assessed needs, students will employ self-directed individual and group learning.	Procedures: a) Observe students in classroom setting, b) record observations for on-task behavior and instructional choice. Instruments: Checklist for self-directed learning	weekly, Wed.morn.	Teachers	To determine whether first, second and third graders' learning skills are substantially improved by their participation in the specially prescribed program.
		Subjects: 25% of each class, with the same students evaluated each time			
		Data: Responses on checklist for self-directed learning		Data to be kept in teaching centers	
		Analyses: Positive answers to items 1,3,5,&7 indicate self-directed activity	by June 15, 1975	ERDC	
		Positive answers to items 2,4,6,&8 indicate otherwise			
		ERDC observer will conduct classroom observation	bimonthly	ERDC	

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
2. Pupils will demonstrate acceptance of pupils who achieve at different levels than themselves.	1. During times of non-structured activity, students will interact in heterogenous groups without regard for individual achievement levels.	Procedures: Teachers and aides will observe and record approximate group description during lunch, bus loading, assemblies, etc. Instruments: ERDC form for group description	once a week	Teachers and aides	To determine whether students are accepting others who are achieving at different levels.
		Subjects: Students in grades 1-3			
		Data: Observations recorded on form		Data to be kept in teaching center	
		Analyses: Inspection of form to determine group heterogeneity	by June 15, '75	ERDC	

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
3. Teachers will demonstrate proficiency in theory and application of Behavior Modification.	Teachers 1. Teachers will demonstrate positive reinforcement in their interactions with students. 2. Teachers will show a reduction of reinforcement errors in their interactions with students.	Procedures: Project Coordinator will conduct frequent, short-term observation of teacher activity in classroom. Instrument: Behavior Modification Observation Form. Subjects: Teachers in "New Adventures in Learning" Program Data: Recorded observations on Behavior Modification Observation form. Analyses: Data from Observation Form to be used to determine % of positive reinforcement in interactions with students. Data from Observation Form to be used to determine % of reinforcement errors.	once a week by June 15, 1975	Project Coordinator Data to be kept in office --ERDC	Teacher-student interactions will be positive 80% of the time. Reinforcement errors in teacher-student interactions will be less than 1%.

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
4. Teachers will plan and implement schedules to include daily experience for each child in reading, handwriting, spelling, oral language, listening, and composition.	1. Teachers will use informal reading inventory and observation to diagnose reading skills. Reading prescriptions will be written for each child. 2. Teachers will observe students' written work to diagnose and prescribe handwriting skill development. 3. Teachers will use phonics encoding survey and observation of written work to diagnose and prescribe. 4. Oral language instruction and assessment will be done in structured small group and total class sessions. 5. Listening skills will be assessed and developed in small group sessions supervised by the teacher. 6. The teacher will assess and promote individual composition skills through evaluation of written compositions.	Procedures: a)Student folders will be examined, b) project coordinator will observe small group and total class instruction, c) teacher will participate in one-to-one discussion with project coordinator. Instruments: a) Student folders---------- b) Project coordinator reports----- Subjects: Teachers participating in "New Adventures in Learning" program. Data: a) Diagnostic and prescriptive materials from student folders.---------- b) Written reports from project coordinator---------- Analyses: Above data to be inspected on an objective fulfilled or objective not fulfilled basis.-------	Frequency to be determined on the basis of need. Periodically, complete by June 15, '75----	Jointly: Teachers, project coordinator to be kept in office to be kept in office ERDC	To determine whether teachers are doing diagnosis, prescription, and assessments

GOAL	OBJECTIVE	EVALUATION ACTIVITIES	TIME	AGENT RESPONSIBLE	EVALUATION DECISION OR CRITERION
5. Each center team will plan and provide activity centers which extend language learning experiences to all pupils in the center. Teacher aides will be utilized as resource person.	1. The teacher will make use of available material to provide activity centers in the following areas: Listening Stations; Arts and Crafts; Educational games; Manipulative materials; and ideas for Creative Writing. 2. Teacher aides will be utilized in management and instructional capacity.	Procedures: 1) Classroom inspections will be made by project coordinator, 2) teachers will observe aides and record observations. Instruments: 1. Project Coordinator report----- weekly 2. Aide Evaluation Form----------monthly Subjects: 1. Activity Centers in classroom 2. Teacher-aides participating in "New Adventures in Learning" program Data: 1. Project Coordinator reports---------- 2. Responses from Aide Evaluation form---------- Analyses: 1. Reports of project coordinator will be checked to determine effective activity center usage.---------- 2. Aide Evaluation forms will be inspected with regard to positive-negative responses from teacher in order to determine changes in aides' performance----------	Project Coordinator Teacher Data to be kept in office Periodically, complete by June 15, '75	Project Coordinator Teacher Data to be kept in office ERDC	To determine whether center teams are planning and implementing activity centers and utilizing aides.

Total Counts of Learners by Grade for Program NAIL at Southside

First Grade

58 total
57 took pre CTBS
58 took pre PPVT
55 took post CTBS
8 moved out during project NAIL
5 moved in during project NAIL
(1 learner did not take pre CTBS, but took post CTBS)

Second Grade

75 total
75 took pre CTBS
73 took pre PPVT
77 took post CTBS
4 moved out during project NAIL
6 moved in during project NAIL

Third Grade

68 total
68 took pre CTBS
68 took pre PPVT
73 took post CTBS
4 moved out during project NAIL
9 moved in during project NAIL

Checklist for Self-Directed Learning

_____1. Does the student select materials appropriate with prescribed needs?

_____ 2. Does the student consistently require aid in material selection?

_____3. Does the student work independently of his peers?

_____ 4. Is the student often distracted by his peers?

_____5. Are the prescribed tasks completed by the student as they are assigned?

_____ 6. Does the student procrastinate in completing prescribed tasks.

_____7. Does the student actively participate in small group and total class sessions?

_____ 8. Is the student passive when in small group and total class situations?

This form to be completed weekly for about 1/4 of the students in the class, same students each time.

Student's Name_____

Date_____

Checklist for Self-directed Learning (Revised)

Pre-scribed Needs	Free Time	Total Group		
_____	_____	_____	1.	Does the student select materials appropriate with diagnosed needs?
_____	_____	_____	2.	Does the student consistently require aid in material selection?
_____	_____	_____	3.	Does the student work independently of his peers?
_____	_____	_____	4.	Is the student often distracted by his peers?
_____	_____	_____	5.	Are the tasks appropriate to diagnosed needs completed by the student as they are assigned?
_____	_____	_____	6.	Does the student procrastinate in completing tasks appropriate to diagnosed needs?
_____	_____	_____	7.	Does the student actively participate in small group sessions?
_____	_____	_____	8.	Is the student passive when in total class situations?

This form is to be completed weekly for about 1/4 of the students in the class, same students each time.

Student's Name _____

Date _____

Comments:

GROUP DESCRIPTION FORM

Group is integrated by:	yes	no
RACE	____	____
SEX	____	____
ACHIEVEMENT LEVEL	____	____

Teacher _____ date _____

COMMENTS: _____

This form to be completed weekly, during times when the students have free choice of group interaction. (Examples: lunch, assemblies, socials, etc.)

AIDE EVALUATION

Name of Aide _____ Date _____

Teacher _____

(Check the appropriate block below)

Aide is:	Always	Sometimes	Seldom	Never
Tardy	☐	☐	☐	☐
Negatively critical of other school personnel	☐	☐	☐	☐

Aide:	Never	Rarely	Sometimes	Always
Requests information or help when needed	☐	☐	☐	☐
Shows initiative in helping in the classroom	☐	☐	☐	☐
Has good rapport with children	☐	☐	☐	☐
Accepts correction or constructive criticism	☐	☐	☐	☐
Displays positive work attitude	☐	☐	☐	☐
Treats confidential or sensitive information in proper manner	☐	☐	☐	☐

Aide's:	Poor	Below Avg.	Avg.	Above Avg.	Excellent
Quality of work is	☐	☐	☐	☐	☐
Operation of A-V equipment is	☐	☐	☐	☐	☐
Personal appearance is	☐	☐	☐	☐	☐
Cooperativeness is	☐	☐	☐	☐	☐

Additional comments:

Tasks Completed by Teacher Aides in Program NAIL, Southside Elementary School *

Management:

Collect money (lunch, etc.)
Clean and arrange room
Lunchroom supervisor
Construction of material
Maintenance of bulletin boards
Audio-visual equipment operation
File work of learners
Assist in maintenance of classroom behavior

Instructional:

Assist with small group sessions (oral language, math, and reading)
Assist individual learners with prescribed work
Administer tests and inventories (PPVT, etc.)
Assist in creative writing sessions

* This is a representative, and by no means complete, list of tasks completed by the teacher aides at Southside.