

AN EVALUATION OF SELECTED
ASPECTS OF A REMEDIAL READING PROGRAM

by

MARGARET MARY PRICE

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INTRODUCTION

The most basic justification for using a program of instruction is the program's ability to accomplish its objectives. Frequently, however, programs and methods are perpetuated by tradition, lack of suitable criteria with which to evaluate the program, ignorance on the part of instructors or program and school administrators, or even more sinister, fear that the program will be proven ineffective. While remedial reading programs may be perpetuated by most of these factors, lack of suitable criteria for evaluation is not one.

Remedial reading programs have the distinct advantage of clearly defined objectives which readily translates into a workable criteria for evaluation. That is, remedial reading programs are designed to increase the reading achievement of poor readers to a greater degree than would have been achieved without special help. The purpose of this research project is to determine the effect of one particular approach to remedial reading instruction. The accountability of this particular remedial reading program will be determined through empirically derived facts, which, it is hoped, will demonstrate a greater degree of reading achievement for children participating in the program, than would have been realized without benefit of the remedial program.

REVIEW OF LITERATURE AND RELATED RESEARCH

Reading disability can be identified by finding expected reading level and comparing it with actual grade level. Reading expectancy or potential is an informed estimate of the level of reading achievement that would be most in harmony with the relevant facts known about the individual. Bond and Tinker (1967) recommended computing reading expectancy in the following manner: multiply the child's I.Q. by the number of years he has been in school and add one year. This gives an expectancy grade, which can be compared with the child's reading grade.

For the purpose of comparing reading attainment with reading expectancy, the reading score used should represent as accurately as possible the instructional reading level of the individual. Following Harris (1970b), it is better to use a composite of oral reading and silent reading scores, for two reasons. The first is that difficulties in word identification are central in many reading disabilities and low comprehension scores may be the result of inability to recognize the words. The other is that poor readers tend to get many of their correct answers on multiple-choice tests by guessing, making their scores on such tests less dependable than the scores of normal readers.

There are two main methods used by Harris (1970a) for comparing expectancy with reading achievement: subtracting the reading score from the expectancy score, or dividing the reading score by the expectancy score.

In a ratio method of comparison, the reading score is divided by the expectancy score and multiplied by 100 to do away with the decimal point. When the reading and expectancy scores are equal, the ratio is 100. When the reading score is higher, the ratio is above 100 and indicates over-achievement; when the reading score is the lower, the ratio comes out below 100 and indicates under-achievement. Harris (1970a) uses the following formulas to compute reading expectancies:

$$\text{Reading Expectancy Age: } \frac{2(\text{Mental Age}) + \text{Chronological Age}}{3}$$

Reading Age:

$$\frac{(\text{Oral Reading Grade} + \text{Silent Reading Grade}) + 5.2}{2}$$

Reading Expectancy Quotient:

$$\frac{\text{Reading Age} \times 100}{\text{Reading Expectancy Age}}$$

Reading Quotient:

$$\frac{\text{Reading Age} \times 100}{\text{Chronological Age.}}$$

The success of a remedial reading can be evaluated in different ways. The writer will review various ways evaluations have been made, and how effective they were.

Bliesmer (1962) analyzed three methods for evaluating progress in remedial programs:

1. determining gains by the typical method of finding

differences between before and after reading test scores,

2. comparing remedial program gains with the average yearly gains made before the remedial program, and

3. finding differences between reading potential and reading achievement levels (potential-achievement gaps) at the beginning and at the end of a remedial program.

Effectiveness of remedial instruction was shown favorably by all three methods.

While differences in reading test scores obtained at the beginning and at the end of a given period of remedial instruction might be most familiar and meaningful to a large number of teachers and parents, the amount of gain thus shown will often need to be considerably greater than that expected of the average child before such gain is commonly viewed as an impressive one. Comparing remedial gains with average yearly gains tends to reveal effectiveness of remedial instruction more immediately, definitely, and impressively. Evaluation of progress in terms of potential or capacity levels might seem to have the most desirable and valid rationale, but it does not tend to give results obtained with other methods.

Maginnis (1971), in examining how extent of reading disability related to reading gains during a tutoring program, made use of all these approaches. Maginnis determined gain in reading by (1) comparing the differences between pre-test and post-test reading achievement test scores; (2) comparing

the differences between gain made during the remedial semester and average semester gain made during previous semesters of school; (3) comparison of the amount of reduction in the retardation gap (gap between reading expectancy and reading achievement) which occurred during the remedial semester; plus (4) the percent reduction in the retardation gap which occurred during tutoring; and (5) the amount of residual gain which took place during the remedial semester. Maginnis concluded that different methods of computing gain show different results as to which students gain the most from a remedial program. No indication was given as to which specific method was most sensitive to students' gain in reading.

Cohn (1966) suggested evaluation of the reading progress of children involved in a clinic program by having a regular program for retesting the children with alternate, equivalent forms of the same reading tests or with succeeding tests included in the same series previously given. Test scores obtained at the close of a school term or after a certain significant length of clinic help would be compared to test scores obtained at the beginning of clinic instruction. Reading gains are obtained by simple subtraction of the original from the subsequent or terminal grade scores.

In order to evaluate these findings in greater detail, the average reading growth per month of schooling was determined for each child, first, prior to admission to the reading clinic, and later whenever a testing program was desired. The first step is to compare the reading grade score of each

child with his "grade equivalent" (repetitions of grades added to grade equivalent).

$$\frac{\text{Average Reading Growth Per month}}{\text{Per month}} = \frac{10 (\text{Reading Level Score} - 1.0)}{10 (\text{Years of Schooling} - 1.0)}$$

At the time an equivalent is made, each child's total reading test score may be converted to a grade score. If the efficiency with which he has responded to the reading program is to be compared with his original ratio, the difference between the two scores must be divided by the months of reading clinic attendance.

Cashden and Pumfrey (1969) have indicated frequent findings of substantial short-term gains in reading attainment. They indicate it is not unusual to find 2-3 months growth in reading age per month of remedial treatment. Gains in reading are usually most noticeable on word recognition test, with smaller gains usually recorded on test which stress reading comprehension.

Questions have been raised concerning long-term persistence of gains resulting from reading remediation, and whether late readers ever "catch up." In a study made by Bluestein (1966), mean reading achievement and average yearly progress in reading showed considerable gains during remediation, gains which persisted at least three years afterwards. As a result, the children were catching up with their grade peers. Balow (1965), however, has summarized

the results of three separate investigations concerning the effect of intensive remedial instruction for severely disabled readers. This study examined the immediate growth in reading skill and the continued growth of pupils after termination of intensive tutoring. The results indicate that the students' reading achievement scores increased while enrolled in remedial classes; however the rate of improvement had fallen off markedly when remedial instruction was discontinued. When a follow-up study was conducted two years later, the children continued to make progress in reading, but at a slower rate than their growth in age. As a consequence, the children were falling further behind their classmates in reading achievement.

DESIGN AND EXPLANATION OF REMEDIAL READING PROGRAM

The purpose of this research project is to determine the effectiveness of the program of remedial reading instruction employed at the Fort Riley Elementary School. The remedial program begins with the administration of a standardized test. During the present school year, the children assigned to remedial reading classes received $2\frac{1}{2}$ hours of remedial reading instruction in addition to their classroom subjects. The program of instruction each child receives in remedial reading emphasizes: word recognition, phonetics, reading comprehension, and student motivation.

Generally, word recognition is taught through actual reading. Children are given material they can easily read,

but which contains unfamiliar words. When a child meets a word he does not recognize, he is instructed to sound out the word by taking it apart phonetically, and/or to attempt to figure out meaning of the word from the context in which it is used. If the child cannot determine the word this way, he is then told the word. The teacher records the "new" word. Special care is taken to review the words again when the child has finished reading. Later the child is given another reading assignment which contains these "new" words, to determine if the child remembers these words when he is confronted by them again. Word recognition is also reinforced by playing small group games which make use of flash cards and charts. Specifically the Controlled Reader, Flash-X, Cyclo Teacher and other devices are used when available.

Phonetic games are used to increase the child's desire to explore new words which in turn will increase his ability to sound out unknown words. To accomplish this, children are first given a word they know. Beginning or ending sounds are then added or changed to form new words. The following is an example of this procedure: STAMP St----amp

L-----amp

C-----amp

Word patterns and spelling patterns are also examined during the course of remedial instruction to increase the student's sight vocabulary and ability to "sound out" words that are unfamiliar to him. An example of this procedure is illustrated in the following word list:

1. pan	2. cake	3. bat
man	make	batting
can	stake	sled
		sledding.

Aside from specific methods of increasing word recognition, actual reading of selected material by the student is stressed. Reading gives the child a chance to increase his sight vocabulary, to learn new words and see spelling patterns, and to provide the opportunity to "sound out" unfamiliar words, all of which will greatly increase the student's recognition of words.

The phonetic elements of this program are taught with the premise that vowel and consonants do not appear in isolation. That is, when a child is asked to give a short a (ă) sound the child is also taught to think of a word that contains that sound (fat). Visual, auditory and kinetic approaches are used in connection with this instruction to help the child remember the sound, the word, where the sound appears in the word, and what the word looks like when it is spelled.

Phonetic instruction is a very basic part of the remedial reading program. Before actual instruction in reading begins, the letters of the alphabet and their sounds are reviewed. Unfamiliar letters and sounds are then re-introduced using a "key word" which contains the particular letter and its sound. Any unfamiliar sound is stressed by prolonging the particular sound, for example, m-m mother, m-m man, m-m mark.

Drill charts and cards are used not only to help the child remember the instruction in phonetics but also to demonstrate to the child his increasing ability. By making the child aware of his progress, the teacher tries to overcome some of the student's negative feelings toward reading and to demonstrate to the child that he can learn to read. Drill charts and/or cards are used daily. Errors are immediately reviewed in the lesson period and explained.

Vowel sounds are introduced one at a time. Children are allowed to gain proficiency with one sound before other vowels are introduced. The effect of the final "e" (hide, dime, tone, pane) and double vowel consonant are also studied.

Blends (ch, sh, th, wh, etc.) are examined first in game form. Those who can't hear the sounds are noted by the teacher, but not exposed to the group. The children who had difficulty with the sounds, then receive individual attention to correct this deficiency.

Syllables are studied after blends. Words are divided on cards or charts. The child is asked to figure out the word by its sounds, for example:

vel	vet
trum	pet
him	self.

When the children become proficient at this task, they are given parts of words and asked to take two parts and join them together to make one word. Following is an example of this procedure:

em	fant
pump	let
in	pire
ham	kin.

Instruction in phonetics next emphasizes compound words. The construction and sounding out of compound words are taught in the same format as syllables.

Skill work in phonics is constantly reinforced in the form of phonic games and word wheels.

Reading comprehension of children participating in the remedial reading program is checked by having each child read stories to the teacher via tape recorder, to the children in the class or to himself. If the child chooses to read to a group of children, he asks the other children the questions and their responses are then scored by the teacher for which the child answering the question receives reinforcement for a correct answer, points to eventually earn candy or stars. This procedure not only makes the student asking the questions attempt to comprehend the study more fully so that he can ask good questions but it also makes him the individual who asks questions rather than the one of whom questions are asked. This can have the added effect of helping the child improve his self image with regard to reading and thus help him to participate more fully in the remedial reading program.

Children who choose to read to the teacher via tape recorder or to themselves are further required to answer questions about the story they have read either in written or oral form.

Specific texts for reading comprehension include the basic text Reading for Concepts which all the children use and The Reading Incentive Series: Mystery in the Sky and Swamp March used as supplementary texts for the 5th and 6th grades. (Be a Better Reader, studies of literature, history, English, and social studies and math are also used.) Interest in reading is maintained by allowing the children freedom in choosing what they would like to read and by using a weekly magazine, "Know Your World," which is written at the student's reading level.

The last program element to be discussed is student motivation. Attempts at keeping the student motivated are incorporated into every aspect of the remedial instruction. Games are employed to teach basic reading skills which not only make the time spent in remedial instruction pleasant for the students, but also teaches them the necessary skills to improve their reading ability.

Reinforcement is given to each child for successful participation in class activities. For example, children are given stars for perfect completion of assigned tasks. These stars are attached to a book marker which will be used in the child's reading book when he has completely covered it with stars. Outside reading is also encouraged by reinforcing the child with a prize, which he chooses from a grab bag, for the completion of 10 reports (oral or written) concerning stories he has read outside of class.

In addition to specific techniques designed to keep the children interested in reading, the sequence of progression

and the format of the instruction are also planned to keep the student motivated. Students begin reading stories that are below their reading level to give them confidence in their own reading ability and also to provide them with some measure of reading success. As the child continues in remedial reading, he is given progressively more difficult reading material. In the beginning, assignments are kept short and only short stories are selected. As the child progresses in the reading program, his assignments are increased and other material added when he can handle harder assignments. Flexibility in selection of classroom activities is also maintained to allow the children choice of alternative activities if the planned activities are boring or distasteful to them.

Before beginning the program 173 students of the 4th, 5th and 6th grades of the Fort Riley Elementary School were given the California Reading Test, Form Z before beginning regular classroom instruction in September 1971. The test was administered by the remedial reading teacher for that school, using standardized instructions.

Students having reading scores below their grade level were given an individual reading test, the Spache Diagnostic Reading Scales, and an individual intelligence test, the Peabody Picture Vocabulary Test.

Next, Bond and Tinker's reading expectancy formula, $\frac{IQ}{100} \times \text{years in school} + 1 = \text{Reading Expectancy}$, was used by the reading teacher. Children performing below their reading

expectancy were then placed in remedial classes.

For purposes of this study, the progress of 12 children, designated as needing remedial reading instruction and who were subsequently placed in remedial reading classes were studied. These children were selected from the 31 students participating in remedial instruction at the Fort Riley Elementary School because they had received four full months of remedial instruction beginning September 1971.

At the end of January 1972, twelve children, who had been participating in remedial instruction since the end of September, were again tested, using the California Reading Test Form Z. The test was administered under conditions similar to those used when the test was first given at the end of September. Reading expectancies were again computed, and the discrepancies noted.

Program effectiveness was determined by comparing differences in the California Reading Test scores before and after remedial instruction. Results of previous research by Curr and Gourlay (1960) indicated that the same form of a test can be regiven without significantly increasing the scores after four months have elapsed. The effects of four months of remedial reading instruction was chosen for evaluation, because a four month period would (a) give the program adequate time to have an impact on the children yet would be short enough to minimize improvements in reading ability due to incidental learning derived from other classroom subjects, (b) to minimize the effects of maturation on reading ability and (c) to provide sufficient time for the children to "forget"

test responses before retesting them.

Program effectiveness was further evaluated by comparing average monthly gains in reading before and after remedial instruction. To compute average monthly growth in reading ability, it was first necessary to determine the number of years of schooling and the reading level scores of each child at the time he began, and the time he completed the four months of remedial instruction. (Table 4.) The years of schooling and reading level scores of each child were then used to compute the average reading growth per month of each child before and after completing four months of remedial instruction. Average reading growth per month was determined by the formula: (Cohn, 1966)

$$\frac{10(\text{Reading Level Score} - 1.0)}{10(\text{Years of Schooling} - 1.0)} = \text{Average Reading Growth per Month.}$$

The effectiveness of the remedial reading program was also evaluated by comparing each child's average monthly growth in reading ability while participating in the remedial program to his average monthly growth in reading ability before beginning the program. Average monthly growth in reading ability, while participating in the remedial reading instruction, was determined by subtracting the reading level scores for each child as he began the program from his reading level score after completing 4 months of instruction. Next, the differences between the reading level score of each child before beginning the program and his reading level score after completing 4 months of remedial instruction, was divided

by .4 (.4 of a school year), which represents the amount of time each child participated in the remedial program. The results of this computation is the average gain in reading ability of each child, per month of remedial reading instruction. The average monthly gain in reading ability during remedial reading instruction, was then compared to the average monthly gain in reading ability before beginning the remedial program.

Finally the effectiveness of the remedial program was examined by comparing the differences between reading potential and reading achievement before and after remedial instruction. Reading expectancy was computed using Bond and Tinker's (1967) formula:

$$IQ \times \text{years in school} + 1 = \text{Reading Expectancy.}$$

The reading expectancy of each child before reading instruction and his reading expectancy after 4 months of reading instruction was computed using this formula. The reading achievement scores of each child before remedial reading and after remedial reading as measured by the California Reading Test were recorded.

The reading achievement level of each child was then subtracted from his reading expectancy quotient prior to remedial instruction and the differences recorded. The reading achievement of each child was then subtracted from his reading expectancy quotient after 4 months of remedial instruction. The differences between reading achievement level and reading expectancy before instruction were then

compared to the differences between reading achievement level and reading expectancy after instruction.

RESULTS

The results of the Peabody Picture Vocabulary Test indicated a range of intelligence from 83-119. (See Table 1) The California Reading Test (see Table 2) indicated improvement for each child in vocabulary growth and comprehension over the four month period.

	Voc.	Comp.	Total
Pre-Test \bar{X}	3.8	3.6	3.7
Post-Test \bar{X}	4.7	4.9	4.8

On the average vocabulary growth was .9 of a year (9 months). Growth in comprehension was 1.3 of a year, and total reading growth was 1.1 of a year. The results indicate that students improved most in the comprehension as a result of the remedial program. Overall reading ability improved significantly over the four months of instruction.

Next, the effectiveness of the program, as measured by monthly gains in reading before and after remedial instruction, was also indicated by a significant increase in average monthly gain in reading ability for the group. On the average, students were achieving .695 of one month of reading grade achievement prior to beginning the remedial program. These same children were achieving .924 of one month of reading grade achieve-

TABLE 1

Results of the Peabody Picture
Vocabulary Test, January 1972

	<u>Grade</u>	<u>Sex</u>	<u>CA</u>	<u>IQ</u>	<u>MA</u>
1.	6	F	11- 2	101	11- 4
2.	5	M	11-10	106	12- 9
3.	5	F	11- 0	94	10- 5
4.	4	F	9- 3	83	7- 1
5.	5	M	12- 0	98	11- 4
6.	5	M	11- 2	98	10-10
7.	4	M	9- 6	119	12- 7
8.	4	M	11- 0	118	14- 3
9.	4	F	10-11	83	8-11
10.	6	F	12- 1	96	11- 0
11.	4	F	9- 6	84	7-10
12.	4	M	9- 7	91	8-11

TABLE 2

Results of the California Reading Test, Form Z
Before and After Four Months of
Remedial Reading Instruction

	<u>Pre-test Sept. 1971</u>				<u>Post-test Jan. 1972</u>		
	Voc.	Comp.	Total		Voc.	Comp.	Total
1.	5.0	5.9	5.5		5.6	6.6	6.3
2.	4.0	3.8	4.0		5.1	5.7	5.5
3.	3.5	3.8	3.7		4.0	4.7	4.4
4.	3.7	3.3	3.5		4.7	4.0	4.9
5.	3.9	3.6	3.8		4.5	4.7	4.6
6.	4.9	3.5	4.2		5.0	4.5	4.8
7.	2.9	2.3	2.5		4.6	4.2	4.4
8.	3.9	3.5	3.8		4.4	4.3	4.4
9.	2.5	2.3	2.4		4.3	3.9	4.1
10.	4.6	4.4	4.5		5.1	5.3	5.3
11.	4.7	3.1	3.9		5.3	5.9	5.7
12.	2.1	3.2	2.1		3.3	3.4	3.4
Σ	45.7	42.7	43.9	Σ	55.9	58.2	57.8
\bar{X}	3.8	3.6	3.7	\bar{X}	4.7	4.9	4.8

ment after the remedial program. This indicates a significant increase in reading growth per month ($p < .0005$) after completing the instruction. These results are shown in Table 3.

TABLE 3

Comparison of Average Monthly Gain in Reading Ability
Before and After Four Months of
Remedial Reading Instruction

Student	Average Monthly Gain in Reading Ability <u>Before</u> Starting Remedial Instruction	Average Monthly Gain in Reading Ability <u>After</u> Completing Four Months of Remedial Instruction	D	D ²
1	.88	.96	-.08	.0064
2	.73	1.00	-.17	.0289
3	.66	.76	-.10	.0100
4	.81	1.11	-.30	.0900
5	.68	.80	-.12	.0144
6	.78	.84	-.06	.0036
7	.48	.97	-.49	.2401
8	.90	.97	-.07	.0049
9	.45	.88	-.43	.1849
10	.69	.78	-.09	.0081
11	.93	1.34	-.41	.1681
12	.36	.68	-.32	.1024
Σ	8.35	11.09	-2.74	.8618
\bar{X}	.695	.924	-.228	

$$s_D^2 = \frac{.8618}{12} - (-.228)^2$$

$$s_D^2 = .0718 - .051984 = .019816$$

$$t = \frac{.228}{\sqrt{\frac{.0198}{11}}} = \frac{.228}{\sqrt{.0018}} = \frac{.228}{.042} = 5.4286$$

$$t = 5.4286$$

$$p < .0005$$

The comparison of the average monthly growth in reading ability while participating in remedial instruction to average monthly growth in reading ability before participating in the remedial program indicate that each child increased in reading ability more than the .4 (4 months) than would be expected. These results are indicated in Table 4.

TABLE 4

Amount of Gain in Reading Scores During Four Months
of Remedial Reading Instruction

Student	Reading Level Score After Completing Four Months of Remedial Reading Instruction	Reading Level Score Before Starting Remedial Reading Instruction	Amount of Gain in Reading Level Scores During Remedial Reading Instruction
1	6.3	5.5	.8
2	5.5	4.0	1.5
3	4.4	3.7	.7
4	4.9	3.5	1.4
5	4.6	3.8	.8
6	4.8	4.2	.6
7	4.4	2.5	1.9
8	4.4	3.8	.6
9	4.1	2.4	1.7
10	5.3	4.5	.8
11	5.7	3.9	1.8
12	3.4	2.1	1.3

On the average the children increased 2.895 months in reading ability per one month of remedial instruction. Before beginning remedial instruction each child averaged .695 months of growth in reading ability per month of instruction. This indicates a significant increase in rate of reading growth while participating in remedial instruction.

TABLE 5

A Comparison of Average Monthly Gain in
Reading Ability Before and During
Remedial Reading Instruction

Student	Average Monthly Gain <u>During</u> Remedial Reading Instruction	Average Monthly Gain <u>Before</u> Starting Remedial Reading Instruction
1	2.00	.88
2	3.75	.73
3	1.75	.66
4	3.50	.81
5	2.00	.68
6	1.50	.78
7	4.75	.48
8	1.50	.90
9	4.25	.45
10	2.00	.69
11	4.50	.93
12	3.25	.36
Σ	34.75	8.35
\bar{X}	2.895	.695

Finally, the effectiveness of the remedial program was examined by comparing the discrepancy between reading expectancy and reading achievement before remedial instruction to the discrepancy between reading expectancy and reading achievement after completing four months of remedial instruction. The results indicate that on the average, the children were 1.03 years below their reading expectancy (potential) before remedial instruction while following four months of instruction, they were .25 years (2 months) below their reading expectancy. See Table 6.

TABLE 6

Reading Expectancies, Reading Achievement Scores
and Discrepancies for Each Child Before and After
Four Months of Remedial Instruction

Student	9-71 Reading Expect.	Reading Achieve.	Disc.	1-72 Reading Expect.	Reading Achieve.	Disc.
1	6.2	5.5	- .7	6.5	6.3	- .2
2	5.3	4.0	-1.3	5.8	5.5	- .3
3	4.9	3.7	-1.2	5.2	4.4	- .8
4	3.6	3.5	- .1	3.9	4.9	+1.0
5	5.1	3.8	-1.3	5.4	4.6	- .8
6	5.0	4.2	- .8	5.4	4.8	- .6
7	4.6	2.5	-2.1	5.2	4.4	- .8
8	4.7	3.8	- .9	5.1	4.4	- .7
9	3.6	2.4	-1.2	3.9	4.1	+ .2
10	5.9	4.5	-1.4	6.3	5.3	-1.0
11	3.6	3.9	+ .3	3.9	5.7	+1.8
12	3.8	2.1	-1.7	4.2	3.4	- .8
Σ	50.3	43.9	-12.4	60.8	57.8	-3.0
\bar{X}	4.2	3.7	-1.03	5.1	4.8	-.25

Evaluating the program from this standpoint, the instruction has had a significant impact on the students who participated.

CONCLUSIONS AND RECOMMENDATIONS

In general, all children who participated in the 4 months of remedial instruction improved their reading ability as measured by the four methods employed in this project.

A comparison of average monthly gains in reading achievement before remedial reading instruction to gains in reading achievement after remedial instruction indicated that children who participated in the reading program developed reading skills at a significantly greater rate after remedial instruction than before remedial instruction. On the average, each child increased his reading level approximately 2.9 months per month of remedial instruction. It must therefore be concluded this particular reading program has been effective.

The children involved in this study varied in age from 9 years to 12 years. The results clearly showed a higher percentage of improvement in the younger children. This would mean that the younger children had a better chance of overcoming their disability. If special classes were started with second and third grade children, perhaps these reading disabilities we meet later would be prevented. The older children need more constant and continued help to overcome their handicaps.

It should be evident to all interested and concerned parties, the Junction City school board, local administration, other teachers, and parents, that the remedial reading

program is well worth the money needed to maintain it. It may be advisable that remedial reading programs in other schools be evaluated in much the same way.

Materials available through the new Learning Problems Center were a great benefit to the program. But hopefully in the future a classroom will be available for remedial reading classes, and time will be allocated for conferences with classroom teachers so that programs can be evaluated periodically and children's individual needs best met through a continuous combined effort.

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AN EVALUATION OF SELECTED
ASPECTS OF A REMEDIAL READING PROGRAM

by

MARGARET MARY PRICE
B. S., Marywood College, Scranton, Pa., 1967

AN ABSTRACT OF A MASTER'S REPORT

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ABSTRACT

The purpose of this report is to determine the effect of one particular approach to remedial reading instruction. The accountability of this particular remedial reading program will be determined through empirically derived facts, which it is hoped, will demonstrate a greater degree of reading achievement for children participating in the program, than would have been realized without benefit of the remedial program.

Evaluation of the progress in the remedial reading program is shown by:

1. finding differences between before and after reading test scores,
2. comparing average monthly gains in remedial reading after completing the remedial program,
3. the amount of monthly gain which took place during remedial instruction as compared to average monthly gains made before the remedial program,
4. finding differences between reading potential and reading achievement levels prior to the remedial program and again after completing the program.

The results proved favorable. On the average, children improved 1.1 year in reading level during the four months of remedial instruction, which translates to an increased reading level of approximately 2.9 months per month of remedial instruction.

In addition to significantly increasing the monthly growth in reading during the remedial instruction, there was also a significant increase in reading growth per month ($p < .0005$) after completing the remedial instruction.

Finally the results indicate a reduction in the discrepancy between reading expectancy and reading achievement after completing the remedial instruction.