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ABSTRACT

        A study was conducted to analyze the impact of the Reading
Recovery Program on first grade students in Vigo County, Indiana. The program
was implemented in Vigo County just last school year (2000-01). For the
study, a first-round sample of 51 students who were successfully discontinued
from Reading Recovery was measured to obtain information on the progress they
made. Students were again tested at year-end to determine continued success.
Data were collected by obtaining test scores in reading and writing using a
control group and an experimental group. The conclusion was that most of the
students did benefit from the Reading Recovery Program and that the program
looks to be very cost effective in terms of long-term monetary expenditures.
(Author/NKA)

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Is Reading Recovery Worth the Cost?

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Brenda Marina and David A. Gilman

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Abstract

This study was conducted to analyze the impact of the Reading Recovery Program on first grade students in Vigo County. Data was collected by obtaining test scores in reading and writing using a control group and an experimental group. The conclusion was that most of the students did benefit by the Reading Recovery Program.

Background of the Problem

Many programs have been implemented throughout Indiana and other states to increase student achievement. And some have focused on efforts to benefit reluctant readers, slow starters and children who just need the skills to figure out how to find the "clues" to learn to read.

The Reading Recovery Program is an early intervention program designed in the 1970's by Marie M. Clay, a New Zealand educator. It was intended to assist students who were failing to keep up in the early grades. First grade students were taught skills necessary to learn to read and gain the confidence they needed to succeed. The program was based on a reading theory that emphasizes meaning. Today, students meet with a reading recovery teacher daily for 30 minutes for a minimum of 12 weeks and as many as 20 weeks. The childrens' reading and writing behaviors are thoroughly analyzed. This intense program not only claims to "catch up" students who are behind their peers, it also claims that the students achieve accelerated progress and continue to learn on their own without further intervention (Kaiserslautern 2002).

Dr. Gay Su Pinnell and Dr. Charlotte Huck introduced the Reading Recovery Program in the United States in 1984 through Ohio State University. Since then the program has been implemented in 38 states, the District of Columbia, four Canadian Provinces, Australia and England.

The Reading Recovery Program believes that most students can learn to read. Research has shown that most young readers who are having difficulty are of average

intelligence. If intervention is intensive and begins early enough, most students can learn to read (Pinnell 2002).

Reading Recovery encompasses ten research based components that are applied in Reading Recovery lessons. (Pinnell 2002)

1. Phonological Awareness: Teach Students to hear the sounds in words.

2. Visual Perception of Letters: Teach students to perceive and identify letters of the alphabet.

3. Word Recognition: Teach students to recognize words.

4. Phonics/Decoding Skills: Teach students to use simple and complex letter-sound relationships to solve words in reading and writing.

5. Phonics/Structural Analysis: Teach students to use structural analysis of words and learn spelling patterns.

6. Fluency/Automaticity: Develops speed and fluency in reading and writing.

7. Comprehension: Teach students to construct meaning from print.

8. Balanced, Structured Approach: Provide a balanced approach so that literacy develops along a broad front and students can apply skills in reading and writing.

9. Early Intervention: Intervene early to undercut reading failure.

10. Individual Tutoring: Provide one-to-one assistance for the students who are having the most difficulty.

Most importantly, Reading Recovery focuses on what the child knows and works toward the unknown. Progress begins before the emotional impact and confusion of failure occurs. The program is an early intervention; **not** a remediation based program.

Reading Recovery teachers constantly assess the child's progress and work to improve reading and writing skills. The Reading Recovery teacher must design the program for each student. Success depends on the decision making of the teacher and that, in turn, depends on the proper training of the teacher.

Reading recovery teachers receive intense training in a year-long in-service program. The teachers learn to observe and record children's' reading and writing behaviors in a systematic way. Then teachers participate in continuous training and in-service sessions with a teacher leader.

In Indiana, Professor Deborah R. Dillon began the process of bringing Reading Recovery to Purdue University where it was developed and implemented in 1993. Since then, more that 18,000 children have been served in 520 schools from 155 districts involved in the statewide project. In the fall of 2000, Vigo County School Corporation implemented the Reading Recovery Program. That year, 12 teachers served 128 students. Students were tested upon entry to the program; exit from the program and at the end of the school year.

In a review of some of the articles regarding Reading Recovery, it was found that some scholars gave the program raving reviews, while others were not so impressed.

According to Stanly L. Swartz (1996), the success of Reading Recovery has been carefully documented since its inception. The children who are the lowest 20% of their class learn strategies needed to perform at or above grade level in an average of 12-20 weeks. Most Reading Recovery children continue to read at or above grade level. Swartz based this information on studies in California by Swartz, Shook and Hoffman (1993), and in Texas by Askew, Frasier and Griffin (1993).

On the contrary, in a report by Dr. Patrick Groff (2002), a National Right to Read Foundation Board Member and Senior Advisor, he claims the program is erroneous and the testing is subjective. Bonnie Grossen and Gail Coulter (2002), of the University of Oregon state in an Executive Summary that the Reading Recovery data reporting system is flawed. Groff says reading and writing tests are based on subjective judgments of the Reading Recovery Teacher. Groff also claims that Clay gives no instruction to determine which children should be given priority as Reading Recovery Students. Evaluations are not methodical or carefully defined. Also Groff notes, there is no fixed set of strategies or required level of text or any text score based on reading of text that must be attained to warrant discontinuing a child from the program. Grossen and Coulter even claim that half of the data on children eligible for Reading Recovery are omitted from the final analysis. They also state that children are taught to use context clues rather than sounding words out. Students may score high on predictable Reading Recovery tests but not so well on authentic text.

What about cost-effectiveness? Is the Reading Recovery Program cost-effective? The program claims to reduce costs associated with at-risk students by lowering retention rates and thereby reducing the need for remediation and special education referrals. The California Department of Education found Reading Recovery costs to be half of those for Title 1 and retention and one-fourth of those for special education placement.

According to the Indiana Reading Recovery Executive Summary (1998), the costs of the program may be difficult to assess. They may include, but are not limited to:

- Quality training of teachers and teacher leaders.
- Start-up costs.

- Investments in non-consumable books and materials.

- Regional cost variables.

And some of the other factors that should be considered are

- Training and start-up costs should be averaged across several years

- Investment in non-consumable books and materials should be averaged across several years

- Teacher salaries should only be calculated for the portion of the day they work with children.

- All program benefits, though not easily calculated should be reported.

A general range of expenses for Reading Recovery is between $2,300 and $3,500 per child. Keep in mind this program reduces the number of students needing ongoing expensive services, i.e. special education, Title 1 or remediation, not to mention the impact on the students' self-esteem. All in all, Reading Recovery in comparison looks to be very cost-effective in terms of long-term monetary expenditures. If Reading Recovery is effective in comparison with other programs and it provides the tools necessary for students to develop the skills they need to succeed, then it should be implemented in all school corporations in Indiana.

Statement of the Problem

All children are different. Some children learn to read and write with ease, while others struggle, get frustrated and eventually fall into a pattern of failure. Students understand quickly that they are behind their peers and either get discouraged, give up completely or even develop behavior problems. Many times school programs hesitate to do anything until students are so far behind that they need long-term expensive programs to even hope to catch them up with their peers. Students end up with so many different labels such as; slow, learning disabled, retarded, mentally handicapped, emotionally disturbed and many, many more dreadful labels by other students. If two children are equal in intelligence, what causes one to achieve a higher rate of success in schoolwork? What can be done to help struggling students before they slip into a pattern of failure? What skills must first be obtained for students to be ready to learn and how can we teach children to be successful? How can we help slower students not only keep up with other students, but also succeed throughout their academic career?

The Marie Clay Reading Recovery Program was developed to help failing students achieve success. This program teaches professionals how to work with students to develop the skills necessary during first grade to allow the slowest students to be reading and writing at the same level as their peers by the end of first grade. Also, many students continue to succeed throughout their educational career. Can this program, however, help those students who fall into failure and eventually wind up in more expensive long-term programs?

In this study a directional hypothesis was tested: Slower students who are taught reading and writing techniques using the Reading Recovery Program are more likely to catch up with their peers by the end of first grade.

<u>Methodology</u>

The sample for this study was taken from the Vigo County School Corporation in the program's inception year 2000-2001. In all, 131 students, twelve teachers, one administrator and two teacher trainers were involved in the Reading Recovery Program serving twelve schools. The schools involved in the Reading Recovery Program in Vigo County range from inner city schools to rural schools. In comparison to other schools in Indiana, the Vigo County Schools show the following statistics:

	Vigo County	Indiana
Per capita income 1989	$11,973	$13.149
Attendance Rate 2000-01	95.5%	95.8%
SAT Scores (Composite) 2000-01	991	1000
Percentage of families below poverty 1990	15.8%	11.8%
Percentage of Special Ed. Students 2000-01	18.5%	16.3%
Percentage of Minority Students 2000-01	11.3%	17.7%

Students in the Reading Recovery Program are provided with daily 30-minute sessions by specially trained teachers to develop effective reading and writing strategies. Lessons include reading familiar stories, reading new or less familiar text, writing stories, working with cut-up sentences, and working with words using sounds and other clues to identify them.

For this study, a first-round sample of fifty-one students who were successfully discontinued from the Reading Recovery Program was measured to obtain information on the progress they made. Students were again tested at year-end to determine continued success.

This study used pre-test, post-test and a year-end test to show the continued progress of reading recovery students. Students were tested by the following criteria:

- Letter ID

- Ohio Word Test

- Concepts About Print

- Writing Vocabulary

- Dictation

Ninety-five reading recovery students are also compared to a random sample of ninety-nine students at the end of the year. This comparison would show whether or not the students who were the lowest at the beginning of the year had caught up with their peers by the end of the year.

Results

Table 1 shows the comparison of Reading Recovery Students tested in five areas upon entry of the program, exit or discontinuation and end of the year status. Although four of the students were not available to test at the end of the year, the remaining students show significant progress in mean scores when exiting the program and at the end of the year.

First Round Successfully Discontinued Reading Recovery Children								

Observation Survey Task	Entry			Exit			Year End		
	n	mean	SD	n	mean	SD	n	mean	SD
Letter ID	51	37.6	14.3	51	52.8	1.3	47	53.2	1.1
Ohio Word Test	51	0.6	1.5	51	15.1	3.6	47	17.8	2.4
Concepts About Print	51	8.1	4.3	51	19.0	2.3	47	20.0	2.0
Writing Vocabulary	51	4.7	4.1	51	41.3	14.1	47	47.9	17.9
Dictation	51	3.9	5.4	51	34.1	2.9	47	34.8	2.6

Table 1

The t values are -7.4 (Letter ID), -42.9 (Ohio Word Test), -17.32 (Concepts About Print), -43.2 (Writing Vocabulary), and -30.9 (Dictation), each having 96 degrees of freedom. At the .0001 level each shows significance.

In Table 2, students in the Reading Recovery Program are compared to a random sample of first graders at the end of the school year. The results have also been shown in Charts 1-5 for each test.

The significance of the results of these tests is shown in Table 3.

Test	T Value	df	Significant
Letter ID	.48	192	.70/not significant
Ohio Word	3.71	192	.003/significant (in favor of control group)
Concepts About Print	2.15	192	.033/significant (in favor of reading recovery group)
Writing Vocabulary	1.35	192	.18/not significant
Dictation	.21	192	.84/not significant

Table 3

Three of the five tests showed results that were not significant. The Ohio Word Test was significant in favor of the control group. The Concepts About Print Test was significant in favor of the reading recovery group. This means that at the end of the school year, the Reading Recovery students were equal to or in some cases tested higher in the skills than the average student in all but one test.

Discussion, Conclusions and Recommendation

The Reading Recovery Program was implemented in Vigo County just last school

year (2000-01). It has been implemented in thirty-eight of the fifty United States and

several other countries. Since the program is in its infancy in this area and therefore there

is not a lot of local data, data must be drawn somewhat from the entire state and the rest

of the country to substantiate the findings. The statistics confirm the hypothesis that the

Reading Recovery Program does help slower students catch up with their peers. The

fifty-one students who belonged to the first round group did have substantial gains. Also,

three of the five tests performed on the students at the end of the year showed no

significant difference between Reading Recovery students and randomly selected

students. And one test showed higher gains for the Reading Recovery students. This

shows that the Reading Recovery students did, in fact, progress to a level that would

allow them to enter second grade with the skills and confidence needed to succeed.

In Indiana 80% or more of the students who complete the program are at or above

grade level in reading and writing at the end of first grade (Schmitt 1998). These figures

coincide closely with the national averages.

Since the program is so new in this area, more time and training are needed to

fully implement it. It is the goal of the Vigo County School Corporation to implement

the program in all the public schools. One question to ponder is this: Are all first graders

tested and children selected from the whole group? Or are the lowest children in each

school selected? If the answer is yes to the first, then the program should be available to

all schools. If the answer is yes to the second, the fear is that the inner city children are getting the short end of the stick. Obviously some schools have lower achievers than others. In Vigo County, some schools are marginally below the average in ISTEP scores while others are well above average. It may follow that those schools would need more Reading Recovery Teachers.

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