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Reading Achievement: A Comparison of Inclusion, Pull-Out, and Combined Approaches
for Students with Learning Disabilities

By
Ethel J. Jones

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of (Arts, Science in Teaching, Music) Degree
of
The Graduate School
at
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Approved by Professor

Professor

Date of Approval 5/9/2002

ABSTRACT

Ethel J. Jones

Reading Achievement: A Comparison of Inclusion, Pull-Out, and Combined
Approaches for Students with Learning Disabilities

2002

Dr. Joy Xin

Special Education Graduate Program

More children are referred for special needs because of their reading problems than in any other areas, and concerns on programs to assist students with learning disabilities were raised, (Bos & Vaughn, 1993). The purpose of this study was to examine if these students would gain reading achievements when they were instructed in an inclusive, pull-out, or combined program. A total of 36 students with learning disabilities from grades 2 and 3 participated in this study. They were enrolled in inclusion, pull-out, and combined programs respectively. The pretest and posttest of the Jerry L. Johns Basic Reading Inventory were administered to determine if any significant differences among the 3 groups. The results show that the reading achievement of the 3 groups on Word Recognition in Isolation and Word Recognition in Context were not significant.

ABSTRACT

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Approaches for Students with Learning Disabilities

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Special Education Graduate Program

This study was conducted to compare the academic reading achievement scores of students with learning disabilities who participated in an inclusive, pull-out, or combined program. A pre-post test was used to compare the reading achievement on Word Recognition in Isolation and Word Recognition in Context. There were no statistically significant differences among the 3 groups.

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TABLE OF CONTENTS

CHAPTER I: Introduction	
Introduction.....	1
Statement of Problem	1
Significance of Study	4
Statement of Purpose	5
Research Questions	5
CHAPTER II: Literature Review	
Introduction.....	6
Pull-Out Program	6
Inclusive Program	14
Combined Program	20
Summary	22
CHAPTER III: Method	
Introduction.....	24
Sample	24
Design	26
Measurement	26
Procedure	26
Data Analysis	29
CHAPTER IV: Results	
Results.....	30
CHAPTER V: General Discussion	
Discussion.....	32
Implications	33
Recommendations	34
REFERENCES.....	36
APPENDIX A.....	38
APPENDIX B.....	39
TEST.....	40

Chapter I

INTRODUCTION

STATEMENT of PROBLEM

In the past decade, there has been a dramatic increase in the number of students being classified as being learning disabled (LD) (Guetzloe, 1999). For example, 120,000 were classified in 1968 and the numbers of children with learning disabilities exceeds 1.7 million today (Haynes & Jenkins, 1986). As a result of this increase of classified cases, a greater number of students with learning disabilities are educated in different classrooms, such as resource rooms, self-contained classrooms and recently inclusive classrooms (Allington, Stuetzel, Shake, & Lamarche, 1986).

Students with learning disabilities are instructed in one of two basic settings: resource or inclusion rooms. The instructional programs in these two placements are referred to as inclusion and pull-out respectively. Inclusion is an educational philosophy of integrating students with disabilities with their age appropriate non-disabled peers (Wildrodt & Claybrook, 1995). Resource rooms are defined as a part time placement of students with special needs with a teacher who provides direct teaching services (Thurlow, Ysseldyke, Worruba, & Algozzine, 1993).

Inclusion advocates support students with disabilities to attend a school in their neighborhood with their age appropriate peers (Willrodt & Claybrook, 1995). Inclusion reduces external or environmental stimuli of students with disabilities, and increases

interactions with their non-disabled peers. The inclusive program also intensifies collaborative interaction between special education and general education teachers (Huefner, 1988). It is reported that students in inclusive classrooms made more friends with non-disabled peers and enjoyed the increased instructional time without missing assignments as compared to traveling to pull-out rooms (Klingner, Vaughn, Schumm, Cohen, & Forgan, 1998). Socially, it has been indicated that students in inclusive classrooms have increased interactions with both disabled and non-disabled peers to build friendships (Willrodt & Claybrook, 1995).

Academically, however, the research on teaching reading to the included students is not as promising as the social component (Klingner, et. al., 1998). These included students are able to interact with their peers, but are not as capable as meeting their academic goals (Moody et. al., 2000). Bringing any student up to the grade level of academic standards if he or she is two years behind by third grade is almost impossible (Slavin, Karweit, & Wasik, 1993). Special education students have limited chances for success, because of their significant deficits in reading (Vann, 1997). Inclusion might bring serious harm to the very students who need individualized remedial reading and one-on-one instruction (Davis, 1989).

The concept of pull-out, remedial and small group instruction is popular in schools as resource room instruction. The criticism on this placement is that it lowers the students' self esteem and motivation (Vaughn, Hughes, & Moody, 2001). Ellaum, Vaughn, and Hughes (1999) indicated that pull-out instruction might widen the gap between students with high and low achievements and thereby isolate them. In contrast, Marston (1996) contests that in a pull-out class, the students may be able to function and focus on the assignments because they were taught by a teacher in another room. In a resource room, there are fewer

distractions than in a classroom with noise and visual stimuli factors (Marston, 1996).

Students typically participate in pull-out instruction and make remarkably high academic strides because they can receive individualized assistance from the specialist teacher. They feel less embarrassed when making mistakes (Klingner, et. al, 1998). Statistically, there is not sufficient research to warrant the abandonment of existing special education programs such as pull-out (Willrodt & Claybrook, 1995).

Supporters of inclusion applaud the development of social skills while those in favor of pullout concentrate on the academic gains achieved by students with learning disabilities. Some educators have used the combined approach in an attempt to provide students with learning disabilities a global education. These students would academically achieve in reading while learning to accept and be accepted by students and teachers. This approach is called the combined program. Research has revealed data that the average gains for the combined services using both pull-out and inclusion to teach reading groups represented an increase from the 15th to the 20th percentile, whereas the pull-out only and inclusion only groups had no change (Marston, 1996).

What is an effective program for reading instruction for students with learning disabilities? Would it be inclusion, pull-out, or a combination of both? Teachers need to consider the best practices that are effective to meet the needs of all students with learning disabilities (Lyon, 1995). Inclusive instruction allowed the special education students to foster friendships with their regular education peers while pull-out programs are associated with higher academic achievements than large-sized class instruction (Kulik & Kulik, 1987). Educators familiar with both instructional approaches state that combining the two approaches may provide students with disabilities the opportunity to learn in mainstream

settings and yet utilize special instructional opportunities unavailable in inclusive settings (Marston, 1996). The present study will determine if students with learning disabilities gain higher academic achievement in reading when they are instructed within an inclusion, pull-out, or combination program.

SIGNIFICANCE of STUDY

Reading and its integrated components of speaking, phonics, writing, and spelling are important keys to success and enjoyment of life. Functioning is difficult in society without the ability to read. More children are referred to special education because of reading problems than any other academic area (Johnston, 1994). Special education students learn to read at a less moderate developmental rate than regular education students. They lag behind two to three grade levels in reading as compared to their regular education peers (Slavin et. al., 1993). Because reading is a fundamental skill, which impacts success, learning in every subject is questionable.

The special educators instruct reading daily through two basic reading approaches: pullout or inclusion. Some educators favor the full inclusion approach because they want the special education students to learn while interacting with their peers. They want the classrooms to be representative of a society with a variety of people and needs (O'Neil, 1995). Others use pull-out instruction because they believe that the emphasis in school should be placed on academics (Smelter & Rasch, 1994). Pull-out instruction affords the opportunity to individualize skills, work at the student's level, and teach in an area with fewer distractions than the regular classroom. The student can focus. Some educators recently studied the effects of combining both inclusion and pull-out approaches. This combined

program is intended to provide students with LD with social and academic skills (Burnette, 1999). With the combined program, both special and general education teachers team to provide instruction in the general education classroom supplemented by a specialist in a resource room (Marston, 1999).

Effective reading instruction contributes to students' success (Lyon, 1995). In the combined program, teachers instruct students at their levels while also teaching social skills. Recently, some studies have demonstrated the effectiveness of such a combined instructional approach (Marston, 1996). Unfortunately, there has been limited research conducted on the combined reading program for students with LD. The present study will examine the academic achievements of those students who are enrolled in an inclusive or pull-out reading program as compared to those who received instruction in a combination of these two programs.

STATEMENT of PURPOSE

The purpose of this research is to determine if students with LD would gain higher academic achievements in reading when they received instruction in an inclusive, a pull-out, or a combined program.

RESEARCH QUESTIONS

1. Are there any academic differences of students with LD in a combined (pull-out and inclusion) program compared to an inclusion-only program?
2. Do students with LD who receive pull-out instruction demonstrate higher academic growth than those in the inclusive program?

Chapter II

LITERATURE REVIEW

INTRODUCTION

Prior to 1975, common practice to teach reading to students with learning disabilities was to divide them into small, remedial homogeneous groups for pull-out reading instruction (Elbaum, Vaughn, & Hughes, 1999). Because of the current inclusion movement, the number of students with learning disabilities has increased in regular education classrooms. As a result, reading taught in an inclusive environment is referred to as an inclusive program. Marston (1996), suggested to combine both inclusion and pull-out as a combination to teach reading to students with learning disabilities.

This chapter will review related research articles on these programs, focused upon the content area of reading. Elbaum, Schumm, and Vaughn (1997) stated that the teachers in the general education classrooms need to make informed decisions about how to organize reading instruction and allocate time so that all students, including those who experience extreme difficulty in reading can make adequate progress.

PULL-OUT-PROGRAM

The pull-out program is referred to as a program where the special education teacher teaches students with learning disabilities in reading, writing, and /or math

outside the general education classroom. The instructional format either can be one-on-one or in small groups (Moody, Vaughn, Hughes, & Fischer, 2000).

Reading is often taught to students with LD in such a pull-out program. This remedial, homogeneous model remains the most widely used service delivery in school (Slavin & Madden, 1989). With this approach, teachers focus on a single skill or lesson, providing oral and silent reading, independent worksheets and activities. Students are expected to participate in the direct and indirect instructional activities that are designed by the special education teacher (Ryndak, Jackson, & Billingsley, 2000).

There are several formats to implementing this program. Some teachers schedule for 30 minutes and some teachers spend 150 minutes. Sometimes, a small class is used to offer an environment for teachers to provide students extensive opportunities to express what they know and receive feedback from other students. The instructional conversations are easier to conduct in such a small class (Vaughn, Hughes, Moody, & Watson, 2001). Students with learning disabilities prefer pull-out programs due to the small size of class or group. It is less embarrassing if they make mistakes in the resource room than in the classroom with more students (Whinnery & King, 1995). Special education teachers expect their students to participate in future general education classes, thus special education instruction is intended to have a congruent relationship with the reading curriculum of the general education program (Allington et al., 1986).

It is found that the pull-out program benefits students with LD more than the inclusive program. Thurlow, et al., (1993) compared the educational experiences in the resource rooms and regular classrooms for students with LD. In the study, they randomly included eight students enrolled in Minneapolis schools. Six were third graders and two

were fourth graders. Four of the students were educated in an inclusive classroom while the other four participated in a pull-out program. The researchers observed the students for seven hours and twenty minutes a day for two days. Thy observation was conducted in a resource room about 43% of the time and 57% of the time in an inclusive classroom. It was found that the students spent one hour in reading in the resource room and were actively engaged for 21 minutes. These findings were very similar in the inclusion classroom. However, it is noted that in the resource room, the students were using readers and manipulatives, playing academic games, reading silently while given directions in small group structures. The students with LD in the inclusion classrooms were engaged in more non-academic activities such as sharpening pencils, raising their hands, looking for materials, working on workbook pages, while being taught in large group structures (Thurlow, et. al, 1993).

Similarly, O'Sullivan, Ysseldyke, Christenson, and Thurlow (1990) support the pull-out program to educate students with LD. It is indicated that students with LD get "shortchanged" in inclusive classrooms. "The critical importance of a child's ability to read cannot be overemphasized. Reading is the foundation for most subsequent academic learning and life skills." (O'Sullivan et al., 1990, pg. 9). The researchers observed forty-seven students with LD and thirty general education students in two school districts. The students enrolled in fourth and fifth grade classrooms were observed each day from November to May. The researchers found a significant difference in scheduled reading instruction in the resource room from that of inclusive classroom. The students with LD were involved in reading activities 66 minutes in the inclusive classroom but only 41 minutes in the resource rooms. Although the students with LD participated in a longer

reading period in the inclusive room, they engaged in less academic activities. The students in the resource rooms were involved in on-task academic activities in smaller groups (81.4%) for a longer time than the students with LD in the inclusive classroom (37.1%). On-task behaviors such as writing, reading aloud, playing academic games, reading silently, and answering academic questions were observed at a higher rate in the resource room while more off-task behaviors, such as disruptive behavior, inappropriately playing, looking around, and being in an inappropriate location were observed in the inclusive classroom.

Haynes and Jenkins (1986) conducted an observational field study, which was designed to answer questions regarding the standardization of allocated reading instructional time in both resource and inclusive classrooms. The researchers found that the majority of previous investigations focused mainly on regular classroom instructional achievement. Another study, Leinhardt, Zigmond, and Cooley, (1981) found that in both settings despite an explicit emphasis on reading achievement students spent an average of only 10% of the day in oral and/or silent reading activities, and teachers averaged only 16 minutes daily for reading instruction.

Haynes and Jenkins (1986) replicated their study to include 143 classified students. They discovered that in total minutes students read more while they were in the inclusive classroom than in the resource room (17.44 min. vs. 13.08 min.) had more minutes of indirect reading (27.48 min. vs. 12.03 min.) in the inclusive classroom than in the resource room. Their research revealed that students in the resource room spent a greater portion of their allocated time on direct and indirect activities and a smaller portion on other academic activities. Moreover, special education students were off-task

23% of the time in the inclusive classroom, in contrast to only 8% of the time in the resource room.

Haynes and Jenkins (1986) supported the resource room instruction because the students were engaged, on-task, and active in individualized activities to a significantly larger degree than those who participated in the inclusive classroom. Similar to Haynes and Jenkins (1986), Rich and Ross (1989) support the resource room program over inclusion for students with learning disabilities. They stated that the students received proportionately more allocated time in the resource room and were frequently on task in the resource room when compared to the inclusive classroom (Rich and Ross, 1989).

Conversely, another study that focused on engaged time for students with LD to compare those involved in the resource room and inclusive classrooms. The conclusion was that resource rooms are not effective (Allington, Stuetzel, Shake, and Lamarch, 1986.) It is asserted that the students with LD who participated in resource programs did not get any more time to acquire reading skills than those in the inclusive programs. The research revealed that remediation consisted primarily of students completing skills in workbooks while the teacher served as the classroom manager. The students in the resource room were instructed in a whole group with little direct or individualized instruction. They also discovered that once the students with LD returned to the general education classroom, they were off-task and unprepared to participate in the regular classroom activities. The special education teacher used numerous worksheets, but was "never" observed attempting to demonstrate skill transference to the regular classroom or other reading activities in a real world (Haynes & Jenkins, 1986).

In addition, the researchers observed twenty-seven students in remedial reading in New York. A total of 3,100 minutes of observation in the inclusive classroom and 1,300 minutes in the resource room were completed. Allington, Madge, Adams, Lowenbraun, (1986) desired to observe in the resource room for a longer period of time; however, the students with LD did not participate in their activities in the pull-out program for one-half as scheduled. Either the special educator neglected to get them or the general education teacher wanted them to remain in the classroom for a “special” project. In addition to the missed time, the resource room teacher terminated instruction about six weeks before the end of the school year in order to complete written reports on the students.

Russ, Berttrum, Billie, and Bongers, (2001) supported the resource room program because of the small group instruction. They conducted their investigation by accumulating articles from academic databases, including Academic Search, Master Files, Educational Information Resource Center, and Wilson Web. They also read and analyzed references from relevant articles to provide additional sources. The researchers measured the students' academic achievement with standardized test scores, task completion, task analysis, and pre-post tests. They located immense research supporting the comparison of class reduction and academic achievement in the general education classrooms. But, they found this type of research less frequently in the area of special education (Russ et. al, 2000). The majority of their research findings on the topic concluded that larger group size correlated inversely with academic achievement for students with learning disabilities. Gottlieb and Alter (1997) based their conclusion on their evaluation of increased instructional group size in resource rooms. Prior to 1994, the average class size for resource rooms was five students. After the 1994 mandate,

eight students were included in one classroom. Results from the 1994-1995 statewide reading achievement tests revealed that only 16% of the sixth graders met the state reading criteria after the group size increased, compared to 29% before the increase. Russ et al., (2001) recommended that no more than five students should receive resource room instruction at anytime. It is revealed that academic achievements in reading, math, social studies, and science yielded significantly higher rates in smaller classes (Russ et al., 2001). They concluded that lower group size facilitates greater academic achievement for students with learning disabilities (Russ et al., 2000)

The intent of the pull-out program was to provide a setting where teachers could work with students either in small groups or individual settings to provide an intensive individual program (Moody et al., 2000). However, this educational philosophy was not in practice when Vaughn et al., (1988) observed fourteen teachers and their students. Their study examined the reading instruction and group practice for students with LD in resource classrooms. They found that the teachers provided little individualized reading instruction, and most of the instruction was primarily whole group. Limited emphasis was placed on word recognition and reading comprehension (Vaughn, et al., 1988). Class size reduction is not effective because teachers do not change their instruction when/if the size of a group is decreased (Slavin, 1990).

Moody et al., (2000) conducted a two-year-follow-up study. Their purpose was to determine if the teachers changed their instructional practices and if the students benefited academically in relation to the changes. They observed six out of the fourteen teachers and their fifty-nine students with LD. These students received reading instruction in the resource room 88 percent of the day. Each classroom was observed

four times for 60-120 minutes. The researchers discovered that after two years, some of the teaching practices had changed and all of the teachers' perceptions changed drastically. Whole group instruction was visible two years ago. Today, small group instruction is promoted. They began to individualize instruction in phonics and reading comprehension in small groups.

Vaughn et al., (2001) provided an overview of research on group practices in resource classrooms, inclusive settings, and peer tutoring. They advocated that group practices for reading instruction play a critical role to effectively instruct students with LD. Although the teachers' practices changed, there were no significant gains in reading comprehension. Moody et al., (2001) noted that the teachers used more individualized instruction; however, the class size was not reduced. The average class size in the original study was 13, and it has risen to 15 today. The teachers stated that their increased caseloads made them frustrated and difficult.

Cox and Wilson (1981) examined the resource, regular, and learning center rooms. The resource room is a designed environment equipped with special materials to enhance student academic achievement where the students receive individual instruction. In a regular classroom, students receive their reading instruction from the general education teacher assisted by a specialist on techniques and material in a whole group setting. Students receive support and assistance for a minimum of thirty and a maximum of two hours a day learning reading to improve skills in the learning centers. The researchers observed ninety students, from grades one through six. The students were matched by chronological age, gender, reading levels and ability according to the psychological tests. There were 30 students with 24 boys and 6 girls. A certified

specialist in LD administered a pre-post test to assess their academic growth. The Woodcock Reading Master was used to evaluate student reading performance. A group comparison was conducted using the mean scores that yielded significant differences on the reading achievement among the three groups. The mean scores were 6.67 for inclusive class, 7.17 for learning centers, and 10.0 for the pull-out programs. Cox and Wilson (1981) found that the students with LD obtained significantly higher post-test scores than those in the other groups. They made more reading progress in the resource room than those in the inclusive classroom and learning centers. It is concluded that the students with LD would academically benefit in the resource classrooms than the inclusive rooms or learning centers (Cox and Wilson, 1981).

As previously stated, students in the pull-out program gained visible academic achievement. The most noted justifications for the academic achievement in pull-out programs are small class size, individualized instruction, and on task behaviors (O'Sullivan et al., 1990). It is obvious that students, as well as leaders, favor the pull-out program over the inclusive program to increase academic achievement (Klingner et al., 1998).

INCLUSION PROGRAM

Inclusion is an educational philosophy of integrating students with disabilities with their age appropriate non-disabled peers in a same classroom (Willrodt & Claybrook, 1995). Inclusion was advocated to ensure that all students would have a high quality of instruction in addition to precluding the social exclusion of students with disabilities from the mainstream (Schumm et al., 2002). It involves keeping special

education students in a regular education classroom and bringing support services to the students rather than taking the students to the support services out of the classroom (Peltier, 1997). Current reports showed that the number of students spending 80% or more of their school days in an inclusive setting has doubled in the last ten years (Rea, 2001).

The advantages of inclusion primarily support the social domains (Vaughn, Elbaum, & Schumm, 1996). Inclusion may reduce the stigma of students with disabilities, encourage collaboration between special education and general education teachers, and increase interaction of the disabled and non-disabled students as well (Snyder, 1999). Inclusive education is found to increase self-esteem of students with learning disabilities because they are less likely to be identified as "slow" learners by their peers or to feel stigmatized (Kettman et al., 1998). Although a significant amount of research concluded that inclusion has numerous social benefits, students with learning disabilities do better academically than those in non-inclusive settings, (Willrodt & Claybrook, 1985).

In a study by Shinn, Powell-Smith, Good, and Baker (1997), students with LD previously placed in resource rooms were included in a general education classroom with in-class support for a trial period. The researchers hypothesized if such inclusion would be successful and/or the reading performance of the included students would improve. Those special education students were from nine schools within three school districts in the Pacific Northwest. The twenty-three were classified as LD in grades two through six and grouped solely by gender. Their reading progress and reading skills were compared to those low achievers who received reading instruction in a general education classroom

Curriculum-based measurement was used. The reading progress of the students was evaluated at weeks 4, 8, and 12 (Shinn, et al., 1997). The research indicated that the included students and their low-reading peers followed equivalent patterns of progress over the trial period. The included students were progressing in reading at a rate equivalent to their low-achieving peers. The parents, special educators, and general education teachers were asked to evaluate their satisfaction. They reported that general education was the preferred placement for 90% of the included students, but that 10% of the group would benefit best from an alternative special education placement (Shinn, et al., 1997).

Shinn et al., (1997) noted that the general education teachers were confident from the beginning of the study in their ability to teach the included students. They felt they were well trained to meet the needs of the students. Both the general and special education teachers reported that their classroom was the most appropriate placement for instructing reading to those students.

Willrodt and Claybrook (1995) compared reading achievement of fifth grade students in two suburban schools. One school utilized the pull-out program and the other utilized an inclusion program for students with disabilities. One hundred-twenty-nine students were in the pull-out school and 80 were in an inclusive school. These two schools were located in the similar socioeconomic communities with a similar student population. The Texas Assessment of Academic Skills was used to measure the reading outcomes. All of the analytical data reflected no significant differences between the two schools. Therefore, the researchers cannot recommend a program that is more beneficial based solely on academic improvement. In terms of social skills achievement of students

in inclusive classrooms, parents prefer inclusion (Marcel, 2001). Although parents had concerns regarding the amount of individualized attention their children received with a large group of students in inclusive classrooms, Marcel (2002) reported that the inclusion program had more social benefits for children than the resource room program (Marcel, 2001). It also found an increase of students' self-worth and self-esteem. Students did not miss key concepts such as introductions, guided practice, independent practice, or conclusions that were covered in class as they traveled to resource rooms. In contrast, others who oppose inclusion express their concerns regarding its effectiveness about appropriate modifications or adaptations for students with LD. The students' performance may decline because of support they did not get from the teacher (Klingner et al., 1998). Instead of focusing on the controversy of placements and programs reported by professionals and parents, Klingner et. al. (1998) focused on better understanding students' perceptions and preferences by interviewing students. The researchers interviewed 32 students (16 with LD and 16 without LD) in urban areas. The students were enrolled in fourth through sixth grade. Each student participated in either an inclusive or resource room program. All 32 students were interviewed, but four were profiled in a subgroup. These four consisted of one who preferred inclusion, another who preferred pull-out, one with limited English speech, and one with visual impairments. A Student's Views of Inclusion Interview was used as a measurement tool for this study. Each member of the research team contributed a potential list of questions. The interview questions were piloted two times and presented to experts before the final draft was produced. There were a total of 12 questions. Some of the questions were open-ended to ask students to choose between opinions and follow-up questions. Six trained

researchers interviewed the students with LD during the last few weeks of the school. Each part of the interview lasted 20-30 minutes and was recorded on protocol sheets and by auditory tapes. The researchers discovered that the students preferred pull-out to inclusion, although the students with LD were closer to an even split on the issue than the non-LD student (Klingner et al., 1998). The students responded that the inclusive class had "harder work" and learning was stressed more, but little of the work they engaged in was on their level (Klingner et al., 1998). Students also made a distinction between the academic and social benefits of inclusion. They stated that pull-out was better academically because they received individualized instruction and the work load was on their level (Klinger, et al., 1998). Socially, they preferred inclusion as a means of making friends and meeting different students (Klinger, et al., 1998).

The researchers indicate that these are average results of the interview and should be interpreted with caution because social outcomes for students in inclusion programs are multifaceted and complicated. They were "surprised" by how few students seemed to be emotionally outraged by this topic (Klingner et al., 1998). Most students expressed opinions but did not seem to care about their placement.

Similarly, Vaughn, Elbaum, and Schumm (1996) examined the effects of inclusion on the social functioning of students with LD. They studied sixty-four students from grades two through four in urban school districts in the southeast regions. All of the students participated in an inclusion classroom for one year, but had previously received instruction in the resource rooms. Peer acceptance, social status, self-concept, self-worth, and self-perceptions on social alienation and loneliness were measured. It was believed that social functioning of included students was an important aspect of the overall

success. The rationale for placing these students in general education classroom is that it will improve their social functioning and acceptance by peers (Vaughn, et al., 1996). The authors concluded that the students in inclusive classrooms benefited more socially than those in resource rooms. It was found that the included students did not demonstrate high levels of loneliness (Vaughn et al., 1996). The participant students were also asked to rate how much they liked each of their classmates on a four point likert scale (ranging from 1, not at all to 4, very much). They had to order three of the best-liked students and three of the least-liked students. The participants also completed a self-concept scale, which represented appearance, friendliness, global self-worth, and academics. Other scales measured loneliness, alienation, and social dissatisfaction. The study found that both the students with LD and the low achieving students rated less positive on the social adjustment scales than the average/high students. The students with LD also demonstrated significantly lower academic achievement scores. The scales on feeling and loneliness yielded no significant differences among the groups. The students with LD scored higher than the other groups on the friendship scale (Vaughn, et al., 1996).

It seems that the inclusion program has many notable social benefits for students with LD. They appear to be able to build friendships and acceptance with their peers without disabilities. These challenged learners when included in a context of a diversity embraced and celebrated in learning in inclusive classrooms (Zollers et al., 1999).

COMBINATION PROGRAM

Educators have been experimenting with programs to enrich the students' academic, emotional, and social growth. These programs include mainstreaming,

inclusion, and pull-out (Sanacore, 1997). The most notable benefit for inclusion is the social aspect (Willrodt & Claybrook, 1985). However, inclusion does not hold an academic surge because it does not address individual needs for students with LD. In such an environment, there are some concerns, for example, general education teachers are not trained to instruct students with learning disabilities in such an environment (Marston, 1999). The promotion of greater academic achievement in the resource rooms has been studied and validated (Cox & Wilson, 1981; Funches & Funches, 1995). However, using pull-out programs increases social concerns because the students are labeled, stigmatized, alienated, and less liked by their non-disabled peers (Vaughn et al., 1996; Kettman et al., 1998).

The alternative is the combination of both inclusion and pull-out programs. The combined service program is an arrangement where the student received all instruction in Individualized Educational Plan (s) in both the pull-out resource room and in an inclusive room. The special education teacher and the general education teacher teamed together to provide instruction to the students with LD in the inclusive classroom with supplemental instruction by the special education teacher in the resource room. Marston (1999) examined ways to deliver the best educational services to students with learning disabilities. He compared the inclusion only, pull-out only, and combined programs. The participants in his study were 240 elementary students with LD who had IEP goals in reading. A total of 33 students with an average grade level of 4.36 were instructed in the inclusive classroom. In the combined program there were 36 students with LD with an average grade level of 4.39. Students in the pull-out program had an average grade level of 4.53. Curriculum-based measurement (CBM) was used to identify the number of

words the students were able to read in mid-October. Each student read passages at the third grade level from the district reading series. The median number of words read correctly in one minute was used as the fall semester's scores. In mid-April, the same passages were used for measurement. Thirty-three of the students with learning disabilities read 28.82 words correctly and were assigned to the inclusion only setting. Thirty-six students who read 25.67 words correctly were scheduled in the combined program. The pull-out only program registered 71 students who read 24.45 words correctly.

There was not a significant difference in scores between students in either group who read words correctly in the fall. In the spring, Marston (1999) retested the same group of students. The posttest scores demonstrated that reading progress of students served in the combined program (9.36) was significantly greater than those in the inclusion-only (5.64) and pull-out only (5.29) programs. The data showed that the average gain for the group in the combined program represented an increase from the 15th percentile to the 20th percentile, whereas the pull-out only and inclusion only had no change in relation to the normative group (Marston, 1999).

Inclusive and resource rooms have been the primary placements for educating students with LD. Those in favor of inclusion emphasize the positive aspects for fostering friendships. Supporters of pull-out programs in resource rooms emphasize the academic gains of students with LD. Today, a third option is provided as the combination program. It provides students with learning disabilities the opportunity to learn in mainstream setting yet utilizes special instructional opportunities unavailable in general education (Marston, 1999).

SUMMARY

What are the best practices to teach reading to students with learning disabilities?

The inclusive setting has affirmed research to support the social benefits. Students are able to make more friends and have a higher self-esteem in such environments (Klinger et al., 1989). However, there is very little empirical information, based on reliable research, to support the efficacy of academic achievement of students in inclusion (Guetzloe 1999). There is a void of statistically sound research in the efficiency of academic achievement in inclusive classrooms for students with learning disabilities (Russ et al., 2001; Affleck et al., 1988).

The research on teaching reading to the students with learning disabilities in the pull-out program focused on the academic growth. These students formed a consensus that pull-out was preferred for learning over inclusion (Klinger et al., 1998). They spent a greater percentage of time actively engaged in the resource rooms (O'Sullivan et al., 1990). The specialist in the resource room was able to provide individualized instruction to these students (Haynes & Jenkins, 1986).

Although the research found that resource classrooms prepared students academically, the social challenges were minimal. Whinnery and King (1995) found that the students with learning disabilities in the resource classrooms felt dumb (31%) more than the students in the general education classroom (6%). Johnston (1994) asserts that the students in the pull-out program have difficulty transferring skills they learn in the resource room to the general education, and that there is little curricular coordination between regular education and special education programs.

The primary purpose of education is simply to educate children (Smelter & Rasch, 1994). Other educators, on the other hand, are concerned with the social relationships in addition to education. They want the students to learn and be prepared for social situations outside the classroom (Peltier, 1997). Therefore, the combined program attempts to foster both the academic and social growth of students with learning disabilities. This present study has examined three service approaches to determine a better delivery model for teaching reading to students with learning disabilities by comparing the inclusive, combined, and pull-out programs. The criteria outlined in the previous research were used to evaluate the current benefits of these programs as they were implemented. The student engaged time, group size, and academic outcomes of each approach have to be evaluated to identify the best practice. One way to provide a smoother transition for students with learning disabilities to function in society is to emphasize social acceptance and perceived behaviors, in addition to providing them with the skills and foundations to succeed academically.

Chapter III

METHOD

INTRODUCTION

This study focused on elementary school students with LD in reading. The reading achievement of these students was examined to compare that of students with LD who participated in inclusive, pull-out, and combination programs. The Jerry L. Johns Basic Reading Inventory (1995) was administered to the participants as pre and post tests. The mean scores of the tests were analyzed to determine if there were greater academic achievement gains for the students in the assigned groups.

SAMPLE

The subjects of the reading achievement study, specifically measuring instructional approaches, were 36 students in grades two and three who resided in two school districts located in the northeastern region of the United States. Participants were grouped according to their Individual Education Plan objectives and received reading/language arts instruction 90 minutes a day. Fourteen of the students were second graders, eight in inclusion, four in pull-out, and two in a combined program. Twenty-two third grade students participated in the study: 14 in an inclusion program, 11 in a pull-out program, and 11 in a combined program (see Table 1).

TABLE 1
STUDENT'S PLACEMENT AND READING EQUIVALENTS

<i>PROGRAM PLACEMENT</i>	<i># of STUDENTS</i>	<i>GENDER OF STUDENTS FEMALES MALES</i>		<i># of STUDENTS in GRADE LEVELS</i>
<i>Inclusion</i>	<i>14</i>	<i>4</i>	<i>10</i>	<i>8, 3rd 6 2nd</i>
<i>Pull-out</i>	<i>11</i>	<i>3</i>	<i>8</i>	<i>5, 3rd 6 2nd</i>
<i>Combined</i>	<i>11</i>	<i>2</i>	<i>9</i>	<i>6, 3rd 5 2nd</i>

The students identified as having a learning disability in accordance with N.J.A.C. 6:28 (2000). They had been identified by the local school district's child study team (CST) on the basis of guidelines that specified the following criteria: impairment in the ability to process information due to physiological, organizational, or integrational dysfunctioning which was not the result of another educationally disabling condition or environmental, cultural, or economic disadvantage and was characterized by a specific learning disability manifested by a severe discrepancy between the pupil's current achievement and intellectual ability in one or more of the following areas; basic reading skills, reading comprehension, oral expression, listening comprehension, mathematics computation, mathematics reasoning, and written expression (N.J.A.C. 6:28, 2000).

Ten teachers (four special education and six regular education) in the two target schools participated in the study. They were assigned to teach their current students and continued to instruct through their normal routines. All the special education teachers had at least seven years of experience in teaching students with LD. The regular education teachers volunteered to teach in an inclusive setting. The minimum amount of

teaching experience in the regular education classroom was eight years and one year in the inclusive setting for each teacher.

RESEARCH DESIGN

A pre-post test comparison design was used in this study. Three groups, inclusion, pull-out, and combination were compared according to student achievement scores.

MEASUREMENT

The Jerry L. Johns Basic Reading Inventory Performance Test (see appendix B) was selected as a pre-post test measure for this study. This informal reading test was composed of a series of graded word lists and reading passages. There were three forms in the test to examine students' functioning on the pre-primer level to grade seven. With this tool, the researcher determined the student's independent, instructional, and frustration levels on Word Recognition in Isolation and Word Recognition in Context.

In approaching the study, it was decided to use a pre-post test measurement to compare reading scores. The students in the second grade were combined such as the students in the third grade to have a sample size that permitted a better degree of power in the data analysis. The dependent variable of reading achievement was analyzed with the independent variable of program placement.

PROCEDURE

Measurement Procedure. This study was designed to see if students with LD who were instructed in a combination program have higher reading achievements than those

instructed in an inclusive or pull-out program. The students orally read selected passages. While they read, the researcher recorded the comprehension performance on a graded word list. The researcher presented the student with a new selection until they had ten or more significant word recognition miscues or were unable to answer half of the comprehension questions. Vocabulary was recorded as the students pronounced a word. The students had a second attempt to analyze any incorrect words. A new word list was given to the student until he could no longer achieve a total score of at least fourteen words correctly or until the students became frustrated.

After receiving permission from the principals of the schools (See Appendix A), informed consent (See Appendix B) was obtained from parents/guardians of the students prior to the participation in the study. In early January, the measurement tool was administered to all of the participants. The examiner explained the purpose of the study before the administration of the Jerry L. Johns Basic Reading Inventory was administered. The testing section was administered at varying amounts of time on each student. The teachers continued instruction in accordance to their instructional manuals, core curriculum, district objectives, and the students' IEPs. In mid-May, the post-test measurement tool was administered to the participants. The data from this test was used to determine if the students with LD who were instructed in a combination approach had higher reading achievements than those instructed in a inclusive or pull-out approach. The pre-post test scores from the Jerry L. Johns Basic Reading Inventory was compared and the mean scores were computed.

Instructional Procedure. There were three approaches used in the study, inclusion, pull-out, and a combination of inclusion and pull-out.

Inclusion: Each inclusion classroom consisted of a full-time regular education teacher who taught integrated language arts (ILA), math, science, social studies, and health and one special education teacher who taught ILA and math. The teachers team-taught. While one teacher taught, the other supported the students with learning disabilities. The special education teacher was included in the classroom for 90 minutes on three days for ILA and 45 minutes on two days for math. Each inclusion classroom averaged 17-20 students. Three to four students were learning disabled while the remaining were regular education students. On the days that the special education teacher was not teaching in the inclusive classroom, the students participated in the regular activities with the regular education teacher and were assigned study-buddies. The study-buddies assisted the students with learning disabilities by helping to find pages, spell familiar words, and re-explain the assignment when the teacher was not available.

Pull-Out: The students with LD were instructed by the special education teacher in the resource room for 90 minutes three days a week for ILA and 45 minutes on three days for math. The teacher used supplemental materials, teacher-made activities, educational games, and modified worksheets to reinforce the regular education curriculum.

Combined: The students with learning disabilities participated in the inclusion classroom with both teachers and their regular education classmates. Each day, the special education teacher removed five to six students with learning disabilities from their

regular classrooms during Weekly Reader or Writing and Publishing time for 25 minutes. During this time, they practiced and reviewed skills and concepts that were introduced in the ILA and/or math class for the week in the resource room. The special education teacher used manipulatives, color-coded supplies, mnemonic devices, big books, charts, graphs, and magnetic letters to reinforce the lesson.

DATA ANALYSIS

Mean and standard deviation of students' grade equivalence in pre-post tests were analyzed. An ANOVA analysis was used to examine the difference of the three groups.

Chapter IV

RESULTS

Pretest and posttest results were analyzed using an analysis of variance with three groups (inclusion, pull-out, and combined), testing time (pretest and post test), for two tests (word recognition in isolation and word recognition in context). Descriptive data for each dependent measure for the three groups are presented in Table 2.

TABLE 2

MEAN AND STANDARD DEVIATION OF
WORD RECOGNITION IN ISOLATION (WRI) AND
WORD RECOGNITION IN CONTEXT (WRC)

GROUP	N	WRI PRETEST		WRI POSTTEST		WRC PRETEST		WRC POSTTEST	
		MEAN	SD	MEAN	SD	MEAN	SD	MEAN	SD
INCLUSION	14	1.57	1.45	1.86	1.41	1.57	1.40	2.07	1.33
PULL-OUT	11	.82	.75	1.09	1.04	1.36	.81	1.73	.90
COMBINED	11	1.91	1.22	2.55	1.13	1.91	.83	2.45	1.13

The SPSS program conducted an ANOVA analysis. The data showed that there is no significant difference of the three groups. Table 3 presents the analysis.

TABLE 3
ONE-WAY ANOVA ANALYSIS OF WRI AND WRC SCORES OF GROUPS

	SUM OF SQUARES	df	MEAN SQUARE	F
WRI BETWEEN GROUPS	6.915	2	3.457	2.378
WRI WITHIN GROUPS	47.974	33	1.454	
WRC BETWEEN GROUPS	1.672	2	.836	.710
WRC WITHIN GROUPS	38.883	33	1.178	

CHAPTER V

GENERAL DISCUSSION

This study was designed to determine if students with LD would gain higher reading achievements when they were instructed in an inclusive, pull-out, or combined program. The findings and conclusion are discussed in this chapter.

The subjects for the study were 36 second and third grade elementary students with LD, representing three groups: inclusion (n=14), pull-out (n=11), and combined (n=11). Reading achievement was measured using the Jerry L. Johns Basic Reading Inventory for Word Recognition in Isolation (WRI) and Word Recognition in Context (WRC).

The results indicated that the mean scores between the three groups (inclusion, pull-out, and combination) for the WRI were not significant. Also, when comparing the mean scores of the 3 groups for the WRC, there was no statistically significant difference too.

The first question for this research was to examine academic differences of students with LD in a combined program compared to an inclusive program? The results of this study did not show any significant academic differences of the two groups. However, the results indicated that students in the combined program made slightly higher academic gains on both the WRI and WRC than those in the

inclusive program. The absence of a statistical difference on the two tests may be due to the limited duration of time between the pretest and posttest. The greater gains by the combined program found in the study may suggest that using a combined approach may be the best way to deliver educational services to students with LD. This finding is consistent with Marston's study (1999).

The second research question for this study was to examine if students with LD in a pull-out program demonstrated higher academic growth than those in an inclusive program? No significant difference was found between the two groups. Although the students in the inclusive program made slightly higher academic gains than those in the pull-out, the gains were not statistically significant. The insignificant results found in the study between the pull-out and inclusive approaches were similar to the research conducted by Willrodt and Claybrook (1995). They concluded that they could not recommend either the pull-out or inclusive approach for their academic benefits because the differences were too small.

IMPLICATIONS

One limitation of this study was the small sample size with 36 participating students. Using a larger sample in each group as well as a wider grade range may be valuable to find out the results. There was an eight-week duration between the pretest and posttest in the study. This limited time duration between tests may impact the results. Even within the eight weeks, students were absent as much as six days, as well as assemblies, early dismissals, and school

closings. Therefore, the short time of learning and instruction may not have been able to increase the students' significant academic achievement.

RECOMMENDATIONS FOR FUTURE RESEARCH

The results of this study seemed to support previous findings that students with learning disabilities in the combined program made higher academic gains than those in the inclusion program, because there was a slight academic difference between the students in the combined program and inclusive program, though the difference was not significant.

Because of the limitations of this study, further research may be needed to validate the results with a longer duration and larger samples size. The longer time duration may afford the students more consistent instruction without interruptions. It may also enable the researcher to assess how the students applied newly learned reading skills to the WRI and WRC tests. If the sample size included a greater number of students in each program, the researcher may find more significant academic achievement scores.

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January 1, 2002

Dear XXXXXXXXXXXX,

I am conducting a study to evaluate effective reading programs for students with learning disabilities. This research is to fulfill a course requirement at Rowan University.

I plan to administer a reading and vocabulary pre-test in January and a post-test in March. This study will not interrupt the students' or teachers' present schedule or routine. I will record data on the student with learning disabilities in XXXXXX, XXXXX, XXXXX, XXXXX classes.

I will compare the scores for my research and destroy all of the data after the course; everything will be confidential.

Please respond to my request to begin my research before January 5, 2002.

A parent consent letter is attached.

Sincerely,

Ethel J. Davis-Jones

January 14, 2001

Dear Parents,

My name is Ethel J. Davis, a second grade teacher at XXXXXXXX Elementary School and a graduate student at Rowan University. I am conducting a study to measure the effectiveness of your child's reading program.

I will administer a reading and vocabulary pre-test in January. I will administer a post-test in March and compare both scores. The data will be used to evaluate your child's reading program.

There will not be any interruptions to your child's current schedule or routine. I will interpret all of the data without exposing your child; everything is confidential. I will destroy all of the information after the semester is completed.

Please sign the permission slop form below and return it before January 17, 2000.

Sincerely,

Ethel J. Davis-Jones

_____ I give permission for _____ to participate in the Effective Reading Program Study.

_____ I do not give permission for _____ to participate in the Effective Reading Program Study.

Parent's Signature _____ Date _____

BASIC READING INVENTORY PERFORMANCE BOOKLET

Jerry L. Johns
Northern Illinois University

Student _____ Grade _____ Sex ☐ M ☐ F Date of Test _____
School _____ Examiner _____ Date of Birth _____

SUMMARY OF STUDENT'S PERFORMANCE										
Grade	Word Recognition				Comprehension				Listening	Estimate of Levels
	Isolation (Word Lists)		Context (Passages)		Oral Reading Form _____		Silent Reading Form _____		Form _____	
	Total Score	Level	Percent Correct	Level	Percent Correct	Level	Percent Correct	Level	Percent Correct	
PP										Independent _____ Instructional _____ Frustration _____ Listening _____
P										
1										
2										
3										
4										
5										
6										
7										
8										

SCORING GUIDE FOR READING LEVELS					
Percent of Word Recognition in Context	100 99	98 97 96	95	94 93 92 91	90 or less
	Independent Level	Independent or Instructional	Instructional Level	Instructional or Frustration	Frustration Level
Percent of Comprehension	100 95 90	85 80	75	70 65 60 55	50 or less

INFORMAL MISCUES ANALYSIS SUMMARY						
Type of Miscues	Frequency of Occurrence			General Impact of Miscues on Meaning		
	Seldom	Sometimes	Frequently	No Change	Little Change	Much Change
Substitutions						
Insertions						
Omissions						
Reversals						

Consistent Strengths (+) and Weaknesses (-)

Comprehension

- ☐ main idea
- ☐ fact
- ☐ inference
- ☐ evaluation
- ☐ vocabulary
- ☐ lower level
- ☐ higher level

Word Recognition

- ☐ use of context
- ☐ single consonants
- ☐ consonant clusters
- ☐ short vowels
- ☐ long vowels
- ☐ syllabication
- ☐ flexible word attack

Check (✓) Consistent Difficulties

Oral Reading

- ☐ fluency
- ☐ word by word
- ☐ ignores punctuation
- ☐ lacks expression
- ☐ loses place
- ☐ repeats from habit
- ☐ requests assistance

Observations

List A-A

1. me
2. get
3. home
4. not
5. he
6. tree
7. girl
8. about
9. book
10. milk
11. dog
12. all
13. apple
14. like
15. go
16. farm
17. went
18. friend
19. take
20. some

List A

1. show
2. play
3. be
4. eat
5. did
6. brown
7. is
8. boat
9. call
10. run
11. what
12. him
13. wagon
14. over
15. but
16. on
17. had
18. this
19. around
20. sleep

List A 1417

1. pocket
2. hello
3. aunt
4. here
5. down
6. then
7. how
8. saw
9. never
10. puppy
11. could
12. after
13. hill
14. men
15. gone
16. ran
17. gave
18. or
19. way
20. coat

List A 8224

1. ten
2. poor
3. city
4. teacher
5. turn
6. fight
7. because
8. soft
9. open
10. winter
11. joke
12. different
13. say
14. quiet
15. sister
16. above
17. seed
18. thought
19. such
20. chase

List A 3183

1. trail
2. stream
3. beach
4. snake
5. lift
6. cabin
7. bless
8. rooster
9. journey
10. treasure
11. hero
12. beyond
13. moan
14. glitter
15. impossible
16. shot
17. island
18. manage
19. receive
20. automobile

List A 5414

1. stove
2. government
3. program
4. grape
5. favorite
6. blizzard
7. noon
8. greet
9. sport
10. rumble
11. tropical
12. language
13. expert
14. nervous
15. starve
16. voyage
17. silence
18. scamper
19. prairie
20. moccasin

List A 5895

1. lizard
2. double
3. scarlet
4. helmet
5. dusk
6. bandit
7. loyal
8. choice
9. furnish
10. century
11. kindergarten
12. entrance
13. dentist
14. celebration
15. blister
16. symbol
17. drowsy
18. attach
19. rehearse
20. terrace

List A 6687

1. bleed
2. accomplishment
3. whimper
4. marriage
5. frisky
6. seam
7. backward
8. location
9. nightmare
10. gently
11. employ
12. broadcast
13. kennel
14. pulp
15. satisfaction
16. cushion
17. graduate
18. harmonica
19. definite
20. yacht

List A 7371

1. dwell
2. slogan
3. knapsack
4. administration
5. gangster
6. flatter
7. incredible
8. algebra
9. bachelor
10. vocabulary
11. longitude
12. saliva
13. peninsula
14. monarch
15. feminine
16. quench
17. competition
18. disinfectant
19. ambitious
20. orchid

List A 1883

1. quote
2. ventilate
3. surgeon
4. analyze
5. masterpiece
6. pollute
7. extraordinary
8. camouflage
9. ruthless
10. perpendicular
11. juvenile
12. vacancy
13. dictator
14. negative
15. honorary
16. custody
17. maneuver
18. faculty
19. pneumonia
20. embassy

It was fall. Ann went for a walk. She took her dog Sam. They liked to walk. They walked for a long time. They saw trees. Some were red. Some were green. They were pretty. Ann and Sam saw birds too. Sam did not run after them. He was nice.

Jack woke up Saturday morning. He looked out of the window. The ground was white. The trees were white.

“Oh boy,” said Jack, “snow.”

“What did you say?” asked Tom, rubbing his eyes.

“It snowed last night. Get up and see,” said Jack.

Both boys ran to the window.

“Look at that!” said Tom. “Come on. Let’s get dressed.”

Jack and Tom ran into the kitchen.

“Mom!” they said. “It snowed last night.”

“Yes,” said Mom. “Dad went out to get your sleds. First we will eat breakfast. Then we can have some fun. The first snow is the best!”

One day Spotty went for a walk. The sun was warm. Spotty walked to the pond. There he saw a frog. The frog was on a log. Spotty wanted to play. Spotty began to bark. The frog just sat there.

Spotty jumped into the water. The frog jumped in too. Spotty did not know what to do. The water was very deep. It went way over his head. Spotty moved his legs. Soon his head came out of the water. He kept on moving. He came to the other side of the pond. That is how Spotty learned to swim.

It was the first time Bill went to camp. He was very happy to be there. Soon he went for a walk in the woods to look for many kinds of leaves. He found leaves from some maple and oak trees. As Bill walked in the woods, he saw some animal tracks. At that moment, a mouse ran into a small hole by a tree. Bili wondered if the tracks were made by the mouse. He looked around for other animals. He did not see any. The only thing Bill saw was an old bird's nest in a pine tree.

The bees had been making honey all day long. At night it was cool and calm. I had slept well until I heard a loud noise near my window. It sounded as if someone were trying to break into my cabin. As I moved from my cot, I could see something black standing near the window. In fright I knocked on the window. Very slowly and quietly the great shadow moved down and went away. The next day we found bear tracks. The bear had come for the honey that the bees were making in the attic of the cabin.

List A-A
(Pre-Primer)

Timed

Untimed

List A
(Primer)

Timed

Untimed

1. me
2. get
3. home
4. not
5. he
6. tree
7. girl
8. about
9. book
10. milk
11. dog
12. all
13. apple
14. like
15. go
16. farm
17. went
18. friend
19. take
20. some

1. show
2. play
3. be
4. eat
5. did
6. brown
7. is
8. boat
9. call
10. run
11. what
12. him
13. wagon
14. over
15. but
16. on
17. had
18. this
19. around
20. sleep

Number Correct

Total Score

Number Correct

Total Score

Scoring Guide for Graded Word Lists

Independent	Instructional	Frustration
20 19	18 17 16 15 14	13 or less

List A 3183
(Grade 3)

Timed

Untimed

List A 5414
(Grade 4)

Timed

Untimed

1. trail	_____	_____	1. stove	_____	_____
2. stream	_____	_____	2. government	_____	_____
3. beach	_____	_____	3. program	_____	_____
4. snake	_____	_____	4. grape	_____	_____
5. lift	_____	_____	5. favorite	_____	_____
6. cabin	_____	_____	6. blizzard	_____	_____
7. bless	_____	_____	7. noon	_____	_____
8. rooster	_____	_____	8. greet	_____	_____
9. journey	_____	_____	9. sport	_____	_____
10. treasure	_____	_____	10. rumble	_____	_____
11. hero	_____	_____	11. tropical	_____	_____
12. beyond	_____	_____	12. language	_____	_____
13. moan	_____	_____	13. expert	_____	_____
14. glitter	_____	_____	14. nervous	_____	_____
15. impossible	_____	_____	15. starve	_____	_____
16. shot	_____	_____	16. voyage	_____	_____
17. island	_____	_____	17. silence	_____	_____
18. manage	_____	_____	18. scamper	_____	_____
19. receive	_____	_____	19. prairie	_____	_____
20. automobile	_____	_____	20. moccasin	_____	_____
Number Correct	_____	_____	Number Correct	_____	_____
Total Score	_____	_____	Total Score	_____	_____

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