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TEACHER TRAINING AND THE IMPLEMENTATION OF READING  
INSTRUCTION FOR STUDENTS WITH MILD TO  
MODERATE MENTAL RETARDATION

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Education:  
Special Education

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by  
Nancy Sharlett Thompson

September 2003

TEACHER TRAINING AND THE IMPLEMENTATION OF READING  
INSTRUCTION FOR STUDENTS WITH MILD TO  
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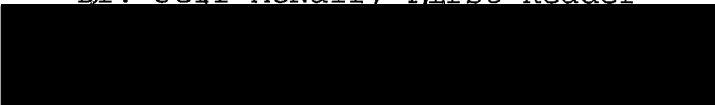
A Project  
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by  
Nancy Sharlett Thompson  
September 2003

Approved by:

  
Dr. Jeff McNair, First Reader

  
Dr. Carolyn Eggleston, Second Reader

8/27/03  
Date

## ABSTRACT

This study was designed to investigate whether special education teachers are adequately trained and equipped to meet the literacy needs of students with mild to moderate mental retardation, particularly those in severe programs. A survey of special education teachers was conducted to discover their beliefs, practices, and opinions regarding the usefulness and effectiveness of training in reading instruction as well as their needs and desires for further training.

Results of the survey revealed that the greater the amount of training and experience special education teachers have, the higher their levels of confidence and effectiveness in implementing reading instruction for students with severe disabilities. The study also found that, although some respondents indicated that they benefited a great deal from the training they had received, the majority found it only somewhat helpful or not at all.

A concern was that at least 65% of teachers felt their students' progress in reading was only one-half year or less within a year time period. These findings suggest a need for further evaluation of teacher training, practices, and the resulting level of expertise as well as

student needs in the area of reading. The results of this study indicated that 80% of the special education teachers wanted further training in reading instruction.

A consensus already exists that many students with mild to moderate mental retardation (severe disabilities) are capable of learning to read in a true literary sense. The challenge is to adequately prepare teachers to handle the literacy needs of this population. Collaboration and commitment between those who specialize in reading and special education is crucial in order to develop the teaching expertise needed to help these students achieve their highest potential in the area of literacy and become viable members of the literary community.

## ACKNOWLEDGMENTS

I would like to thank Dr. Jeff McNair for his help and assistance with this project. Without his encouragement at crucial moments, I may never have crossed this finish line. The whole process ended up being the most valuable learning experience of my time at Cal State.

Words seem inadequate to express my heartfelt gratitude to God, my wonderful family, friends, coworkers, and my principal, Rebecca Silva. Their unconditional love, support, and patience have made all the difference! It has been a long journey, completed successfully through their faithful encouragement and willingness to cheer me on!

A very special thank you to my beloved sister, Peggy, whose home, heart, friendship, and understanding provided such a support and haven for me this past year. I never would have made it without you!

Deep love and gratitude for my precious niece, Ameerah and her two beautiful children, Neo and little angel Trinity, whose birth came in God's perfect timing and helped bring me back to family, reminding me of what is truly important.

## DEDICATION

To honor my mother with this finished product is only a small gesture signifying the amount of gratitude I owe for her constant and unfailing love and support through all my endeavors through thick and thin.

"Thanks, Momsie! It's done!" ☺

Dedicated also to my wonderful students who have "taught me" how to teach reading. You are the inspiration behind this project! Your desire and perseverance in learning how to read despite life-long obstacles, keeps the fire lit within, motivating me and helping me realize more and more each day the true joy and excitement of learning. Keep reading! I believe in you!

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## CHAPTER ONE

### INTRODUCTION

#### Background

Teaching reading, both in method and timing, has long been a subject for heated debate. This debate can become even more heated and controversial when considering the literacy needs of students with mild to moderate mental retardation and/or Down syndrome.

Efforts toward any type of formal reading instruction for students with mild to moderate mental retardation have only recently been incorporated within the last 30 to 40 years (Katims, 2000a). Previously these students were simply kept at home or institutionalized.

In the early 1970's, although disabled students were still segregated, they began to attend special schools which provided formal schooling opportunities (Gold, 2000a). However, the general perception at that time was that these students could not learn to read; therefore, daily living, functional, and vocational skills were emphasized instead (Conners, 1992).

With the implementation of Public Law 94-142 in 1975 (Turnbull & Turnbull, 2001), a free and appropriate education became a protected right for all children.

Programs for students with special needs were established on regular school campuses, allowing students to attend their own neighborhood schools.

Unfortunately, according to Katims (2000b), these programs continued to focus more on other skills rather than literacy, except as needed for functional use. Furthermore, an evaluation of textbooks used to train future teachers revealed that many [did] "not address or emphasize the importance of teaching reading and writing to this population" (p. 2).

The current and ongoing literacy crisis in the United States has prompted state and the federal entities to offer financial incentives and penalties for school reading performance and student achievement. There is a strong emphasis on teacher training, and on using reading programs which have proven successful and are based on scientific research, such as direct instruction in phonemic awareness and phonics (Bowler, 2002b; Holland, 2000).

Recent studies demonstrate that students with mild to moderate mental retardation are capable of learning to read in a literary sense (Hedrick, 1999; Ryan, 1999; Gold, 2000). Bochner, Outhred, and Pieterse (2001) declared that there is no longer a debate as to whether these students

are capable of learning to read. However, there is little evidence of existing research revealing the extent to which these students are offered appropriate literacy opportunities within the classroom by their special education teachers (Katims, 2000b; Hedrick, 1999).

The majority of students are initially referred to special education due to reading difficulties (Lewandowski, 1977). Yet, once these students are placed in special education programs, they are most often taught by teachers with limited skill and training in the area of reading instruction (Lewandowski, 1977; Katims, 2000b).

Several researchers reiterate the need for special educators to have more training in the area of reading instruction. Cheeseman (1997) declared that less than 10% of teachers are sufficiently prepared to deal with specific reading disabilities, and even less attention is given to equipping teachers to work with students who are mentally retarded (Morris, Ervin, & Conrad, 1996; Moriarty, 1997).

#### Statement of the Problem

This study will investigate the following question: Are special education teachers adequately trained and equipped to meet the literacy needs of students with mild

to moderate mental retardation, particularly those served in programs classified as severely handicapped? To help guide the ensuing research, two null hypotheses are stated below, each accompanied by an alternate hypothesis.

Null Hypothesis 1. No relationship exists between teacher training in reading instruction and the level of teacher confidence in the implementation of literacy instruction for students with mild to moderate mental retardation (severe disabilities).

Alternate Hypothesis 1. There is a relationship between teacher training in reading instruction and the level of teacher confidence in the implementation of literacy instruction for students with mild to moderate mental retardation (severe disabilities).

Null Hypothesis 2. No relationship exists between teacher training in reading instruction and the level of teacher effectiveness (as shown by student progress) in the implementation of literacy instruction for students with mild to moderate mental retardation (severe disabilities).

Alternate Hypothesis 2. There is a relationship between teacher training in reading instruction and the level of teacher effectiveness and student progress in the



implementation of literacy instruction for students with mild to moderate mental retardation (severe disabilities).

Besides the level of teacher training, a major confounding variable is the amount of teaching experience teachers have accumulated and the influence this has on their level of confidence and effectiveness in the area of reading instruction.

Therefore, several other questions to be explored in this study include:

1. Are there any similar characteristics of teachers according to teacher confidence, i.e. Novice, Competent, and Very Competent?
2. Does the amount of teaching experience affect teacher confidence in teaching special education students how to read?
3. Is there a relationship between teacher confidence and teacher effectiveness (as demonstrated by student progress in reading).
4. Does the frequency (F) of instruction have any influence on student progress in reading?
5. Is there any relationship between teacher confidence and the desire for further training?

6. Is there any relationship between teacher effectiveness (student progress) and the desire for further training?

#### Purpose of the Study

The purpose of this study is to determine whether teacher training in the area of reading instruction influences the level of teacher confidence and effectiveness for teachers serving students with mild to moderate mental retardation, especially those served in programs designed for students with severe disabilities. This discourse is vital to the education system because much of the learning that students do over their lifetimes will be in the form of retrieving information from a printed medium, in short, reading. Furthermore, this issue is vital to the growth and structure of our society as a whole, which, as stated in our nation's constitution, is built on the foundation that all are created equal and have the right to the pursuit of happiness. Freedom is preserved by a people who are literate and informed, thereby enabling them to put forth effort to maintain their rights and freedom of choice.

The inability to read results in low self-esteem (Black, 1974), intense embarrassment, and the failure of

students to improve their knowledge and skills, especially at the high school level (Moriarty, 1997). The premise of our educational system is that all students can learn and have the right to equal access of educational opportunities, which allow for the development of one's greatest potential (Anderson, Hiebert, Scott & Wilkinson, 1985; National Commission on Excellence in Education, 1983). One of the key avenues for enabling students with mental retardation and severe disabilities to achieve satisfaction in life and reach their highest potential is to help them become an integral part of the literary community as well as contributing members of society (Ryan, 1999; CAST, 1999-2000; NAEP, 1998). Without adequate and effective training of special education teachers in the area of reading instruction, they will not be effective in helping these students achieve these goals.

All students, including those with severe disabilities, deserve the best opportunities and services available. Following an extensive review of research studies (over 33 years; 41 research sites worldwide; 34,000 people), The National Reading Panel (2000) concluded that learning to read is NOT a natural process. Direct instruction is often necessary, especially for

students with learning issues. This suggests that teachers need specialized training to effectively meet the needs of this population.

Many studies have already demonstrated that students with mild to moderate mental retardation have the capability of learning to read (Hedrick, 1999; Ryan, 1999; Gold, 2000b). Other studies suggest our educational system as it is may not be providing sufficient opportunities for them which match that capability (Katims, 2000b; Hedrick, 1999).

Some researchers have indicated that teachers want more training in the area of reading instruction (Vaughn, Moody, & Schumm, 1998). Several others declare that training for teachers of students with specific learning disabilities is addressed more often than for those teaching students with mental retardation (Morris et al., 1996; Moriarty, 1997; Lewandowski, 1977). The current study will delve deeper into this area of teacher training and hopefully shed more light on how special education teachers feel regarding the amount, quality, and helpfulness of reading instruction they have already received as well as desires and interest for further training.

## Theoretical Bases and Organization

Accurate knowledge and levels of expectation for students with mental retardation in regard to attaining literacy skills play a major role in whether or not they are exposed to meaningful literacy experiences (CAST, 1999-2000; Gold, 2000b; Zahn, 2001; Kliever, 1998; Buckley, 1995; Bochner et al., 2001). Those who do not believe students with mental retardation have the ability to learn to read in a true literary sense may not be willing to put forth the time and effort needed to accomplish this task. Given this position, intense teacher training in the area of reading instruction would not be necessary. Exposing students to functional reading and learning survival signs would suffice.

On the other hand, some experts such as those involved in the Reading Recovery Program (Knuth, 1992; Pinnell, 1989) or the teaching methods developed by Collins (Zahn, 1999), train teachers to work with children, regardless of ability level, allowing all students the opportunity to learn how to read. The intense and lengthy teacher-training required by these programs, which includes a strong emphasis on phonics, develops teachers with the same philosophy, perseverance, and skills, who in turn produce many more educated and

literate citizens. Many students, who may otherwise fail at learning to read, succeed. Those who have a great deal of difficulty in reading are at least provided the opportunity to learn and progress much closer their capacity.

Reading readiness, as a factor in learning to read, can be especially important in regard to reading instruction and literacy attainment for this population. Students who have not yet learned to read by the time they reach the secondary level are at a particular disadvantage. The reasons they never learned to read previously may be related to developmental readiness, but there are a host of other influential factors. These may include absenteeism, frequent relocation, or missing reading instruction at the "right" time, while the rest of the class moves on. Some teachers choose not to focus on literacy or lack the materials and/or skills to do so. Whatever the reasons, for older students who may be at their potential point of readiness, literacy is often deleted from their program and replaced by vocational and daily living skills (Farrell & Elkins, 1994/1995).

It seems students with mental retardation tend to lose on both ends. In the beginning, depending on educators' philosophies, they are too young and not ready

developmentally to learn to read; later they are too old and, from many educators' viewpoint, would benefit much more from focusing on other skills. If these beliefs and philosophies prevail, the need for training special education teachers in the area of reading instruction may not seem as critical.

#### Limitations of the Study

Due to lack of time and availability of an adequate number of teachers teaching students with mild to moderate mental retardation (with IQ's ranging from 36-68), the 42 special education teachers surveyed work with students possessing a much wider range of abilities than was the particular focus of this study. Student disabilities ran the gamut from the severe and profound, who may often never learn to read even simple words, to students with emotional disturbances, who typically have normal intelligence and often read at grade level. Therefore, answers given on the surveys to questions regarding student abilities as well as methods and materials used for reading instruction vary accordingly. The main objective of this study, however, was to obtain information on the level and effectiveness of training in

literacy instruction which special education teachers have received.

In addition, developing the survey for this study was a learning experience for the author. The importance of clear wording, simplicity, and placement of items on the survey became more obvious in hindsight. Any lack of clarity in interpreting the information requested could result in confusion, varied responses, and the worst-case scenario--blank answers. In the end, these discrepancies could skew the resulting statistical analysis. The following are notations of the manner in which particular discrepancies or variations were handled with regard to the survey:

- Blanks: no tally
- Question 2: number of years credential held (#'s mixed w/X); counted as possessing credential only; number of years held not considered
- Question 4: current class type not specified - category added
- Added "Other" category for class types not listed on survey
- Mixed grades within same class type: went with lower grade due to probable lower reading levels



A major limitation of this study was the lack of opportunity to observe teachers involved in actual reading instruction. In order to determine true teacher effectiveness, it would be necessary to obtain students' baseline reading levels prior to a predetermined period of instruction as well as the measurement of their reading levels following this instruction. More often, studies of this kind have been done in the general education setting, but a very limited number have been conducted in settings involving students with mild to moderate mental retardation; particularly those at the secondary level (Insider, 2000; Hedrick, 1999).

Lastly, a common limitation inherent in survey research is that the data collected is self-reported. Responses received from the survey were teachers' opinions and thoughts regarding their training experiences and their effectiveness in facilitating student progress in reading. It is important to have the perspective of teachers because they are the ones who work so closely with the students and are most familiar with their own needs as well as those of the students. Teacher effectiveness ratings by supervisors, in addition to teachers rating themselves, could be beneficial in

providing more objective input regarding student progress in reading.

## Definition of Terms

### Abbreviations

TY -	Total Years
SPED -	Special Education
GEN -	General Education
SD -	Standard Deviation
ED -	Emotionally Disturbed
TMH -	Trainably Mentally Handicapped
MH -	Multiple Handicapped
AUT -	Autistic
DD -	Developmentally Delayed; Severe and Profound
LH -	Learning Handicapped

### Variables

Teacher Confidence. This term refers to how teachers rated themselves in teaching reading to general and special education students. In this study, how teachers rated themselves in regard to teaching reading to special education students will be used for analyses and discussion. The three levels of confidence are Novice (N), Competent (C), and Very Competent (VC).

To further clarify, the term Novice does not mean a brand new teacher with little or no experience. It refers to the level of confidence that teacher has in teaching reading to special education students in the classroom.

Frequency. Frequency (F) refers to the rate or number of times the teacher provides reading instruction per week.

Teacher Effectiveness. Teacher effectiveness will be equated with the amount of reading progress teachers felt their students tended to make in a year. Teacher effectiveness and student progress may be used interchangeably.

#### Special Terms

Mental Retardation. According to The Merck Manual (n.d.), mental retardation is sub-average intellectual ability, which is present from birth or early infancy. It can be identified and measured by standardized intelligence tests. Students with an IQ of 69 to 84 generally have difficulty learning in school but are not mentally retarded.

Mild Mental Retardation. IQs for mild mental retardation range from 52-68. These students typically have difficulty learning to read, but they may achieve a fourth to sixth-grade reading level.

Moderate Mental Retardation. IQs for moderate retardation range from 36-51. Progression beyond a 2<sup>nd</sup>-grade level in academics for these students is unlikely. They are usually able to learn some social and occupational skills (Kenny & Clemmens, 1997).

Learning Disorders/Disabilities. It is important to distinguish mental retardation, involving general overall deficits in intellectual functioning, from learning disorders and disabilities in which the deficit is limited to a specific area, such as math, reading, or written expression. These students may have high IQs overall, however, performance in one of the above areas is significantly below what would be expected considering age, intelligence, and schooling background factors (Healthinmind.com, 2001).

Reading and Literacy Skills. For the purposes of this review, reading and/or literacy skills will be defined as the ability to gain meaning from text for the purpose of gaining information or pleasure from what is read (Pikulski, 1994), thereby perceiving oneself as a viable member of a literate society.

Reading for Meaning. When reading lessons and vocabulary are combined with current, meaningful experiences and activities of the readers, connections are

easily made, interest and motivation levels are high, and the percentage of retained information and learning is much greater (Sticht & McDonald, 1992).

Functional Approach. A functional approach to reading entails learning survival signs and sight word vocabulary in real-life settings. The strategy is for students to see the words enough times to eventually memorize them and know their meanings. This typically involves a great deal of drill and practice using individual words (Hedrick, 1999; Conners, 1992; Insider 2000; Gurry & Larkin, 1999).

Phonetic Approach. A phonetic approach begins with learning the letter/sound symbols, blending sounds together, and learning the phonetic rules in order to decode words, even new ones not previously seen (Love, 1982; Lyon, 1998).

## CHAPTER TWO

### REVIEW OF THE LITERATURE

#### Introduction

The purpose of this literature review is to gain an understanding of the reading capabilities of students with mild to moderate mental retardation, as well as the beliefs, practices, and training of educators in the area of literacy instruction for this population.

Efforts toward any type of reading instruction for this population have only recently been incorporated. Many people, including some educators, do not believe students with mild to moderate mental retardation are capable of learning to read phonetically as an avenue of achieving literacy (Bender, Valletutti, & Bender, 1976). It is important to address this controversial issue before decisions regarding methods of teaching reading can be made as well as the degree and quality of training needed for teachers to effectively accomplish this task.

In addition, the broader history and controversy surrounding the debate about the most effective approach to reading instruction will be addressed only to the extent it relates to the instruction of students with

mental retardation and their potential of becoming viable members of a literate society.

The following questions and issues will be investigated and discussed within this literature review:

1. Are students with mild to moderate mental retardation (including students with Down syndrome) truly capable of learning to read and gain literacy skills?
2. Are these students, regardless of disability, provided the opportunity to gain literacy skills to the fullest extent of which they are capable?
3. If so, what approaches and/or strategies are most effective in helping students with developmental disabilities gain literacy skills?
4. Do teachers in the position of educating this population have the skills and training necessary to accomplish this task?

#### Capability and Opportunity to Learn

Many people, including some educators, do not believe students with mild to moderate mental retardation are capable of learning to read phonetically as an avenue of achieving literacy (Bender et al., 1976; Sitlington, Clark & Kolstoe, 2000; Bochner et al., 2001). On the other hand,

based on studies and research, a number of authors have reached the opposite conclusion (Cegelka & Cegelka, 1970; Conners, 1992; Hedrick, 1999; Reale, 1999; Katims, 2000b; Gold, 2000b; Bochner et al., 2001). It is important to address this controversy before decisions regarding methods of teaching reading can be made. Efforts toward any type of formal reading instruction for this population have only recently been incorporated within the last 30 to 40 years (Conners, 1992; Gold, 2000b; Katims, 2000a; Bochner et al., 2001; Turnbull & Turnbull, 2001).

The precursor for this change was the implementation in 1975 of Public Law 94-142 (Turnbull & Turnbull, 2001), a major legislative decision guaranteeing a free and appropriate education for all children, including those with mental retardation.

According to Katims (2000a), Professor of Educational Psychology and Special Education at the University of Texas in San Antonio:

The story of the treatment of people with mental retardation dates back to the beginning of recorded history. However, documented attempts at systematic literacy instruction, including efforts to teach reading, writing, and spelling to individuals with



mental retardation, is a relatively recent phenomenon. (p. 2)

Reading instruction for students with mental retardation is also addressed by Connors (1992),

Research on reading by children with moderate mental retardation was virtually nonexistent prior to the late 1960's because of emphasis on other types of skills and the general belief that these children could not learn to read. Early research suggested that this belief was misguided. (p. 577)

Katims (2000b) further noted that the majority of literature reviews on this topic indicate that "people with mental retardation read well below their own mental age" (p. 11). Cheeseman (1997), director of the Read to Succeed Adult Reading Clinic, declares that one out of three adults do not read normal adult materials. She states that those with reading disabilities "can learn if given appropriate research-based instruction" (p. 35).

Use of research-based instruction in reading appears to be more the exception than the rule, as indicated by Katims (2000b). In his book, *The Quest for Literacy*, Katims delineates the outcomes resulting from the belief held by many that these students are not capable of learning to read. "Unfortunately, current classroom

instructional programs tend to focus primarily on teaching social, vocational, and daily living skills to the exclusion of literacy instruction beyond a basic functional level" (p. 2). Katims (2000b) goes on to say that textbooks on special education and mental retardation "perpetuate 'literacy pessimism' among professionals because they do not address or emphasize the importance of teaching reading and writing to this population" (p. 2).

While it seems many students in this population have missed out on the experience of learning to read (McCray, Vaughn & Neal, 2001; Katims, 2000b), there is encouraging evidence that those who have been afforded the opportunity are able to learn and make progress in reading (Fuller, 1974; Katims, 1996 & 2000b; Kliever, 1998; Hedrick, 1999; Reale, 1999; Gold, 2000b, July 7; Marva Collins Seminars, 1998-2001; National Reading Panel, 2000).

According to Katims (2000b), "Teachers who use a progressive instructional orientation have demonstrated that students with mental retardation have the potential and ability to become increasingly literate" (p. 4).

A year-long study demonstrated that better than average gains were made by students with mental retardation being instructed using the Four Blocks literacy framework (Hedrick, 1999) which incorporates

phonics and sight-word learning, the use of good literature, as well as writing (see Appendix B for a detailed description of this method).

Reale, an employee of the Massachusetts Department of Mental Retardation, demonstrates evidence of adults with mental retardation who have successfully increased their reading skills. As a result clients were able to get jobs or job promotions. She discusses the importance of literacy and the impact this skill has on the quality of their lives (Ryan, 1999).

Just over 30 years ago, all students with Down syndrome were considered profoundly retarded and, therefore, uneducable and often institutionalized. In 1971 they continued to be segregated from their non-disabled peers, but were allowed to attend special schools. By the late 1970s, it was thought that 20-50 percent of these students might be only mildly retarded. Research studies done by Buckley indicated that many students with Down syndrome began reading at a very early age (Gold, 2000b).

A comparison of Buckley's 1986 and 1999 studies (Gold, 2000b), done on the reading achievements of forty-six 11 to 20 year-olds with Down syndrome in Hampshire, Australia, clearly demonstrates the reading capabilities of these students. In addition, there were

clear benefits to integrating them into mainstream schools as opposed to isolating them within special schools.

The study shows mainstream children have an average reading age of nine years, and they continue to improve academically. In contrast, those in special schools have an average reading age of five years nine months. They do not continue to improve. (Gold, 2000a, ¶ 5)

#### Low Expectations

As evidenced by the previous example, accurate knowledge and levels of expectation for students with mental retardation in regard to attaining literacy skills play a major role in whether or not they are exposed to meaningful literacy experiences (CAST, 1999-2000; Gold, 2000b; Zahn, 1999; Kliewer, 1998; Buckley, 1995; Bochner et al., 2001). In addition, the impact of low expectations is closely tied to how students perceive themselves. If they see themselves as poor readers, they tend to act accordingly (Cunningham, Hall, & Sigmon, 1999).

Ability-grouping is common, and once students are placed in the low reading group, they often never rise above that level (Lyon, 1998).

Collins (Zahn, 1999) suggests that low expectations negatively impact student progress, and boldly claims that

she can "get any class in the world to read in one month." She ventures, "If you teach at-risk students, that makes you an at-risk teacher. I don't teach at-risk students; I teach scholars" (§ 162). Her claims are validated by the success of students who experience her methods of instruction, which include the use of intensive, systematic phonics.

In 1991, Harvard University assessed the progress of eight schools in Oklahoma. Four schools that worked Collins' program had an average increase of over 172% on the Iowa Standardized Test, compared to only a 10% increase in the four schools that did not utilize her program (Marva Collins Seminars, 1998-2001).

In 1996, Collins asked to help the three lowest achieving schools in Chicago. After only four months, the two schools that used her model raised test scores over 85%; the other school increased only 10% (Marva Collins Seminars, 1998-2001).

The NAEP 1998 *Reading Report Card* findings indicated that 68 percent of fourth graders in high poverty areas were considered poor readers according to set standards. In contrast, according to an independent investigation of her work, Collins had 100 percent of her students reading well at her private school in Chicago, in spite of the

fact they came from high poverty areas (Home School Legal Defense Association, 1996-2002).

During an interview, when asked about students with learning or cognitive disabilities, Collins (Zahn, 1999) responded from her own personal experience. For three years she taught students with learning disabilities in a public school. Every year they did better than all the other students because she did not treat them as if they were learning disabled.

Collins went on to say that her own daughter, currently an administrator at one of her schools, works with special children on a pull-out basis. Even though teachers had said these students would never be able to read, she has them all reading (Zahn, 1999).

#### Developmental Readiness

An additional factor to consider for this population is the debated topic of developmental readiness with regard to reading (Flesch, 1986; Kirk, 1993; Cawley & Parmar, 1995). According to some researchers, "Many mildly handicapped students do not begin to read until they are 8 to 10 years of age and then only after an intensive period of training in reading readiness skills" (Bender et al., 1976, p. 23). High interest reading materials of a

functional nature should be used, along with a focus on meaning rather than simply decoding words.

Some educators claim that if students with mild to moderate mental retardation have not learned to read by the time they reach high school, they never will (Farrell & Elkins, 1994/1995; Sitlington et al, 2000; Stanovich, 1986). This statement is a declaration made by those who are strongly convinced that functional reading, as opposed to a phonetic approach, is much more beneficial and practical for these students once they reach the secondary level (Cegelka & Cegelka, 1970).

Proponents of functional reading hold that since there is so little school-time left with these students once they reach the secondary level (at age 14), it is vital to help them become as functional as possible in daily living skills and within the community (Bender et al., 1976). At this age, there is little benefit in teaching them to read using a phonetic approach and still achieve only a first, second, or third-grade reading level.

The opposing side argues that between the ages of ten to fourteen, many students with developmental delays may just be achieving a mental capacity comparable to five to seven year olds (Farrell & Elkins, 1994/1995), the age at

which most students of normal intelligence learn to read (Flesch, 1986). If this is true, it is only fair that these students be afforded the opportunity of gaining this skill at their point of readiness (Cawley & Parmar, 1995).

Farrell and Elkins (1994/1995) venture, "The important thing to remember is that the chronological milestones we are accustomed to don't usually apply, since these young people generally develop intellectually at a much slower pace than other children" (p. 271). They go on to say, "The unfortunate outcome for many of the older children is that they begin to acquire concepts about literacy at the time that their curriculum deletes literacy in favor of vocational or daily living skills" (p. 275).

It is important to keep in mind the factors of time and effort relative to a student's age (Lyon, 1998). Cheeseman (1997) states that the "required time (for learning to read) increases significantly with age. By the time the student reaches adolescence, the time needed for success is nearly doubled" (p. 35).

In light of this, a factor worth noting is that once these students reach high school, they typically have eight more years of opportunity to learn within a school setting, since formal schooling is available to them



through age 21. Hedrick (1999) proposes that "programs for students with mild to moderate mental retardation can be designed from pre-kindergarten to transition into the adult world in a way that balances necessary social skills/daily living skills with intensive and extensive literacy instruction" (p. 148).

If an effective and solidly-structured literacy program were in place during these years, and afterward they were connected with an adult literacy program (Reale, 1999), their progress and level of achievement could be significant given this longer time frame (Bochner et al., 2001). Reale (1999) has spent over five years developing literacy classes for adults with mental retardation. She draws several conclusions from her experiences. She found several significant components necessary for success in reading. These include: use of phonics and whole language materials; learning across settings—home, work, class; and following the same reading development steps as adults in community-based adult education programs.

Although much of the research and literature studied focuses on literacy programs for younger students, it is important to keep in mind that the same elements, steps, and processes are necessary in teaching reading to students with disabilities, regardless of age (Chall,

1983b; Reale, 1999). Spadorcia (1997) concurs that "despite age, students need to go through the same stages of reading and writing development that younger students go through" (p. 93). Furthermore, those aspects of literacy instruction found to be effective within the general education population should be seriously considered for use among students with special needs (Hedrick, 1999; Reale, 1999; National Reading Panel, 2000).

#### Approaches

Since many researchers agree that students with disabilities benefit from the same research-based instructional approaches that work for others (National Reading Panel, 2000; CAST, 1999-2000; Spadorcia, 1997), it is important to look at certain issues regarding reading instruction in general.

Through the years, four major approaches to teaching reading have gone in and out of popularity (Cunningham & Allington, 1994). The first one is the phonics approach, which, as mentioned earlier, focuses on letter/sound relationship, and then uses these as tools to decode words.

Though the basal reader approach incorporates phonics, it typically begins with sight word learning and has a strong emphasis on comprehension. Graduated levels of difficulty and a wide range of literature are characteristic of basal readers.

Those who felt restricted or regimented within the basal approach were rejuvenated when the literature approach came into vogue. Having the freedom to choose from a wide variety of real books (also known as trade books) cultivated an excitement and love of reading. Then in the late 1980's, personal experiences expressed through writing became the popular approach, based on the thought that students' own writings were the simplest and most motivating for them to read (Cunningham et al., 1994).

Despite the varying approaches described above, Connors (as cited in Katims, 2000a) notes that "in regular education the focus of reading instruction is on gaining meaning from print, while the research on reading instruction for students with mental retardation focuses almost exclusively on the identification of individual words" (p .11). Insider (2000) reported, "Most studies of reading in mental retardation target sight-word instruction, that is, the memorization of words rather than the development of word-attack skills" (§ 4).

Pikulski (1994) expressed this same concern:

Traditional approaches to literacy education for this population generally focused on the teaching of isolated mastery of a linear set of sub skills which people with disabilities have great difficulty mastering. Therefore, they do not gain access to participation in the higher processes of using literacy as a tool for communication, obtaining information, or of reading for pleasure. (p. 35)

About twelve years ago, Cunningham, Hall, and Defee (1998) became increasingly concerned about the phenomenon in which different approaches to reading come in and out of fashion. They declared that students have different learning styles. They suggested that, depending on the emphasis, certain methods work for some children, but not for others, and vice versus. "When the pendulum swings to another approach, we may pick up some of those who weren't faring too well under the previous emphasis but lose some who were" (Cunningham et al., 1998, p. 652).

#### The Four Blocks

As a result, these educators developed a literacy instruction framework now known as "The Four Blocks" (Cunningham, Hall, & Sigmon, 1999). This framework provides a balance between more traditional reading

instruction (guided reading, use of basal readers, direct phonics instruction), and a contemporary, constructivist orientation toward literacy instruction (writing process, student choice of books from good literature) (Hedrick, 1999; Bintz, 1993). The Four Blocks is a multilevel, multi-method approach, which, amazingly enough, incorporates many aspects of the various approaches described earlier (for a more detailed description of "The Four Blocks" method please see Appendix B).

The Four Blocks framework is only one example of an integrated approach, which clearly incorporates a combination of methods for teaching reading. It provides a variety of avenues to become literate, as well as accommodating a wide range of ability levels among students. More importantly, it results in superior reading achievement for a wide range of children. Feedback received by Cunningham et al. (1999) consistently indicates that both regular and special education teachers feel that the needs of special education students can be met more effectively using the Four Blocks framework. "When a teacher provides more routes to the goal of literacy, more children will find a route to take them there" (Cunningham & Allington, 1994, p. 17).

### Which Approach?

In the 1960's, the Federal government conducted a study and spent a large amount of money trying to determine which method for teaching reading was truly the best (Cunningham & Allington, 1994). The results were inconclusive, other than discovering that combination approaches were more effective than any one particular approach. These same conclusions have been reached following research studies involving students with mental retardation (Cegelka & Cegelka, 1970; Bender et al., 1976; Reale, 1999).

Adams (1990), states explicitly in her book, *Beginning to Read*, that she does not believe there is "any universal best method for teaching reading ... The effectiveness of a method depends on the materials, its teachers, its students, and the compatibility of each with the other" (p. 423).

In addition, due to differing personalities, abilities, and learning styles among students, incorporating aspects from as many methods as possible is beneficial as well as necessary (Love, 1982; Cunningham et al, 1998; Bond & Dykstra, 1967). Cunningham and Allington (1994) agree by stating,

The reason the great debate rages on is that there is truth in all the arguments. To learn to read, children must read real books. Children who write become better writers and better readers. English is an alphabetic language; in order to read and spell the thousands of words necessary for fluent reading and writing, children must figure out the letter-sound relationships. Finally, basal readers provide multiple copies of a variety of literature, which gradually increase in difficulty along with an organized curricular plan, that teachers can use to instruct and assess progress. (p. 15)

Each approach has its own strengths and weaknesses. Many renowned people and educators plea for a balanced approach to reading instruction which includes systematic phonics as well as the use of good literature (Chall, 1983; Anderson et al, 1984; Adams, 1990; Trachtenburg, 1990; Honig, 1996; Marva Collins Seminars, 1998-2001; The Thomas B. Fordham Foundation, 1959).

#### Phonics versus Whole Word or Whole Language

Phonics has long been a central figure in the ongoing controversy regarding reading instruction, even for general education students. A common opponent through the years has been the whole word method (formerly called

"look-say") which today has progressed into the whole language approach (Thomas B. Fordham Foundation, 1959). Huey (1908) was one of the early advocates for teaching reading by memorizing whole words, as long as they were learned in context (Garnett, 1991). Proponents of the whole word method argue that learning is faster and more enjoyable compared to the hard work and drudgery of learning all the sounds first (Daniels & Diack, 1961). Phonics first supporters stand strong as they counter these benefits by stating the drawbacks, "If you don't teach a child the letters, he'll always be stumped when he sees a new word" and in the end he can only become a "lifelong word guesser" (Flesch, 1986, p. 51-52).

According to Flesch (1986), anytime the use of phonics and the word method were investigated and analyzed, the concluding results put phonics instruction "on top". After a thorough search for scientific evidence supporting the word method, Flesch declared that "there was none" (p. 61).

Chall's (1983a) findings are similar to Flesch's when comparing phonics-based instruction with other emphases, such as meaning. This is especially true for beginning readers. Many researchers emphasize the importance of phonics instruction in the beginning stages of reading.



Dykstra (as cited in Chall, 1983a, p. 5) expressed strong convictions regarding the use of phonics.

We can summarize the results of sixty years of research dealing with beginning reading instruction by stating that early systematic instruction in phonics provides the child with the skills necessary to become an independent reader at an earlier age than is likely if phonics instruction is delayed and less systematic. As a consequence of his early success in 'learning to read,' the child can more quickly go about the job of 'reading to learn'.

(p. 5)

Drawing from a number of similar success stories throughout the United States, Flesch (1986) lends credence to the use of phonics instruction. Previously, students (in one geographical area) were "far below grade level in reading skills...even sixth-graders were still guessing at words... Five years later (*following phonics instruction*), students were performing above grade level in the primary grades and at grade level in the intermediate grades"

(p. xi).

Early exposure to phonics instruction in the educational experience of students is strongly supported by many researchers (Chall, 1983a; Anderson et al., 1985;

Flesch, 1986; Adams, 1990; Snider, 1992; Honig, 1996). Adams (1990), however, describes a relatively recent shift in focus regarding phonics. Rather than phonics versus no phonics being the key argument, the debate seems to have shifted as to which kind of phonics instruction is most effective. In direct-synthetic phonics (explicit), letter sounds are isolated and taught directly, along with specific practice in blending sounds. Conversely, indirect-analytic phonics (implicit) uses sight words to make generalizations regarding letter-sounds. For example, *dog*, *desk*, and *dig* all begin with the same sound (Chall, 1983a; Flesch, 1986).

In her summary of recommendations, Chall (1983a) states that evidence favors a direct approach to teaching phonics for exceptional students with reading and learning disabilities. Snider (1992) notes that there is sufficient evidence to support phonics instruction for average beginning readers in first grade, but also for older remedial readers who are still in the beginning stages of reading. In addition, success of the Boston Area literacy program for adults with mental retardation (Reale, 1999), in which the most successful textbooks include a strong phonics component, lends further support to conclusions reached by Chall (1983a) and Snider (1992). Garnett (1991)

draws the same conclusion that "Research to date shows that children learn how to read more fluently when their reading lessons are structured and their skills are taught directly" (p. 5).

Cunningham (1993) and Conners (1992) concur regarding the importance of combining phonics instruction with sight-word learning. "Sight words are easier to learn for students with decoding ability. A knowledge of letter-sound relationships reduces uncertainty and helps students learn a word as a sight word" (Cunningham, 1993, p. 34).

Heymsfeld (1989) purports that explicit phonics is a major component in the teaching of reading. He points out that advocates of the whole language approach, led by Goodman (1989) and Smith, are criticized due to their firm stand against direct, systematic phonics instruction. They hold that students will learn to read naturally by developing "their own phonetic principles as they read and write" (Heymsfeld, 1989, p. 66).

The premise of this conclusion is that all students have the ability to make generalizations and draw conclusions on their own without direct instruction from a teacher (Honig, 1996). However, this is a higher level thinking skill, which typically can be very difficult for

some students, especially at-risk students and/or those with reading disabilities or mental retardation. In general, these students have had less exposure to reading and writing activities or may not be able to gain certain reading skills except through direct instruction (Adams, 1990; Snider, 1992; Kirk, 1993; Cunningham & Allington, 1994).

The National Institute of Child Health and Human Development (NICHD) carried out an extensive review of research studies conducted over the last 33 years at 41 research sites throughout the world involving over 34,000 children and adults (Lyon, 1998; National Reading Panel, 2000). According to Lyon, findings showed that, unlike oral language development, learning to read is not a natural process. Therefore, although the amount may vary from student-to-student, most need direct, systematic reading instruction (Honig, 1996).

Flesch (1986) also supports the use of explicit phonics. He points out that by the 1930's reading disorders were prevalent and many students were having difficulty breaking the alphabetic code using the look-say/whole word method. Therefore books were "dumbed down" resulting in readers such as "Dick and Jane" which contained easier and more limited vocabulary. According to

Flesch, it was not until 1955 that phonics became an issue of concern within education, mostly in response to his book, *Why Johnny Can't Read?* (Garnett, 1991, p. 15-16).

As with the look-say and whole word methods from previous years, the whole language approach came under scrutiny following its emphasis during the early 1990's. The 1994 NAEP report, according to the *LA Weekly* (March 7, 1996 issue), declared that after eight years of whole language implementation, California's fourth-grade reading scores were the second lowest in the nation. Blumenfeld, who wrote, "The Literacy War Goes On," suggests that the whole language movement has created a "literary catastrophe" (Home School Legal Defense Association, 1996-2002).

In light of the current literacy crisis, state (Holland, 2000) and federal (Bowler, 2002b) entities are offering financial incentives and penalties depending on reading performance and student achievement. There is a strong emphasis on teacher training and using reading programs which have proven successful and are based on scientific research, such as direct instruction in phonemic awareness and phonics. "Failed programs such as whole language are being scrapped" (Holland, 2000, ¶ 9). Finn, president of the Thomas B. Fordham Foundation and a

former education official during Reagan's administration, claimed, "There's now a scientific consensus on how to teach reading" (Bowler, 2002b, ¶ 15).

### Balanced Approach

Honig (1996), California's superintendent of instruction during the inception of the whole language movement, conducted his own investigation of what had gone wrong, along with an analysis of which components aid effective reading instruction. His conclusions, expressed in *Teaching Our Children to Read*, favor a balanced approach incorporating good literature and systematic phonics (Thomas B. Fordham Foundation, 1959).

Although opposing sides are still lined with those emphasizing one method over another, there seems to be a growing consensus supporting a combined approach to teaching reading which incorporates the strengths of both whole language and direct phonics instruction (Winograd & Greenlee, 1986; Slaughter, 1988; Heymsfeld, 1989; Trachtenburg, 1990; Garnett, 1991; Spiegel, 1992; Vaughn, Moody & Schumm, 1998).

Winograd and Greenlee (1986) suggested that important components for an effective reading program include direct instruction on certain aspects of the reading process as well as independent reading time for pleasure and gaining

information. Adams (1990) stated, "The vast majority of studies indicated that approaches in which a systematic code of instruction is included with meaningful connected reading resulted in superior reading achievement overall" (p. 12).

### Effective Strategies

In reviewing the literature, many authors, regardless of the preferred instructional approach, seemed to emphasize several effective strategies for obtaining as well as enhancing literacy skills. The strategies of reading aloud (by the teacher) and having students reread the same books or materials address student deficits in the areas of language background and vocabulary as well as the issue of fluency or automaticity. Considering their needs, it is easy to see why inclusion of these strategies would be even more important for students with mental retardation.

Reading Aloud (by the Teacher). Few literacy activities are more important in facilitating reading development than having the teacher read aloud to students (Anderson et al., 1985; Honig, 1996; Lyon, 1998; Katims, 2000b). In addition to increasing background knowledge on many subjects as well as vocabulary, reading aloud gives students the opportunity to hear language read with a

natural flow, proper intonation, and grammar. As they gain a clearer understanding of story structure and how characters work to resolve problems and conflicts, it helps stimulate ideas for their own writing activities. Reading aloud enables students to experience a wide variety of literature, which otherwise may not be accessible to them, and, in turn, sparks interest, motivation, and initiative for further independent reading (Cunningham et al., 1999). Enjoyment is perhaps one of the greatest benefits; for many, this can be the high point of the school day.

Poetry is another form of literature which can bring a great deal of pleasure when read aloud. Hearing it gives students "a sense of the rhythm and flow of language as well as stimulating a love for the mere sounds of words" (Cafiero, 1997, p. 32).

Fluency/Automaticity. Becoming "automatic", or getting past the elements of merely decoding text is crucial to increased comprehension and enjoyment of the literature experience. Rereading the same books or materials is a valuable tool, which helps students increase their speed, smoothness, and fluency in reading (Lyon, 1998; Downhower, 1989 & 1994; Samuels, 1988). "Students with reading problems need to have many



opportunities to practice reading material that is on their level and not too difficult in terms of word recognition" (Vaughn et al., 1998, p. 222). Appropriate reading level material for each student should be comprised of 90-95% easily recognizable and familiar words (Anderson et al., 1985; Worthy & Broaddus, 2002).

In addition to other literature, poetry reading, as mentioned earlier, can be a fun medium to facilitate increased fluency. "The rhythmic sounds and patterns make poems perfect for chanting" (Wicklund, 1989, p. 479). In addition to improving literacy skills, experiencing the works of such famous poets as Shakespeare, Frost, Dickinson, and Sandburg can help create a common ground between peers, which is especially important for adolescents with developmental disabilities. Involvement in these classic poetry activities, helps these students feel pride and satisfaction in being able to access some degree of age-appropriate literature (Cafiero, 1997).

For students with mental retardation, a great deal of one-on-one and/or small group instruction and guidance from the teacher is necessary for good progress in the beginning stages of reading. Once progress is evident and secured, paired reading and peer tutoring can be effective ways to provide further rereading practice while allowing

for social interaction and connection with peers (Topping, 1989; Farrell & Elkins, 1994/1995; Mastropieri, 2001; McCray et al., 2001). These peer activities benefit both students by providing extra read-aloud time as well as the chance to develop listening skills by following along. Other positive outcomes include improved self-esteem and peer relationships, increased time on task, and more positive attitudes toward reading itself (Topping, 1989).

#### Teacher Training

As mentioned earlier, many more students with mental retardation are capable of achieving a higher rate of literacy if only given the chance to learn. The de-emphasis of literacy instruction for these students is further evidenced by the lack of trained teachers (Flesch, 1986; Cheeseman, 1997; Katims, 2000a).

Flesch (1986) cites the realizations of one veteran teacher following her training and use of a phonics-first reading program. "I have taught reading for twenty years, but my first-graders have never been as far advanced as they are this year. I just *thought* I was teaching reading before!" (p. xi).

Training experiences, in the area of reading instruction for teachers of students with special needs,

may be even more lacking (Lyon, 1998; Lewandowski, 1977; Kirk, 1993; Morris, Ervin & Conrad, 1996). In 1993 adults with mental retardation living in the Boston area were interested in receiving educational services in reading and writing so they could get better jobs. However, within the Massachusetts Department of Mental Retardation, educational services had been dropped when vocational services were implemented. In addition, these adults were unable to access literacy-learning services within community programs due to cost, long waiting lists, and lack of staff who had training and knowledge of how to teach reading to people with learning disabilities (Reale, 1999; Learning for Life, n.d.).

Cheeseman (1997) declares that "less than 10% of teachers are prepared adequately to teach students with specific reading disabilities. Of those trained, few work with adolescents or adults" (p. 35). Adequate teacher training seems to be an area of need.

As quoted earlier, "Many survey textbooks in special education and mental retardation perpetuate 'literacy pessimism' among professionals because they do not address nor emphasize the importance of teaching reading and writing to this population" (Katims, 2000b, p. 2).

Katims (2000a) further declares that textbooks used for teacher training which were analyzed for literacy content addressing mental retardation

"...have a serious lack of literacy optimism...and tend to be oriented toward a deficiency-based, decontextualized, functional approach. Poorly detailed descriptions of academic characteristics, assessment procedures, and instructional procedures in the area of literacy for people with mental retardation in the majority of textbooks are disturbing" (p. 12).

Adequate training of special education teachers in the area of reading instruction seems to be a critical need in helping this population attain literacy skills. More often the literature seems to address the issue of training for teachers of students with specific learning disabilities rather than those with mental retardation (Morris et al., 1996; Moriarty, 1997; Lewandowski, 1977).

According to Vaughn et al (1998), "Teachers are 'starving' for professional development experiences that provide them with research-based reading practices that yield effective outcomes for students with severe reading difficulties" (p. 223). Many teachers feel tossed about by all the changes and reforms they are expected to keep up

with and implement within their classrooms. One teacher expressed, "I feel that I am at the bottom of a cement mixer where they whirl around ideas and down load them on my desk" (p. 223).

Most students are initially referred to special education due to reading difficulties, yet end up being taught by non-reading specialists (Lewandowski, 1977). In 1976, thirty-two states had no reading requirement for teachers obtaining learning disabilities certification. Of the remaining states, many required only one course in reading instruction (ibid).

Even today, requirements appear relatively unchanged. Findings from a recent report addressing the teaching of beginning readers in Wisconsin suggested that direct instruction (previously discussed) has potential for improving early reading. Yet, in a survey of new Wisconsin teachers, most had learned little about direct instruction in their training programs (Schug, Tarver, & Western, 2001).

In addition, courses offered in reading instruction often do not contain a fieldwork component or teaching practicum (Morris et al., 1996).

One learns to teach reading by teaching—and reflecting on the teaching act—under the supervision

of an experienced guide... Expertise is needed to help disabled readers. Until reading and special education faculty members in colleges of education commit themselves to developing teaching expertise in their graduate students, I do not foresee significant improvements in the quality of school-based remedial reading instruction (Morris et al., 1996, p. 376).

In contrast to teacher training for those in special education, Reading Recovery is an excellent example of clinical teacher training in the area of literacy instruction. Reading Recovery teachers begin with a week-long training session during the summer, followed by a year-long program involving weekly classes lasting two and a half hours. During this year, teachers actively work with students applying the learned reading techniques and strategies. They are provided observation, discussion, and feedback sessions as well (Knuth, 1992; Pinnell, 1989).

The effect of highly trained teachers in this area is that more students are learning to read with ongoing success, fewer are being retained in first grade, and fewer are being referred to special education or classified as learning disabled. According to research, Reading Recovery is one of the most effective early-intervention reading programs boasting a greater

than 90% success rate as opposed to special education's limited success (Morris et al, 1996; Moriarty, 1997; Pinnell, 1989; Hill & Hale, 1991).

Moriarty (1997) poses the possibility that the shortcomings may be found in the method of reading instruction or delivery rather than in special education itself. Morris et al (1996) concur by stating that slow and disabled learners can learn if they are exposed to appropriate instruction given by adequately trained teachers. They make a strong declaration regarding this issue. "Until reading and special education faculty members in colleges of education commit themselves to developing teaching expertise in their graduate students, I do not foresee significant improvements in the quality of school-based remedial reading instruction" (p. 376).

### Conclusions

While it seems many students in this population have missed out on the experience of learning to read, there is encouraging evidence that those who have been afforded the opportunity are able to learn and make progress. Although much research has been done regarding this topic, a consensus has not been evidenced until quite recently. After reviewing the research and literature sources on

this topic, the author agrees with the conclusion of many researchers and educators that students with mild to moderate mental retardation can be taught to read. As referenced earlier, there is no longer a debate as to whether such students have the capacity to learn to read.

The debate has shifted as to the most effective way to teach these students. Though degrees of controversy still exist, as already demonstrated, there is strong consensus among researchers that the best method for teaching these students is a combined approach (including systematic phonics instruction) which addresses the varying levels, learning styles, and personalities of students.

The "Four Blocks Method", which incorporates phonics and sight-word learning, the use of good literature, as well as writing, seems to be a powerful option for providing a balanced program of literacy instruction for all students, including those with mental retardation.

After reviewing the literature and examining the positions of the experts, it is evident that a major paradigm shift is taking place. There is a changing trend in the approach to reading instruction for students with mental retardation—from exclusively functional and/or



traditional approaches to more integrated and progressive methods.

This paradigm shift is a welcome event for the author and aligns well with her own conduct and philosophy regarding reading instruction. The consensus of the experts studied seems to indicate that students with mild to moderate mental retardation do have the capability to participate meaningfully and make significant progress in the area of literacy. Furthermore, it is apparent that no single approach is going to succeed in increasing literacy for at-risk students.

It appears that many students within this population may not be currently receiving instruction within balanced, integrated literacy programs. Researchers are calling for further research to determine the effectiveness of literacy instruction focusing on meaning and language use within the larger context of sentences and paragraphs as opposed to simply identifying individual words.

Additionally, further research is needed on the existence and quality of teacher training in the area of literacy instruction for those educating students with mental retardation as well as other disabilities. Determining the number of courses required as well as the

resulting level of satisfaction and teacher competency are important in the ongoing evaluation and maintenance of an effective literacy program. Extensive training comparable to that which Reading Recovery teachers receive may not be feasible or even warranted. However, it seems that more in-depth training in reading instruction for special education teachers is necessary.

In light of Reading Recovery's success in reducing the number of students initially referred to special education, research studies following the implementation of this program could suggest ways of using it as an effective avenue for increasing literacy skills of special education students. The success rates for older non-readers with mental retardation would be an interesting study.

In the final analysis, care should be taken not to stereotype students or hold tenaciously to preconceived ideas regarding reading ability or potential. Conclusions as to ability should not be formed without at least giving students at any age the chance to learn and perform using a variety of methods and materials. Decisions on reading approach should be based on the needs, abilities, and desires of the students. A combination of methods is most effective.

The research shows that students will benefit from a well-balanced, integrated approach if only given the chance, but there is a lack of teachers who are trained to use this type of approach. We need to meet the challenge of adequately preparing teachers to handle the literacy needs of this population, so students can reach their highest potential in life.

The following chapter will present the methodology and research approach used in this study, which investigates the key question as to whether special education teachers are being adequately trained and equipped to meet the literacy needs of students with mild to moderate mental retardation (severe disabilities).

The two null hypotheses posit that there is no relationship between teacher training in reading instruction and the level of teacher confidence or effectiveness in the implementation of literacy instruction for students with mild to moderate mental retardation (severe disabilities).

The two alternate hypotheses postulate that a relationship does exist between the level of training and teacher confidence and effectiveness in the area of reading instruction.

## CHAPTER THREE

### METHODOLOGY

#### Design of the Investigation

The design of this investigation required a quantitative research approach involving statistical analysis of descriptive data obtained as to the level of satisfaction and effectiveness of special education teacher-training as well as the implementation of reading instruction within special education classrooms.

A survey developed by the author was the instrument of choice to accomplish this task. The variables investigated included teacher information on gender, ethnicity, and age, credentialing, training, experience, and beliefs and practices regarding reading instruction, including teacher confidence, frequency of instruction, and teacher effectiveness as determined by student progress in reading.

A three-page survey (see Appendix B) containing 18 structured questions addressing the above variables was developed by the author and then distributed to two different groups of special education teachers attending separate in-service trainings. All teachers who completed

the survey were currently teaching in programs designed for students with severe disabilities.

The following is a description of the variables contained within the survey questions. Question 1 asks for the gender, ethnicity, and age of the teacher. Questions 2 and 3 ask what credentials are held: what type of special or general education credentials, and whether they are emergency, preliminary, or clear. Questions 4-6 request information on experience in general and special education as well as the total number of years teaching. Question 7 asks for details regarding student characteristics as to age, gender, and ethnicity of the teacher's current class.

Questions 8-11 focus on teacher training received in reading instruction, what type, and how helpful it was, and how teachers rate their current level of confidence in teaching reading to general and special education students, i.e. Novice (N), Competent (C), and Very Competent (VC).

Questions 12-17 address teachers' reading instructional practices as to frequency, methods and materials used, and resulting student progress within a one-year time frame. (For the purpose of this study, student progress is equated with teacher effectiveness).

Finally, question 18 requests teachers to indicate what interest they have in further training. At the end of the survey, an opportunity for additional comments was provided.

The use of this survey facilitated the collection and analysis of data needed to find specific information to answer specific questions, which, in the end, would help determine the level of support or lack thereof for this study's hypotheses (Charles & Mertler, 2002). The data collected would help support or negate the existence of relationships between certain variables, such as: teacher confidence and teacher training and experience; teacher confidence and teacher effectiveness; and teacher confidence and/or effectiveness and the desire for further training.

#### Population and/or Participants

Forty-two (N = 42) special education teachers participated in this study by filling out a survey indicating their thoughts and opinions regarding their training and experiences in the area of reading instruction. As to gender, the teachers surveyed were 64% female and 36% male; ages ranged from 27 to 71 with the average age being 45 years old. Only 39 teachers indicated

ethnicity. Caucasians made up 72% of the teachers with Asians, Hispanics, and African-Americans each being almost equally represented at around 10%.

All of the survey participants, as already noted, were currently teaching students with severe disabilities within the following types of programs: Emotionally Disturbed (ED); Trainably Mentally Handicapped (TMH); Multiple Handicapped (MH); Autistic (Aut); and Severe and Profound (DD).

#### Treatment

A three-page survey (see Appendix B) containing 18 questions covering the training and implementation of reading instruction was distributed to two different groups of special education teachers attending in-service trainings. At the first in-service, 23 surveys were handed out; 21 were collected. At the second in-service, 21 surveys were distributed with a 100% being returned. Of the surveys distributed, 42 of the 44 were collected resulting in a 95% return.

A grid containing all the variables from the survey was developed. Each variable was coded with a numerical value. These codes were merely labels or names and had no other significance. The data information from the surveys

was translated into code and transferred onto the grid sheets by hand. Afterward the data from the grid sheets was inputted into the computer software program entitled, Statistical Package for the Social Sciences (SPSS). When this process was completed, the results from the statistical analysis were printed out. The printed results included frequency counts along with means, modes, and standard deviations.

#### Data Analysis Procedures

Analysis of the collected data was mainly accomplished through the SPSS computer software program, which performed the statistical calculations necessary to reveal specific information on frequencies, means, modes, and standard deviations. In addition to using this software, relationships or possible correlation between certain variables were tallied by hand. Afterwards, tables containing these variables and the tallied results were developed and observed by the author in order to discover any trends or connections between the variables.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Presentation of the Findings

The results of the study will be presented in chronological order according to the 18 survey questions. Following these, several additional tables are presented showing the relationship between several sets of variables. Statistical data for the most part will be given in tabular form along with some narrative (unless otherwise stated, N = 42 represents the number of valid survey responses).

Table 1. Teachers According to Gender, Ethnicity, and Age

Question 1: Teacher information: gender, ethnicity, age			
<u>Gender:</u> (N = 41)		<u>Age:</u> (N = 37)	
	#	%	
Males	15	37	Range 27-71
Females	26	63	Mean 45
			Mode 44 (4)
<u>Ethnicity:</u> (N = 38)		#	%
	#	%	Late 20's 3 8
African American	3	8	30's 9 24
Hispanic	3	8	40's 11 30
Asian	4	10	50's 9 24
Caucasian	28	74	60's 4 11
			70's 1 3

In regard to teacher information, female teachers outnumber the males in an almost 2:1 ratio, 64% being female and 36% male. In addition, there is a rather large

representation of Caucasian teachers (72%) with a much lower but almost equal representation of the remaining ethnic groups, around 10% each for African American, Asian, and Hispanic teachers. Ages ranged from 27 to 71 with the average age being 45 years old, which could have allowed the possibility for more training as well as teaching experience.

Table 2. Teachers with Credentials Completed or in Progress

Questions 2 & 3: Credentialing		
#	%	
10	24	Mild/Moderate
28	67	Moderate/Severe
16	38	Multi-Subject
9	21	Single Subject
20	48	Have 1-3 Clear Credentials (SPED and/or GEN)
18	43	Have Clear General Education Credentials
16	38	Emergency Permit currently in SPED
15	36	Have received their Special Ed Credential within the last five (5) years (1998-2003)

Almost 40% of the teachers indicated that they held only an emergency permit in special education as opposed to a preliminary or a clear credential (This study was done just prior to the internship requirement established in 2003).

Close to half (20) of the teachers stated that they held 1-3 clear special and/or general education credentials. Within the last five years 15 of the 42

teachers (36%) have obtained their special education credentials.

Experience

All the teachers surveyed were currently teaching students with severe disabilities within the following types of special education programs: Emotionally Disturbed (ED); Trainably Mentally Handicapped (TMH); Multiple Handicapped (MH); Autistic (Aut); and Severe and Profound (DD). Many teachers have experience in a variety of the programs listed in Table 3. An example of how to read each line is as follows: ED - 18 teachers said they have taught ED; only 16 teachers reported the number of years taught; and the average number of years (mean) taught was 4.

Table 3. Experience with Students with Severe Disabilities

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Questions 4: Experience

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<u>Type</u>	<u>Number Taught</u>	<u>Number Reporting Years Taught</u>
ED	18	16 reported number of years; mean = 4 yrs
TMH	18	15 reported number of years; mean = 7 yrs
MH	10	7 reported number of years; mean = 2 yrs
AUT	16	12 reported number of years; mean = 3 yrs
DD	17	13 reported number of years; mean = 5 yrs

---

Table 4. Years of Teaching Experience

Question 5 & 6: Experience							
Years	GEN		SPED		TY		
	#	%	#	%	#	%	
0	22	52	-	-	-	-	
1-2	8	18	5	12	5	12	
3-5	6	15	15	35	13	31	
TY 1-5	14	33	20	47	18	43	
6-10	4	10	7	17	4	10	
11-15	0	0	6	15	5	12	
16-19	2	4	2	4	3	7	
20+	-	-	7	17	12	28	
Mode	6	15 (1-yr)	6	15 (5-yrs)	7	17 (5-yrs)	
Teachers w/experience	20	48	42	100%	-	-	
Range (yrs)	1-20		1-28		1-39		
Mean	3		11		13		
SD	4		8		10		

The average number (mean) of total years (TY) teaching was 13 years. However, the standard deviation (SD) was 10 years. This larger number representing the standard deviation indicates there was a wide range of teaching experience, which included both general (GEN) and special education (SPED).

Total Years. Almost 30% of the teachers have 20 or more total years of experience. Over 40% of all the teachers had only 1-5 years total teaching experience, with five years having the greatest frequency overall.

General Education. Close to half (48%) of the teachers have experience teaching in a general education

setting ranging from 1-20 years. One-third of the teachers have 1-5 years of experience. Only 5% have more than 10 years.

Special Education. Special education experience ranges from 1-28 years. Almost half have only 1-5 years of experience. Nearly 40% have more than 10 years.

Current Class Type. Without access to class lists while completing the survey, it was difficult for teachers to remember the number of students in each gender and ethnic category. As a result, the mixture of responses given varied between actual numbers and checkmarks to indicate the presence of those categories, and partial information or complete blanks.

In light of these discrepancies, only the results of class type will be stated. The other student variables of age, gender, and ethnicity have little or no bearing on this particular study.

Table 5. Teachers' Current Class Type

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Question 7: Current class type, age, gender and ethnicity

---

#	%	(N = 41)
5	12	ED
10	24	TMH
4	10	MH
4	10	AUT
6	15	DD
3	7	LH (Learning Handicapped)
9	22	Not Specified

---

Table 6. Training Received in Reading Instruction

Question 8: Types of training received (N = 41)					
<u>College/University</u>		<u>Inservice</u>		<u>None</u>	
#	%	#	%	#	%
15	37	6	15	4	10
	(1 Class)		(1-3 hrs)		
5	12	3	7		
	(2 Classes)		(1 day)		
12	29	9	22		
	(3 Classes)		(2-3 days)		
4	10	3	7		
	(Degree/Cert)		(1 week)		
36	88	21	51	4	10

Self-Taught included: Experience (4); Reading (3);  
 11 27 Programs (2): Zoophonics, Edmark

Training

Around 90% of the teachers had formal reading instruction in a college or university setting (the most common being one class or three classes), compared to a little over 50% who participated in inservice trainings (the most common length being two to three days). Four teachers already held a degree in reading instruction, but four had not had any formal college training at all. Two others had received only a few inservice hours.

Table 7. Degree of Assistance From College Training

Question 9: Degree of assistance		
#	%	
6	14	No training received
3	7	Not at all
17	41	Somewhat helpful
16	38	Very helpful

About 40% of the teachers rated the college training they had received as very helpful. Six teachers (14%) had not received any formal college training in reading instruction. Of those who had, 50% felt it had been only somewhat helpful or not at all.

Table 8. Trainings Indicated as Most Helpful

Question 10: Which training was most helpful?		
#	%	
16	38	College/University, included: CLAD, RICA
3	7	Inservice Prep, Cal State Classes
5	12	Self-Taught
4	10	None
14	33	Not specified

Many teachers (33%) did not specify which type of training they felt was most helpful. Of those who did, the majority (almost 40%) indicated their college or university training was most beneficial. Only 7% marked inservice as most helpful.

Table 9. Teacher Confidence in Teaching Reading

General Education Students			Special Education Students		
#	%		#	%	
12	30	Novice	11	26	Novice
20	48	Competent	19	45	Competent
5	12	Very competent	12	29	Very competent
5	12	Not specified			

## Teacher Confidence

Teacher confidence levels for teaching reading to general (GEN) and special education (SPED) students were pretty comparable for Novice and Competent teachers. Very Competent SPED teachers were almost double those in GEN, partly because of those who did not specify themselves. Several reasons for teachers not specifying themselves for GEN could be lack of experience in that area or because it was not their current setting.

Many teachers rated themselves differently between SPED and GEN. Therefore, to avoid confusion and complexity, teacher confidence will be according to how teachers classified themselves in teaching reading to special education students, since that is the focus of this study.

Table 10. Teacher Opinion on How Their Students Best Learn to Read

---

Question 12: How do your students learn best?		
#	%	(N = 41)
10	25	Phonics
15	37	Other methods
7	17	Phonics & Other methods
5	12	Not able to learn reading
3	7	Other methods & Not able to learn
1	2	Phonics, Other methods, Not able to learn

---



## Implementation

The majority of teachers indicated their students are able to learn reading by phonics and/or other literacy activities. The 12-20% who say their students cannot learn to read were mainly in DD and MH classes where ability levels may only allow students to learn a few sight and survival words, if at all.

Table 11. Teachers Teaching Reading

---

Question 13: Do you teach reading?

---

#	%	
35	83	Yes
7	17	No

---

The percentages in Table 11 suggest that many students are receiving some level of reading instruction within the classroom.

Table 12. Methods Used to Teach Reading

---

Question 14: Reading methods used

---

#	%	(N = 40)
29	73	Survival Words/Signs
20	50	Sight Words
13	33	Whole Literature
22	55	Phonics
12	30	Computer Software
8	20	Other Methods, included: Teacher reading aloud, Paired Reading, & Tutoring

---

A high percentage of teachers use sight (50%) and survival signs (73%) to teach reading, which confirms what the literature suggests regarding the emphasis on functional skills for this population. Phonics is used by 55% of the teachers.

Table 13. Programs/Materials Used to Teach Reading

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Question 15: Programs/Materials used

---

#	%	(N = 40)
4	10	Hooked On Phonics
4	10	Sing, Spell, Read, & Write (Phonics)
8	20	Literature
3	8	Basal Readers
6	15	SRA
23	58	Other Programs, included: Zoophonics, Edmark, Project Read, PECS, & Reader Rabbit

---

A fairly high percentage of teachers (58%) said they used other literacy programs than those listed. The three most frequently mentioned were Project Read (4), Zoophonics (6), and Edmark (5). Reader Rabbit, PECS, and High Frequency Word Lists were also mentioned.

Table 14. Frequency Per Week for Reading Instruction

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Question 16: Frequency per week for reading instruction

---

#	%	
1	2	Zero (0)
6	14	1-2 times
13	31	3-4
22	53	5 or more

---

Further Training

Teachers desiring further training preferred one college/university class and/or a one-day inservice above the other options listed. Six teachers (15%) wanted a degree or certificate in reading instruction; five requested mentoring to increase their skill.

Table 17. Further Training Relative to Teacher Confidence

Confidence:	<u>Novice</u>		<u>Competent</u>		<u>Very Competent</u>		<u>TOTALS</u>	
	(11)		(19)		(12)		(42)	
Training:							#	%
<u>Inservice Only</u>	2		6		6		14	33
<u>1 Class</u>	2		3		0		5	12
<u>1 Class + Inservice</u>	2		1		1		4	10
<u>2 Classes</u>	0		1		0		1	2
<u>3 Classes + Inservice</u>	2		1		0		3	7
<u>Degree/Cert</u>	1		4		1		6	15
<u>TOTALS</u>	9	21%	16	38%	8	19%	33	79
(Not Desired)	2		3		4		9	21

Notable points regarding the desire for further training according to teacher confidence:

1. One-third of all teachers desire only inservices
2. Competent teachers had the highest percentage of those wanting further training

3. Six teachers were interested in a degree or certificate; four of those were Competent teachers
4. Higher the level of confidence, higher the number of teachers who did not feel the need for further training (e.g. Novice - 2; Very Competent - 4)

Table 18. Further Training According to Teacher Effectiveness (Student Progress)

Student Progress:	Very					TOTALS	
	<u>Little</u> (18)	<u>½ Yr</u> (9)	<u>1 Yr</u> (8)	<u>1+</u> (1)	<u>Varies</u> (6)	#	%
Training:							
<u>Inservice Only</u>	6	3	2	1	2	14	33
<u>1 Class</u>	3	2	0	-	0	5	12
<u>1 Class + Inservice</u>	1	1	1	-	1	4	10
<u>2 Classes</u>	1	0	0	-	0	1	2
<u>3 Classes + Inservice</u>	2	0	0	-	1	3	7
<u>Degree/Cert</u>	2	1	3	-	0	6	15
<u>TOTALS</u>	15	7	6	1	4	33	79
(Not Desired)	3	2	2	-	2	9	21

Fifteen of the 18 teachers (36%) who experienced very little reading progress with their students desired further training to increase their effectiveness in the

area of reading instruction. This group had the greatest representation. Two expressed an interest in obtaining a degree or certificate.

Table 19. Teacher Profile Relative to Teacher Confidence

N = 42	<u>Novice</u>		<u>Competent</u>		<u>Very Competent</u>		<u>TOTALS</u>			
	#	%	#	%	#	%	#	%		
Teachers:	11	26	19	45	12	29	42	100		
<u>Credentials</u>										
Emergency	7		6		3		16	38		
Preliminary	1		6		1		8	19		
Clear	3		7		8		18	43		
<u>Training in Reading Instruction (College/University)</u>										
0 Classes	2		3		1		6	14		
1 Class	6		6		4		16	38		
2 Classes	3		2		1		6	14		
3 Classes	0		7		3		10	24		
Degree/Cert	0		1		3		4	10		
<u>Training - How Helpful?</u>										
No training	2		3		1		6	14		
Not at all	1		1		1		3	7		
Somewhat	4		10		3		17	41		
Very	4		5		7		16	38		
<u>Experience</u>										
		<u>Novice</u>			<u>Competent</u>			<u>Very Competent</u>		
<u>Years:</u>	TY	SPED	GEN	TY	SPED	GEN	TY	SPED	GEN	
0	-	-	6	-	-	10	-	-	6	
1-2	5	5	2	0	0	4	0	0	2	
3-5	3	3	1	8	10	2	2	2	3	
TY 1-5	8	8	3	8	10	6	2	2	5	
6-10	0	1	1	2	2	3	2	4	0	
11-15	1	0	0	2	4	-	2	2	0	
16-20	0	1	1	3	0	-	2	2	1	
21-25	0	1	-	3	3	-	1	0	-	
26-30+	2	-	-	1	-	-	3	2	-	

Note: TY = Total Years; SPED = Special Ed; GEN = General Ed

Teacher profile characteristics (see Table 19) relative to teacher confidence will be elaborated on in the discussion section.

Table 20. Correlation Between Teacher Confidence and Teacher Effectiveness, Including Frequency of Reading Instruction

Student Progress:	Very Little		$\frac{1}{2}$ Year		1 Year		1+		Varies	
	#	F	#	F	#	F	#	F	#	F
(11) <u>Novice</u>	10		0		1		0		0	
		3=1-2				1=5x				
		3=3-4								
		4=5x								
(19) <u>Competent</u>	7		7		2		0		3	
		1=0		1=1-2		2=3-4				1=3-4
		1=1-2		3=3-4						2=5x
		3=3=4		3=5x						
		2=5x								
(12) <u>Very Competent</u>	1		2		5		1		1	
		1=5x		2=5x		1=1-2		1=3-4		3=5x
						4=5x				
TOTALS:										
<u>Progress:</u>	18	43%	9	22%	8	19%	1	2%	6	14%
<u>Frequency</u> 3-5:	13	61	8	89%	7	88%	1	100%	6	100%
5x:	7	39	5	71%	5	62%	0	0%	5	83%

Table 20 suggests the following:

1. Novices - 90% had very little progress of students in the area of reading

2. Only 1 Novice had 1 year of reading progress (F=5x)
3. Very Competent teachers - 50% experienced 1 year or more in student reading progress
4. Only 1 Very Competent teacher experienced very little progress
5. Fourteen of the 19 teachers (34%) who considered themselves Competent, generally experienced only ½ year or less reading progress in students over a year.

At the end of the survey, two teachers gave additional comments regarding reading instruction:

1. One teacher desires more training after Masters and Level II credential are completed.
2. Another strongly feels every primary grade teacher (K-2) should have a reading specialist credential.

#### Discussion of the Findings

The variables considered in this study included teacher information on gender, ethnicity, and age, credentialing, training, experience, and beliefs and practices regarding reading instruction, including teacher

confidence, frequency and methods of instruction, and student progress (teacher effectiveness).

### Wide Ranges

This group of 42 special education teachers had a wide range of ages, credentialing and training as well as experience. Many of the statistical results show an almost perfect bell curve. For example, for teacher confidence in teaching reading to special education students, teachers rated themselves as follows: 11 Novices (N), 19 Competent (C), and 12 Very Competent (VC). Novice and Very Competent teachers being close in number as well as being at opposite ends of a continuum help make characteristics, trends, similarities, and differences between the two groups easy to see. Several factors regarding the larger middle group (Competents) are also revealing.

### Credentialing

Almost 40% of the teachers indicated that they held only an emergency permit in special education as opposed to a preliminary or a clear credential. Within the last five years 15 of the 42 teachers (36%) have obtained their special education credentials. Combined, these figures indicate that about 75% of this group's teaching force are in process of becoming or are newly credentialed special education teachers. In addition, nearly 50% of the



teachers have only 1-5 years of experience in special education. On the other end of the scale, however, almost half (20) stated that they held 1-3 clear special and/or general education credentials.

### Experience

Total Years. Almost 30% of the teachers have 20 or more total years of experience. In contrast, over 40% have only 1-5 years of experience, five years having the greatest frequency.

General Education. Close to half (45%) of the teachers have no general education teaching experience. Another 40% have less than five years experience.

Special Education. Special education experience ranges from 1-28 years: almost half (45%) have 1-5 years; about one-third (29%) have 8-15 years; and one-fourth (26%) have 16-28 years of teaching experience.

These wide ranges, in the areas of training and experience, result in varying levels of teacher confidence and effectiveness in the implementation of reading instruction for students with severe disabilities.

### Teacher Confidence

Altogether 18 teachers (43%) had five or fewer total years of teaching experience. Eight of these rated themselves as Novices in teaching reading to special

education students. Eight rated themselves as Competent, and two as Very Competent.

Certain characteristics were found in the 11 teachers (26%) who considered themselves Novices in teaching reading to special education students. Seven of the 11 Novices were on emergency permits as opposed to only three of the Very Competent teachers (see Table 17). Most Novices had only 1-5 years of teaching experience with little or no previous general education experience. In addition, four of the seven on emergency permits expressed that the training they had received was only somewhat helpful or not at all. The three others indicated their training was very helpful, but two of the three indicated student progress in reading was only a half a year or less.

The other four teachers, who marked themselves as Novices, had clear or preliminary credentials, and more years of experience (most included general education experience also). However, all of them also rated what little reading instruction training they had received as only somewhat helpful or not at all. Two of the four had never received any training in reading instruction (ages 63 and 71; both with over 30 years of experience).

According to Table 17, there seem to be certain trends relative to teacher training in reading instruction and its impact on the level of teacher confidence progressing from Novice (N), to Competent (C), to Very Competent (VC) (addressing Question 1 in the "Statement of the Problem" section).

First of all, obtaining higher-level credentials seems to affect teacher confidence (fewer emergency permits compared to more preliminary and clear credentials, i.e. more training).

Table 21. Credentialing Relative to Teacher Confidence

---

Novices:	7 of 11 (64%)	are on Emergencies
Very Competents:	3 of 12 (25%)	are on Emergencies
Novices:	3 of 11 (27%)	have Clear Credentials
Very Competents:	8 of 12 (67%)	have Clear Credentials
Novices:	1 of 11 (2%)	has a Preliminary
Competents:	6 of 19 (14%)	have Preliminaries
Very Competents:	1 of 12 (2%)	has a Preliminary
(*Most VC's currently hold Clear Credentials)		

---

Only one Novice (N) had a preliminary credential compared to six Competents (C). Also, only one of the Very Competent teachers (VC) held a preliminary credential, but most had already obtained clear credentials. The above statistics support Alternate Hypothesis 1, which posited that the more hours of training teachers receive in

reading instruction the higher their level of confidence in teaching reading. It does not support Null Hypothesis 1, which stated there is no relationship between the two variables of training and teacher confidence.

Secondly, more hours of college/university training in reading instruction make an impact on teacher confidence also (see Table 17). One hundred percent of the Novices (11) had only 0-2 classes, some of which included inservice trainings. Although about half of the C's & VC's had only 0-2 classes as well, at least 40-50% of the Competents (8) and VC's (6) had taken three or more classes, including four who had degrees or certificates in reading instruction. The number of degrees/certificates held in reading parallels the level of teacher confidence: Novices had none (0); Competents had one (1); and Very Competents had three (3).

These findings additionally show a positive relationship between the number of training hours received and teachers' confidence level in implementing reading instruction, once again lending support to Alternate Hypothesis 1.

The findings also seem to suggest that the Very Competent teachers felt their training time had been more beneficial (see Table 17 Training - How Helpful?).

Overall, 48% of the teachers surveyed (42) who received training felt it was only somewhat helpful or not at all. On the other hand, 67% of the VC's felt their training was very helpful compared to only 36% of the Novices (almost double the difference). Again, the Novices had only taken up to two classes, whereas these VC's had taken three or more.

Perhaps the Novices found that their limited training was not sufficient to meet the challenges of reading instruction for this population, whereas, after three or more classes, the VC's seem to have been able to effectively implement the skills they had learned. As an example, learning to use a saw is a critical aspect of carpentry, but nothing can be put together effectively without combining a few additional tools, such as a hammer and nails.

It is important to consider other factors regarding the number of teachers who have had little or no training in the area of reading instruction. As mentioned earlier, reading difficulties are the number one reason for student referrals into special education. Yet, 14% of the teachers in this study had not had any formal training in this area. Four of these six teachers had 15-35 years experience, with the majority of their time being spent in

TMH or ED classes serving students most likely to benefit from formal instruction in literacy. This may seem like a small percentage until one considers the ramifications of 14% of the doctors being thrust into the world of medicine without any formal training on the spread of disease, a crucial component in that field.

Another 38% (16) of the teachers surveyed had had only one formal training class in reading instruction, five having had a few additional inservice hours and one other had a week-long inservice training. Out of the 16, only three had 1-2 years of experience, eight had 3-5 years, and five had 10-20 years experience. It seems the majority of these teachers (13 of 16) had been in class settings (TMH, ED, AUT) for lengthy periods of time (3-20 years), in which, as the research has shown, students could benefit from reading instruction, yet they had had little or no training in this area. Only four of the 16 teachers were in DD programs for the severe and profound and indicated their students could not learn to read. Unfortunately, with what little training these teachers had received, 10 of the 16 (63%) indicated the training was only somewhat helpful or not at all.

Lastly, 18 of the 42 teachers (43%) had five or fewer total years of teaching experience. Eight of these rated

themselves as Novices in teaching reading to special education students. Eight rated themselves as Competent, and two as Very Competent.

If the total years of experience are broken down a bit more, a significant difference emerges (see Table 17). All of the teachers (5) having only 1-2 years of total teaching experience put themselves in the Novice category; whereas, none of the Competent or Very Competent teachers had fewer than three years experience.

Three out of 11 Novice teachers (27%) had six or more years of experience. In contrast, ten out of 12 Very Competent teachers (83%) had six or more years. These figures shed light on Question 2 put forth in the "Statement of the Problem" section, suggesting that the amount of teaching experience enhances teacher confidence.

#### Teacher Effectiveness

Considering the numbers from Table 20 on teacher confidence versus teacher effectiveness (i.e. student progress), there appears to be a correlation between these two variables (Question 3). Ninety percent of the Novices (10 of 11) experienced very little reading progress from their students as opposed to 8% of the Very Competent teachers (1 of 12). Two other VC's measured a half a year's progress. At the other end of the scale, 50% of the

VC's (6 of 12) experienced one year or more student-reading progress in contrast to only 9% from the Novices (1 of 11).

Students classified by their teachers as making "very little progress" in reading did not appear to be affected by the frequency of reading instruction nor the teacher confidence level. Frequency of instruction for the 18 N's, C's, and VC's teachers all varied in range from one to five times per week, yet the results were the same - "little progress" (Question 4).

In contrast, students classified by their teachers (C's & VC's only) as making a half a year's progress or more in reading were perhaps influenced by the frequency of instruction as well as teacher confidence level. This included teachers who said student progress varied according to ability. About 90% (22 of 24) of these teachers overall had frequency rates of 3-5 times per week for reading instruction as opposed to 60% of the Novices. Only one of the 11 Novices indicated a higher reading progress rate of one year; her frequency rate was five times per week for reading instruction.

Teachers who saw more results tended to have higher frequency rates in general, but overall, frequency of reading instruction seemed to have a beneficial impact on



reading progress in combination with the level of teacher expertise and confidence.

A major confounding variable of student progress in reading achievement could be that of student ability and disability type. Since data regarding class type was partial and incomplete (22% did not specify class type), it was difficult to analyze the full impact of this factor. It could be likely that students in TMH (24%), ED (12%), and LH (7%) classes (totaling 43%) might experience greater progress in reading than students in DD (15%), MH (10%), and AUT (10%) classes (totaling 35%). It is interesting to note that the TMH percentage (24%) is almost double that of any other class type indicated.

Despite the confounding variable mentioned above, the statistics from Table 20 raise a concern that 65% of the teachers (27 of 42) indicated their student progress in reading fell within a half a year or less. Half (14) of these teachers (52%) considered themselves competent in teaching reading to special education students.

These percentages are in great contrast to other studies (already mentioned) which have been done on reading progress experienced by students with disabilities (including mental retardation) using a variety of reading

programs as well as specially trained teachers (i.e. Four Blocks Method, Reading Recovery, Marva Collins Seminars).

Sometimes teachers may feel their teaching methods are effective because from their viewpoint some progress seems evident. For example, Flesch's (1986) reference to the veteran first-grade teacher who, after being trained to implement a phonics-first reading program, observed her students' increased growth in reading. She expressed the surprising and sad realization that previously she only "thought" she had been teaching reading!

In conclusion, the findings suggest that the more training hours in reading instruction, the higher the level of teacher effectiveness in implementing literacy instruction for students with severe disabilities. This lends support to Alternate Hypothesis 2, which stated that there is a relationship between the amount of teacher training in reading instruction and the level of teacher effectiveness in implementing literacy instruction. It does not support Null Hypothesis 2, which stated there is no relationship between the two variables of training and teacher effectiveness.

#### Further Training

Relationship to teacher confidence (Table 17). Almost 80% of the teachers expressed a desire for further

training in the area of reading instruction. Nine teachers did not indicate an interest. Only two of these were Novice teachers; three were Competent; and four were Very Competent. The number of teachers not interested in further training seems to increase according to the level of teacher confidence. Possible explanations for lack of interest may be gleaned from their profiles. Almost all held clear or preliminary credentials (three of whom had certificates in reading instruction). Most had ten or more years of teaching experience. Both of these variables (training and experience) can influence skill level and expertise as well as confidence. In addition, several teachers felt they had not benefited from what little training they had already received, and a few taught in DD classes with students not likely to gain literacy skills. Both of these factors could decrease motivation.

Competent teachers had the highest percentage of those wanting further training (38%). Six teachers were interested in a degree or certificate; four of those were Competent teachers. A possible rationale for the higher interest level of Competent teachers is that they may have learned and experienced enough to be somewhat effective in teaching reading, but could also see the benefit of further training to increase their skills.

One-third of all the teachers (especially Competent and Very Competent) desired only inservices, a less demanding form of training. Again, this may be due to the higher confidence level of these teachers. Only two Novices chose just inservice.

Relationship to teacher effectiveness. It was encouraging to see that so many teachers (15 of 18) who experienced very little reading progress with their students (36%) desired further training to increase their effectiveness in teaching reading. This group by far had the greatest representation being made up mostly from Novice (10) and Competent teachers. Two even expressed an interest in obtaining a degree or certificate.

Also, as shown earlier, it seems many Competent teachers as well as Novices need further training in light of the high percentage of students gaining less than a year's growth in reading.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

This study was designed to investigate whether special education teachers are adequately trained and equipped to meet the literacy needs of students with mild to moderate mental retardation (severe disabilities). The design of this investigation required a quantitative research approach involving statistical analysis of descriptive data obtained from 42 special education teachers as to the level of satisfaction and effectiveness of training already received in the area of reading instruction as well as their needs and desires for further training.

A survey developed by the author was the instrument of choice to accomplish this task. The variables considered included teacher information on gender, ethnicity, and age, credentialing, training, experience, and beliefs and practices regarding reading instruction, including teacher confidence, frequency of instruction, and teacher effectiveness as determined by student progress in reading.

Results of the survey revealed that the greater the amount of training and experience special education teachers have, the higher their levels of confidence and effectiveness in implementing reading instruction for students with severe disabilities. The study also found that, although some respondents benefited a great deal from the training they had received, the majority found it only somewhat helpful or not at all.

A concern was that at least 65% of the teachers felt their students' progress in reading was only one-half a year or less within a year time period. These findings would indicate a need for further evaluation of teacher practices and level of expertise as well as student needs in the area of reading.

A consensus already exists about the literacy capabilities of students with mild to moderate mental retardation. The challenge is to adequately prepare teachers to handle the literacy needs of this population. Additional results from this study indicated that 80% of the special education teachers wanted further training in reading instruction. Collaboration and commitment between those who specialize in reading and special education is crucial in order to develop the teaching expertise

necessary to help these students to achieve their highest potential in the area of literacy.

### Conclusions

This study investigated the following key question: Are special education teachers adequately trained and equipped to meet the literacy needs of students with mild to moderate mental retardation, particularly those served in programs classified as severely handicapped? To help guide the ensuing research, two null hypotheses were developed, each being accompanied by an alternate hypothesis.

The results of this study seem to support the alternate hypotheses rather than the null hypotheses, which stated that a relationship does exist between teacher training in reading instruction and the level of teacher confidence and effectiveness in implementing literacy instruction for students with mild to moderate mental retardation (severe disabilities).

The results given in Table 17 seem to indicate a certain teacher profile according to level of confidence in teaching reading to special education students. Novice teachers tended to lack training and credentials and had fewer years of teaching experience. Very Competent

teachers often had the opposite characteristics, and Competent teachers tended to be in the middle.

Frequency of reading instruction did appear to impact student progress and there seemed to be a relationship between teacher confidence and effectiveness. This study also showed the need for further training in order to improve student progress in reading. Special education teachers require specific skills and knowledge in order to meet the literacy needs of students with severe disabilities most effectively.

In regard to further training, teachers with lower levels of confidence and effectiveness appeared to have a stronger interest in improving their instructional skills in reading, although many who felt competent saw the benefit of honing their skills also. Special education teachers do have many instructional skills, but there is always room for growth so students can make the highest possible gains.

Students deserve the best opportunities and services available. This is especially true for students with learning issues. This suggests that teachers need specialized training in order to meet the literacy needs of these students. In addition, most researchers concur that phonics is a crucial element in an effective reading



program and that teachers, particularly those working with special education students, need instruction in the use of this method.

Students with mental retardation and severe disabilities should not be forgotten on either end of the scale. Children, regardless of age or ability level, are never too young to be exposed to a literacy rich environment and given the opportunity to gain as many reading skills as possible. They are never too old to receive reading instruction if they want it and they have the capability. If these underlying beliefs and philosophies prevail, the need for training in reading instruction will be prioritized and deemed necessary in helping students achieve literacy.

#### Limitations of Study Design and Procedures

Due to lack of time and availability of an adequate number of teachers teaching students with mild to moderate mental retardation (with IQ's ranging from 36-68), the 42 special education teachers surveyed work with students possessing a much wider range of abilities than was the particular focus of this study. Student disabilities ran the gamut from the severe and profound, who may often never learn to read even simple words, to students with

emotional disturbances, who typically have normal intelligence and often read at grade level. Therefore, answers given on the surveys to questions regarding student abilities as well as methods and materials used for reading instruction vary accordingly. The main objective of this study, however, was to obtain information on the level and effectiveness of training in literacy instruction which special education teachers have received.

A common limitation inherent in survey research is that the data collected is self-reported. Responses received from the survey were teachers' opinions and thoughts regarding their training experiences and their effectiveness in facilitating student progress in reading. It is important to have the perspective of teachers because they are the ones who work so closely with the students and are most familiar with their own needs as well as those of the students.

A major limitation of this study was the lack of opportunity to observe teachers involved in actual reading instruction. In order to determine true teacher effectiveness, it would be necessary to obtain students' baseline reading levels prior to beginning a predetermined period of instruction as well as the measurement of their

reading levels following this instruction. Teacher effectiveness ratings by supervisors, in addition to teachers rating themselves, could be beneficial in providing more objective input regarding student progress in reading.

#### Future Research and Recommendations

It appears that many students within this population may not be currently receiving instruction within balanced, integrated literacy programs. Further research is necessary to determine this. In addition, further research is needed on the existence and quality of teacher training in the area of literacy instruction for those educating students with mental retardation as well as other disabilities. Determining the number of courses required as well as the resulting level of satisfaction and teacher competency are important in the ongoing evaluation and maintenance of an effective literacy program. Extensive training comparable to that which Reading Recovery teachers receive may not be feasible or even warranted; however, it seems that more in-depth training in reading instruction for special education teachers is necessary.

In light of Reading Recovery's success in reducing the number of students initially referred to special education, research studies following the implementation of this program could indicate the benefits of using it as an effective avenue of increasing literacy skills for those students currently receiving special education services. What would be the success rate of using the Reading Recovery model for older non-readers with mental retardation?

In the final analysis, care should be taken not to stereotype students or hold tenaciously to preconceived ideas regarding reading ability or potential. There are students with such severe disabilities who may only be able to learn functional reading and survival signs within the community. However, conclusions as to ability should not be formed without at least giving students at any age the chance to learn and perform using a variety of methods and materials. Decisions about which reading approaches to utilize, should be based on the needs, abilities, and desires of the students.

Research shows that students will benefit from a well-balanced, integrated approach if only given the chance, but there is a lack of teachers who are trained to use this type of approach. We need to meet this challenge

of adequately preparing teachers to handle the literacy needs of this population. Collaboration and commitment between those who specialize in reading and special education is crucial in order to develop the teaching expertise needed to help these students achieve their highest potential in the area of literacy and become viable members of the literary community.

APPENDIX A  
THE FOUR BLOCKS FRAMEWORK

## THE FOUR BLOCKS FRAMEWORK

1. Guided Reading: (previously called basal block)

- Multiple copies of student books
- Materials become increasingly more difficult
- Exposure to wide range of literature
- Emphasis on vocabulary and comprehension strategies
- Choral reading; Reader's Theatre; Modeling

2. Self-Selected Reading Block: literature/trade books

- Students choose what they want to read
- Appropriate levels of text for independent reading; rereading
- Student / Teacher conferencing

3. Writing Block: (Language / Writing Experience)

- Motivating: use student's own language & experience
- Whole or small group
- Dictate thoughts to adults
- Software with talking text (Write Out Loud)

4. Working with Words: (phonics & spelling)

- |               |                   |
|---------------|-------------------|
| - Phonics     | - Word walls      |
| - Sight words | - Used in context |
| - Pictures    | - Rhyming         |

(Cunningham et al., 1999)

APPENDIX B  
TEACHER SURVEY



TEACHER SURVEY  
Level of Literacy Training of Special Education Teachers

(All information gathered will remain anonymous and confidential. Information given will not result in you being contacted for commitments or obligations.)

Reading: ability to gain meaning from text for: communication, information, pleasure

1. Gender \_\_\_\_\_ Ethnicity \_\_\_\_\_ Age \_\_\_\_\_ (of teacher)
  
2. What type of *credentials* do you hold? (Mark # of years held)  
\_\_\_\_ Emergency:      \_\_\_\_ Special Ed      \_\_\_\_ General Ed  
  
\_\_\_\_ Mild/Mod Educ. Specialist:      \_\_\_\_ Preliminary      \_\_\_\_ Clear  
\_\_\_\_ Mod/Severe Educ. Specialist:      \_\_\_\_ Preliminary      \_\_\_\_ Clear  
  
\_\_\_\_ Multi-Subject:      \_\_\_\_ Preliminary      \_\_\_\_ Clear  
\_\_\_\_ Single Subject:      \_\_\_\_ Preliminary      \_\_\_\_ Clear
  
3. What years, *and* from what *states and institutions* did you obtain your credential(s)?  
\_\_\_\_\_  
\_\_\_\_\_
  
4. Using the following disability types:  
*ED, TMH, MH, Autistic, DD (Severe/Profound)*  
  
List the **types** of individuals with disabilities you have taught, the **age** of the students, and **how long** you taught them (eg. **ED/14-18/3 years**).  
\_\_\_\_\_  
\_\_\_\_\_
  
5. **How many years** have you taught **General Ed**? \_\_\_\_\_ None  
  
**General Ed:**      \_\_\_\_ Grade?      \_\_\_\_ How many years?  
                          \_\_\_\_ Grade?      \_\_\_\_ How many years?
  
6. **Total** years of teaching experience? \_\_\_\_\_  
  General Ed \_\_\_\_\_  
  Special Ed \_\_\_\_\_

7. What is the make **up** of your **current class**?

Type of Class and Ages: \_\_\_\_\_

Gender: \_\_\_ Males? \_\_\_ Females

Ethnicity: \_\_\_ African American \_\_\_ Hispanic

\_\_\_ White \_\_\_ Asian \_\_\_ Other

8. What **training** in **teaching reading** have you had \_\_\_ None

College/University      Inservice      Self-Taught

\_\_\_ 1 Class      \_\_\_ 1-3 hours      Please specify:

\_\_\_ 2 Classes      \_\_\_ 1 Day      \_\_\_\_\_

\_\_\_ 3 Classes      \_\_\_ 2-3 Days      \_\_\_\_\_

\_\_\_ Degree/Cert.      \_\_\_ 1 Week      \_\_\_\_\_

Other \_\_\_\_\_      Other \_\_\_\_\_      \_\_\_\_\_

9. To what degree did the above **training assist** you in teaching reading?

\_\_\_ Not at all      \_\_\_ Somewhat helpful      \_\_\_ Very helpful

10. **Which** training was the **most helpful** in preparing you to teach reading?

\_\_\_\_\_

11. How would you rate **your confidence** in teaching reading:

General Ed Students?

\_\_\_ Novice      \_\_\_ Competent      \_\_\_ Very competent

Students with disabilities?

\_\_\_ Novice      \_\_\_ Competent      \_\_\_ Very competent

12. My students **learn to read** best or most effectively using:

\_\_\_ Phonics?      \_\_\_ Some other method?

\_\_\_ Not able to learn reading

13. **Do you teach reading** to your students? \_\_\_ YES \_\_\_ NO

14. What reading *methods* do you use to teach reading?

- Survival words/Signs
- Sight word method Program? \_\_\_\_\_
- Whole Language(Literature) \_\_\_\_\_
- Phonics program: \_\_\_\_\_
- Software Programs: \_\_\_\_\_
- Other (please specify): \_\_\_\_\_

15. What *programs* or *materials* are you currently using?

- Hooked on Phonics  Basal Series
- Sing Spell Read and Write  SRA
- Literature (specify) \_\_\_\_\_
- Other \_\_\_\_\_

16. How many *times per week* do your students work on reading?

- 0  1-2  3-4  5 or more

17. How much progress do you feel your students make each year in reading?

- Very little  ½ year  1 year  1 year +

18. I would participate in *further reading training* in the following area(s):

- | <u>College/University</u>             | <u>Inservice</u>                   | <u>Other</u>                         |
|---------------------------------------|------------------------------------|--------------------------------------|
| <input type="checkbox"/> 1 Class      | <input type="checkbox"/> 1-3 hours | <input type="checkbox"/> Mentoring   |
| <input type="checkbox"/> 2 Classes    | <input type="checkbox"/> 1 Day     | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 3 Classes    | <input type="checkbox"/> 2-3 Days  | _____                                |
| <input type="checkbox"/> Degree/Cert. | <input type="checkbox"/> 1 Week    | _____                                |
| Other _____                           | Other _____                        | _____                                |

*Additional Comments* regarding reading instruction:

\_\_\_\_\_  
\_\_\_\_\_

(Continue on back if desired)

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