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A study of the amount of training that pre-service and in-service special education teachers receive in the teaching of reading

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A STUDY OF THE AMOUNT OF TRAINING THAT PRE-SERVICE

AND IN-SERVICE SPECIAL EDUCATION TEACHERS

RECEIVE IN THE TEACHING OF READING

By
Virginia Egbert

A Thesis

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ABSTRACT

Virginia E. Egbert
A Study of the Amount of Training That Pre-Service and In-Service Special Education
Teachers Receive in the Teaching of Reading
2001
Dr. Stanley Urban
Learning Disabilities

The purpose of this study was to determine if special education teachers at the

pre-service and in-service levels have received and are receiving enough training to

proficiently teach reading to their students. This study attempted to reveal the level of

knowledge and training that special education personnel possess in the area of teaching

reading. Data was gathered through a questionnaire, and then the responses for all of the

participants were analyzed and presented in graphs. The responses were classified as

those from in-service teachers or pre-service teachers in order to compare the data

between the two groups.

The findings for research question one suggest that pre-service special education

teachers do not receive adequate training in the teaching of reading as evidenced by their

lack of undergraduate coursework and knowledge of current research and programs. For

research question two, the findings indicate that in-service teachers did have more

training and knowledge than pre-service teachers, but the application of that training and

knowledge is not being monitored in any specific way. Concerning research question

three, the findings point towards requiring more undergraduate reading coursework for

pre-service special education teachers and requiring accountability for the reading

progress of students of in-service special education teachers.

MINI ABSTRACT

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The purpose of this study was to determine if special education teachers at the

pre-service and in-service levels have received and are receiving enough training to

proficiently teach reading to their students. The findings revealed that pre-service special

education teachers do not receive adequate training in the teaching of reading. In-service

special education teachers have had adequate exposure and training in the teaching of

reading, but do not necessarily apply training techniques within the classroom.

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The author wishes to express her appreciation to the following:

Dr. Stanley Urban for all of his guidance, assistance and understanding during the course of this project.

My parents who continually give support, encouragement and love to all of my endeavors.

Nancy Richter who inspired me to become a teacher and has proved to be an invaluable friend and resource.

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CHAPTER I
STATEMENT OF THE PROBLEM

BACKGROUND:

The number of children classified as having learning disabilities has increased

from an estimated 375,000 in 1976 to more than 2.6 million in 1997 (Swanson, 1999).

Evidence from longitudinal, population-based data, indicates that at least 17 to 20 percent

of children have a significant reading disability (Lyon, 1998). Learning to read is critical

to success in life. Children who do not learn to read at a competent level are at risk for

failure in school and therefore, failure at vocational and occupational pursuits later in life.

According to the position paper of The International Reading Association on methods for

teaching beginning reading (1999), "There is no single method or single combination of

methods that can successfully teach all children to read. Therefore, teachers must have a

strong knowledge of multiple methods for teaching reading and a strong knowledge of

the children in their care so they can create the appropriate balance of methods needed for

the children they teach."

A major factor that has been identified as impeding effective instruction for

children at risk for reading failure is current teacher preparation practices. Lyon (1998)

states that, "Many teachers have not had the opportunity to develop basic knowledge about the structure of the English language, reading development, and the nature of reading disabilities." He concludes from the research, that colleges of education need to develop preparation programs that foster content and expertise for both pre-service and in-service teachers. Currently, many pre-service and in-service special education teachers have not been prepared to meet the needs of their learning disabled students in the area of reading instruction.

THEORY:

Research evidence from converging studies agree on the following definition of reading (Snow, Burns and Griffin, 1998):

Reading is a complex system of deriving meaning from print that requires all of the following:
- the development and maintenance of a motivation to read
- the development of appropriate active strategies to construct meaning from print
- sufficient background information and vocabulary to foster reading comprehension
- the ability to read fluently
- the ability to decode unfamiliar words
- the skills and knowledge to understand how phonemes or speech sounds are connected to print

A proficient reading teacher must understand this definition, be able to assess children in regard to this definition and then prescribe a balance of teaching methods so that each child can be taught what he or she needs to learn. The IRA's position paper on reading instruction ends with this statement from Bond and Dykstra (1967):

Future research might well center on teacher and learning situation characteristics rather than method and materials. The tremendous range among classrooms

within any method points out the importance of elements in the learning situation over and above the methods employed. To improve reading instruction, it is necessary to train better teachers of reading rather than to expect a panacea in the form of materials.

As early as 1967, Bond and Dykstra recognized the need for improved training of teachers in the area of reading instruction. Although these criticisms of teacher preparation in reading are generally focused on regular education it also applies to special education teachers since their students have experienced failure in the regular classroom.

NEED:

There is a need for this study since reading is a major area of weakness common to those who have problems in learning disabilities.

PURPOSE:

The purpose of this study is to determine if special education teachers at the pre-service and in-service levels have received and are receiving enough training to proficiently teach reading to their students.

VALUE:

The value of this study is to alert directors of undergraduate special education programs and directors of special education in the public schools that special education teachers and prospective special education teachers may not have been given sufficient training to teach reading. After reviewing the findings of the study, directors of undergraduate programs in special education might reevaluate program requirements to include more in-depth reading training and exposure to a myriad of reading strategies and

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programs. In addition, directors of special education in the public schools might meet with their special education teachers and discuss possible in-service training options to be considered in the area of teaching reading.

RESEARCH QUESTIONS:

1) Are pre-service special education teachers receiving adequate training in teaching reading?

2) Are in-service special education teachers being continually trained and monitored concerning their knowledge of teaching reading?

3) Is there a need for changes in policy at the pre-service and in-service levels concerning the teaching of reading to special education students?

LIMITATIONS OF THE STUDY:

There are some limitations inherent in the design of this study, which must be considered when interpreting the results. This questionnaire was only given to 21 pre-service special education majors from one local university and to 43 in-service special education teachers from one suburban school district. These undergraduates and teachers may not be representative of the population of pre-service and in-service special education teachers; therefore this study should be generalized with discretion.

CHAPTER II

REVIEW OF THE LITERATURE

The following body of literature establishes that students are having difficulty learning to read, that there are specific strategies and programs designed to overcome reading difficulties, and that teachers, specifically special education teachers, must become expert teachers of reading. Learning to read may be the single most important skill that children must master while in school. The Council for Exceptional Children (CEC) (1996) relates that reading is the gateway to all other knowledge. If children do not learn to read efficiently, the path is blocked to every subject they encounter in their school years. As DiChiara (1998) points out, one could claim that the ability and the inability to read affect every fiber of a child's educational body. If a student is not able to read, his or her mathematical abilities are affected, along with capacities in science and social studies. All subjects are negatively and forever impacted by illiteracy. For an illiterate child, self-esteem suffers, extra-curricular activities are curtailed or eliminated, dropout rates are increased, referrals to special education are escalated, and crime rates rise. Their quality of life diminishes: menial jobs, low pay, and so forth become the template for a lesser life.

The most fundamental responsibility of schools is teaching children to read.

In the executive summary of the American Federation of Teachers' (AFT) report, "Teaching Reading Is Rocket Science" (1999) it is stated that there is an alarming prevalence of struggling and poor readers that is not limited to any one segment of society. The report then supplies the following statistics: About 20 percent of elementary students nationwide have significant problems learning to read; at least 20 percent of elementary students do not read fluently enough to enjoy or engage in independent reading; the rate of reading failure for African-American, Hispanic, limited-English speakers and poor children ranges from 60 to 70 percent; one-third of poor readers nationwide are from college-educated families; and twenty-five percent of adults in this country lack the basic literacy skills required in a typical job.

In concurrence with the AFT report, Lyon (1998) admits that the rate of reading failure and illiteracy are high in the United States. Evidence from longitudinal, population-based data indicate that at least 17 percent to 20 percent of children have a significant reading disability. Similarly, the Learning Disabilities Association of America (LDA) (1996) pointed out that 1 in 5 American adults is functionally illiterate and that three-fourths of the unemployed lack sufficient skills to function successfully in the nation's work force. Clearly, the research demonstrates that reading failure is a major concern for the American people.

There are many studies that have documented student reading progress over time. One of the most compelling findings from recent reading research is that children who have a poor start in reading rarely catch up. A first grade student who is a poor reader

almost invariably continues to be a poor reader (Torgesen, 1998). The CEC (1996) points out that most students who fall behind in reading skills never catch up with their peers to become fluent readers. Instead, they fall further and further behind in school, become frustrated, and drop out at much higher rates than their classmates. Likewise Scanlon (1996) reports that a child who experiences difficulty in the early stages of learning to read often continues to experience such difficulty throughout his/her academic career and beyond. Furthermore, the AFT (1999) states: "Difficulty with the first steps of reading eventually undermines vocabulary growth, knowledge of the world, mastery of language, and skill in writing. Once behind in reading, few children catch up unless they receive intensive, individual, and expert instruction, a scarce and expensive commodity in most schools."

The next relevant aspect of the literature is concerned with identifying why children fail to learn to read and how to remediate reading difficulties. Organizations such as the National Institute of Child Health and Human Development, the American Federation of Teachers, the International Reading Association, the Learning Disabilities Association of America, and the Council for Exceptional Children have all conducted studies and published research pertaining to methods of reading instruction and the best ways to overcome reading failure. Prominent leaders in the field of teaching reading have also published a great deal of literature and research. Various organizations and experts agree on the following points. First, early identification and intervention are paramount. Next, instruction must include explicit teaching of phonemic awareness. Finally, there is no singular correct way to teach reading; rather instruction should consist

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of a combination of research-based strategies.

In the area of early identification and intervention, it is important to note that reading is not developmental or natural, but is learned. Reading difficulties reflect a persistent deficit, rather than a developmental lag in linguistic skills and basic reading skills (Grossen, 1997). Treatment intervention research has shown that early direct instruction seems to be the best medicine for reading problems. Torgesen (1998) declares, "The best solution to the problem of reading failure is to allocate resources for early identification and prevention." He declares it a tragedy that even though educators know the cost of waiting too long to intervene, few school districts have a mechanism in place to identify and help children before failure takes hold. In the majority of cases, there is no systematic identification until third grade, at which time successful remediation is more difficult and more costly (Torgesen, 1998).

In his statement to the Committee on Labor and Human Resources, G. Reid Lyon (1998) relates:

> We have learned that for 90% to 95% of poor readers, prevention and early
> intervention programs can increase reading skills to average reading levels.
> However, we have also learned that if we delay intervention until nine-years-of-
> age, (the time that most children with reading difficulties receive services),
> approximately 75% of the children will continue to have difficulties learning to
> read throughout high school. To be clear, while older children and adults can be
> taught to read, the time and expense of doing so is enormous.

Likewise, Grossen (1997) relates that children who fall behind at an early age

such as kindergarten and grade one fall further and further behind over time. Longitudinal studies show that of the children who are diagnosed as reading disabled in third grade, 74 % remain disabled in ninth grade. Furthermore, adults with reading problems often exhibit the same characteristics that are exhibited by children with reading problems.

Similarly, DiChiara (1998) states that if schools delay intervention until age seven for children who are experiencing reading difficulties, 75% will continue to have difficulty. When these reading problems are identified in the first or second grade, 82% of the time they can be remedied. If reading problems are not identified until the third, fourth or fifth grade, they can only be remedied 46% of the time. DiChiara (1998) goes on to say that if a child has not learned how to read by the time he or she leaves the sixth grade, that student is in big trouble, because formal reading instruction typically stops, with regular students, after the sixth grade.

Previously mentioned research has stated the importance of identifying students with reading difficulties as early as kindergarten and first grade. How do schools identify reading difficulties for such young children? Research indicates that the best predictor in kindergarten or first grade of a future reading difficulty in grade three is poor performance on a combination of measures of phonemic awareness, rapid naming of letters, numbers, and objects, and print awareness. Phonemic awareness is the ability to segment words and syllables into specific sound units or phonemes (Grossen, 1997). Torgesen (1998) mentions three specific measures or tests of phonemic awareness that are suited for early identification: *The Phonological Awareness Test* (Robertson &

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Salter, 1995), *The Test of Phonological Awareness* (Torgesen & Bryant, 1994), and the *Yopp-Singer Test of Phoneme Segmentation* (Yopp, 1995).

An inability to perform well on measures of phonemic awareness such as the above tests seems to be the common identifying factor for most poor readers. This lack of phonemic awareness seems to be a major obstacle to reading acquisition. Children who are not phonemically aware are unable to segment words and syllables into phonemes. Therefore, they do not develop the ability to decode single words accurately and fluently. This inability is the distinguishing characteristic of persons with reading disabilities (Grossen, 1997). Furthermore, the CEC (1996) concurs by reporting that most non-readers share a common problem; they have not developed the capacity to recognize what reading experts call phonemes.

In addition, Scanlon and Vellutino (1996) explain that children who experience difficulty in learning to read typically differ from normally developing readers in their sensitivity to the phonemic structure of spoken language, in their verbal memory skills, and, often, in their word retrieval abilities. Such deficits are thought to result in the most common manifestation of poor reading: difficulty employing the alphabetic code to identify printed words. Researchers have demonstrated that accomplished readers are adept at recognizing phonemes and putting them together to construct words and phrases. They are able to do this quickly, accurately, and automatically. When this critical linguistic skill is missing, children have difficulty decoding and reading single words, much less sentences, paragraphs and whole stories (CEC, 1996).

Since research has established that deficits in phonological awareness are linked

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to reading difficulties, remediating those deficits in young children appears to be the best course of action. Systematic, explicit phonics instruction leaves little to chance and ensures the success of most children (Moats, 1998). Intervention for learners who have difficulty with phonological awareness must be early, strategic, systematic and carefully designed (CEC, 1996). Phonic elements should be taught in a logical order, simple to complex, informed by the structure of language itself (Moats, 1998). For children having reading difficulties, effective reading instruction strategies should be used to build phonological awareness and alphabetic understanding. These strategies should make phonemes prominent in children's attention and perception (CEC, 1996).

Grossen (1997) reports that using the following types of phonemic awareness tasks has had a positive effect on reading acquisition and spelling for at-risk readers: rhyming, auditorily discriminating sounds that are different, blending spoken sounds into words, word-to-word matching, isolating sounds in words, counting phonemes, segmenting spoken words into sounds, and deleting sounds from words. Moats and Lyon (1997) concur by referring to initial data obtained from longitudinal studies that suggest that early direct instruction in phoneme awareness and sound-symbol knowledge (phonics), within a complete reading program, increases decoding skills, word recognition abilities, and, to some extent, reading comprehension skills in many at-risk kindergarten, first-grade, and second-grade children.

The Report of the National Reading Panel (NRP): Teaching Children to Read (2000) contends that explicit, systematic phonics instruction is a valuable and essential part of a successful classroom reading program. However, it does caution against giving

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a blanket endorsement to all kinds of phonics instruction. The NRP (2000) emphasizes the importance of recognizing that the goals of phonics instruction are to provide children with key knowledge and skills to ensure that they know how to apply that knowledge in their reading and writing. Simple exposure to phonetic skills without instruction on how to apply those skills is not very effective.

Although the importance of phonemic awareness instruction has been proven, that type of instruction by itself will not provide at-risk readers with the tools they need to become proficient readers. An effective blueprint for effective reading instruction should include a multiple-modality approach and a variety of techniques and methods that take into consideration the individual learning styles and unique needs of children (DiChiara, 1998). The reading process is so complex that many strategies must be taught simultaneously to best serve the needs of most children.

The editor of the American Educator, in his article The Unique Power of Reading and How to Unleash It (1998), asserts that all children need explicit, systematic instruction in phonics and exposure to rich literature, both fiction and non-fiction. Moreover, while children need instruction in phonics in early reading development, even then, attention to meaning, comprehension strategies, language development, and writing are essential. Furthermore, developing children's interest and pleasure in reading must be as much a focus as developing their reading skills. Grossen (1997) lists seven key principles of effective reading instruction identified in research studies: (1) Begin teaching phonemic awareness directly at an early age such as kindergarten, (2) Teach each sound-spelling correspondence explicitly, (3) Teach frequent, highly regular sound-

spelling relationships systematically, (4) Show children exactly how to sound out words, (5) Use connected, decodable text for children to practice the sound-spelling relationships they learn, (6) Use interesting stories to develop language comprehension, and (7) Balance instruction, but do not mix it.

In her summary, Moats (1998) states: "If they are taught with care, children can gain sufficient reading skill by the end of first grade to read many books independently. Competence is reinforcing; those who can read are likely to read. Those who do read are more likely to be educated. And therein lies our responsibility: to teach with knowledge, skill, and artistry the alphabetic invention that makes this all possible." To ensure that children become proficient readers, all teachers must accept the responsibility to develop expertise in teaching reading.

The final topic reviewed in the literature concerns the knowledge base teachers, particularly special education teachers, must acquire in order to become experts in the field of teaching reading. Teaching reading is a job for an expert. Learning to read is a complex linguistic achievement, which is contrary to the popular belief that learning to read is natural and easy. Moreover, teaching reading requires considerable knowledge and skill, acquired over several years through study and supervised practice (AFT, 1999).

Although much skill and knowledge in the area of teaching reading is expected, not all teachers are well prepared to be adept teachers of reading. In a position paper from the Orton Dyslexia Society (ODS), Informed Instruction for Reading Success: Foundations for Teacher Preparation (1997) it was reported that despite the fact that the knowledge children need to succeed at reading is well-documented and the kinds of

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instructional methods that are effective have be verified, most teachers are not being given the content and depth of training needed to enable them to provide appropriate reading instruction.

According to Lyon (1998), several recent studies and surveys of teacher knowledge about reading development and difficulties indicate that many teachers are under prepared to teach reading. Most teachers receive little formal instruction in reading development and disorders during either their undergraduate and/or graduate studies, with the average teacher completing only two reading courses. At present, motivated teachers are often left to obtain specific skills in teaching phonemic awareness, phonics, reading fluency, and comprehension on their own by seeking out workshops or specialized instructional manuals.

The AFT (1999) report asks us to consider what the classroom demands of the teacher. The teacher must stimulate children's interest in reading through regular exposure to interesting books and through discussions in which students respond to many kinds of text. To achieve the best results, the teacher must instruct most students directly, systematically, and explicitly to decipher words in print, while keeping in mind the purpose of reading which is to learn, enjoy, and understand. The teacher must also assess children and tailor lessons to individuals in order to accommodate children's variability. He/she must interpret errors, give corrective feedback, select examples to illustrate concepts explain new ideas in several ways, and connect linguistic symbols with "real" reading and writing. It is obvious that no one can develop such expertise by taking one or two college courses, or attending a few one-shot in-service workshops.

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Many teachers have little or no knowledge of recent research concerning the teaching of reading. DiChiara (1998) describes the answers he has gotten from teachers when he asks them why they teaching reading the way they do. The answers range from "This is the way my college taught me." to "This is the way my cooperating teacher taught during my student teaching." to "I took the basal series they handed me and tried to teach with it." It is rare to find an answer that quotes research or discusses research-based practices or programs. DiChiara (1998) also states that when teachers in his state were asked if they felt prepared to teach reading during their first year teaching, over 90% of the teachers indicated that they did not feel prepared. Some likened the experience to "trial by fire" which does not bode well for teacher preparation programs.

Pre-service and in-service teachers need better training to carry out deliberate instruction in reading, spelling and writing. Now that more research is being conducted to show that teachers need more training, undergraduate programs and school districts need to reassess how to train teachers to teach reading. The deficiencies in teacher preparation show a misunderstanding of what reading instruction demands and a mistaken notion that any literate person should be able to teach children to read (AFT, 1999). Most of the literature that has been reviewed has shown research evaluating regular education teachers and their preparation and ability to teach reading. Of perhaps more importance is the preparation and ability of special education teachers to teach reading.

There is some research that discusses the content of special education teacher training in general, but there are very few studies detailing special education teacher

training in the area of reading. Common sense would dictate that if teachers who teach students without significant learning difficulties need better training in teaching reading, special education teachers that mainly work with students with learning difficulties need the best training in teaching reading that is available. The ODS position paper (1997) stated that resource room and special education personnel need in-depth training in teaching reading. This is because these specialists are likely to be working with children with more severe reading problems and they need to know how to pinpoint specific areas of weakness in reading performance for children experiencing difficulty learning to read. Special education teachers must have expertise in effective remedial strategies targeting structured language methods that have been developed to address the needs of children with reading disabilities. Gable (1987) concurs by relating that as demands for teachers capable of serving a diverse population of special needs students intensify, so too does the importance of addressing the issue of the content of teacher education programs in relation to those demands.

Special education teachers who work with beginning or elementary age students will have a large range of abilities and disabilities within the small groups they teach. A special education teacher must be able to assess each student's individual needs, choose one or more courses of instruction to remediate weaknesses, and continually assess progress to ensure that the correct methods of instruction are being used. Most of all, a special education teacher must be able to examine his/her teaching methods and continually check if they are working for at least most of his/her students. The LDA (1996) contends that in the area of reading research indicates that some learning disabled

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students need a multisensory phonics approach, with instruction in phonological awareness; some students need a more meaning-based approach; while other students need interventions to address comprehension problems. For most students, a combination of many approaches is needed for success. Special education teachers cannot possibly be effective teachers of reading if they are not aware of these approaches and how to use them in the classroom.

In summary, the review of the literature has shown that students with reading difficulties are of epidemic proportion in our country. There are proven, research based methods of assessment and instruction to support these students in their efforts to become competent readers. The difficulty in remediating this problem lies in the lack of effective training methods for pre-service and in-service regular education and special education teachers. Universities and school districts must train prospective teachers and current teachers in quality, research based methods and programs related to the teaching of reading. In effect, teaching reading in today's society demands a high level of expertise.

CHAPTER III

DESIGN OF THE STUDY

INTRODUCTION:

The research for this thesis was conducted through questionnaires given to in-service special education teachers in one suburban New Jersey school district and pre-service special education teachers at one suburban New Jersey University. Permission was given to distribute the questionnaires by the Director of Special Education in the in-service special education teachers' school district. The Student Teaching Advisor of the pre-service special education teachers also gave permission to distribute the questionnaires. The purpose of this study is to determine if special education teachers at the in-service and pre-service levels have received and are receiving enough training to proficiently teach reading to their students.

DESCRIPTION OF SAMPLE:

The population chosen for this study was a convenience group consisting of 43 in-service special education teachers from one local school district and 21 pre-service special education teachers from one local university. The 43 in-service special education teachers were chosen because they teach in the same school district as the researcher.

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The 21 pre-service special education teachers were chosen because they represent a convenience group and attend classes at the same university as the researcher.

INSTRUMENTATION:

A survey instrument was constructed to determine the training and experience of in-service and pre-service special education teachers related to reading. The survey instrument took the form of a questionnaire consisting of twelve items. The questionnaire required that the participants simply check off their answers to the questions. The items on the survey inquired about levels of teaching experience and grade levels that have been taught. Other items pertained to the number of reading courses and specialized reading courses for students in special education taken as an undergraduate student. Still, other items examined types of reading programs used, supplementary methods of teaching word recognition, phonetic skills, and comprehension skills as well as the assessment of student reading levels. The last three items appraised the knowledge of and exposure to three well known reading programs for at-risk or learning disabled individuals.

COLLECTION OF THE DATA:

The questionnaire was distributed to the in-service special education teachers during the last two weeks of November 2000. The questionnaire was distributed to and completed by the pre-service special education teachers on November 29, 2000. The frequency of responses to each item will be tabulated. The results will be reported item by item first from in-service teachers and then from pre-service teachers so as to produce a direct comparison between the two groups. The frequency of responses will be shown in bar

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graph form for each item for each group of participants in the study.

CHAPTER IV

ANALYSIS OF THE DATA

INTRODUCTION:

The purpose of this study is to determine if special education teachers at the pre-service and in-service levels have received and are presently receiving enough training to proficiently teach reading to their students. The participants in the study completed a questionnaire pertaining to their teaching experience, their amount of undergraduate instruction in teaching reading, their current methods of teaching and assessing reading skills, and their familiarity with current specialized reading programs for learning disabled students.

With the exception of teaching experience, the results for the questions on the questionnaire were separated into two sections: 1) results for in-service teachers currently teaching in a public school system and 2) results for pre-service teachers currently completing their student teaching experience. The analysis of the data obtained from the questionnaires required tallying the frequency of the results for each question. The participants included 43 in-service teachers and 21 pre-service teachers (n = 64). A comparison was made between the in-service and pre-service teachers' levels of

preparation; also, the results are being examined to determine levels of knowledge and expertise of each group in the area of teaching reading. This thesis addresses three research questions:
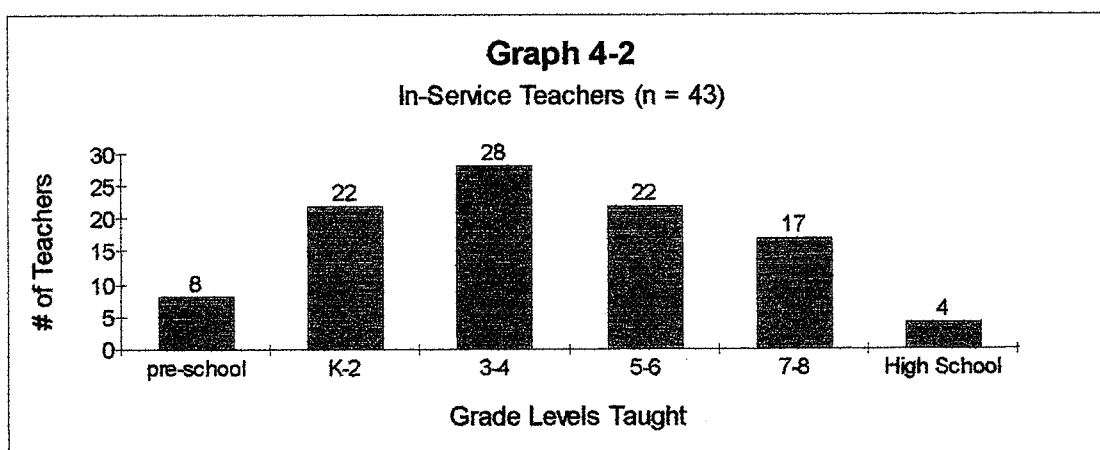
1) Are pre-service special education teachers receiving adequate training in teaching reading?

2) Are in-service special education teachers being continually trained and monitored concerning their knowledge of teaching reading?

3) Is there a need for changes in policy at the pre-service and in-service levels concerning the teaching of reading to special education students?

RESULTS:

The first item on the questionnaire determines levels of teaching experience ranging from being an undergraduate student to teaching ten or more years. Graph 4-1 shows the distribution of teaching experience. The highest percentage is the undergraduate students totaling 33% of the study participants. Those teaching more than ten years totaled 23%. Those teaching one to three years and four to six years each totaled 17%. Ten percent of those participating have been teaching between seven and ten years.

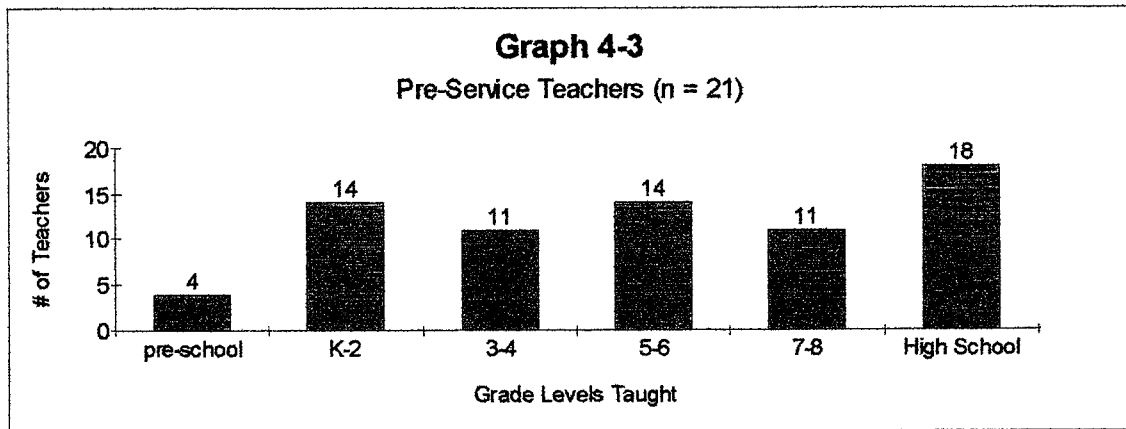**Graph 4-1**
All Participants (n = 64)
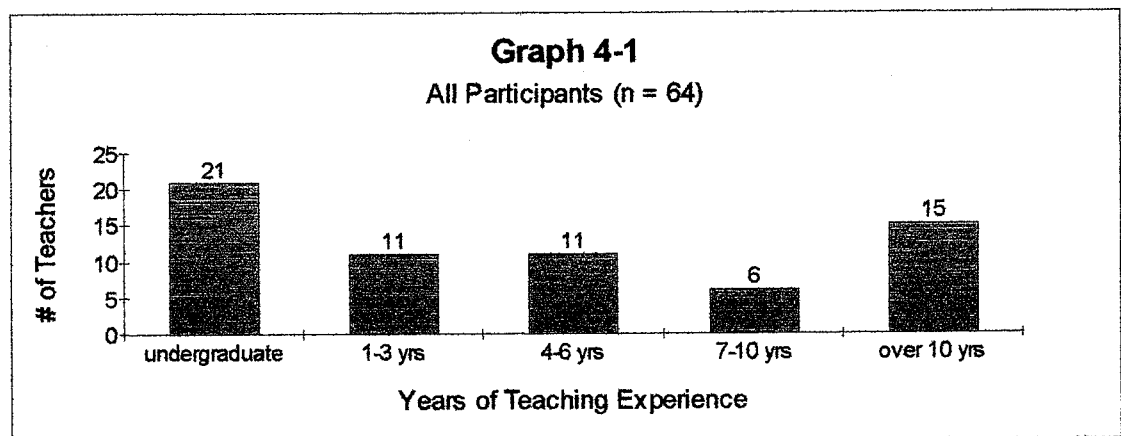
The second item on the questionnaire determines the grade levels at which the participants have taught. It was rare to find that the in-service or pre-service teachers grade level experiences were in just one category. Most participants have had experience at multiple grade levels. Graph 4-2 shows the grade level categories and the number of participants in each category for in-service teachers. 65% of the 43 in-service teachers have taught at the third or fourth grade level. 51% have taught either kindergarten, first, or second grade and 51% have taught either fifth or sixth grade. 40% have taught seventh or eighth grade and 19% have taught at the pre-school level. Only 9% have taught at the high school level. The majority of experience lies between kindergarten and eighth grade for the in-service teachers.

Graph 4-2

In-Service Teachers (n = 43)

| Grade Level	# of Teachers
pre-school	8
K-2	22
3-4	28
5-6	22
7-8	17
High School	4

Grade Levels Taught

The pre-service teachers have had exposure to a variety of grade levels during their practicum and student teaching experiences. Graph 4-3 shows the grade level categories and the number of participants in each category for pre-service teachers. 86% of the 21 pre-service teachers have taught at the high school level. 66% have taught at the kindergarten, first or second grade level and 66% have taught at the fifth or sixth grade level. 52% have taught at the third or fourth grade level and 52% have taught at

the seventh or eighth grade level. 38% have taught at the pre-school level. The pre-service teachers have a well-distributed amount of experience at all of the grade levels from pre-school through high school.

Graph 4-3

Pre-Service Teachers (n = 21)

# of Teachers vs Grade Levels Taught

pre-school: 4, K-2: 14, 3-4: 11, 5-6: 14, 7-8: 11, High School: 18

The third item on the questionnaire pertains to the number of reading courses taken as undergraduate students. Graph 4-4 shows the responses that range from unsure to four or more undergraduate reading courses for in-service teachers. 33% of the in-service teachers report having four or more undergraduate reading courses. 23% have had two undergraduate reading courses and 19% have had three undergraduate reading courses. 11% have had just one, 7% have had zero, and 7% are not sure how many undergraduate reading courses they have taken.

Graph 4-4

In-Service Teachers (n = 43)

# of Teachers vs # of Undergraduate Reading Courses

unsure: 3, 0: 3, 1: 5, 2: 10, 3: 8, 4+: 14

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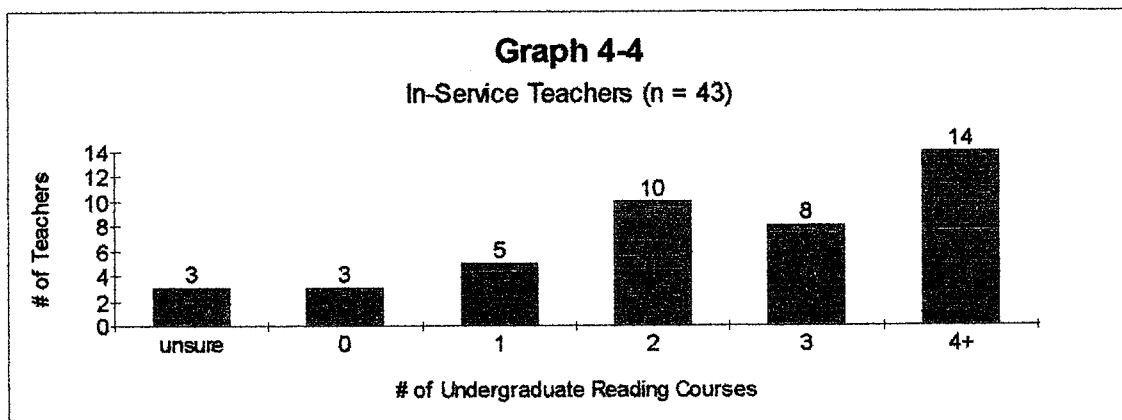
The pre-service teachers report having either two, three, or four or more undergraduate reading courses. 62% report taking two undergraduate reading courses. 28% report taking four or more undergraduate reading courses and indicated on the questionnaire that they were getting their certificate for "Teacher of Reading". 9% indicated that they have taken three undergraduate reading courses. None of the pre-service teachers have only taken one undergraduate reading course.

Graph 4-5

Pre-Service Teachers (n = 21)
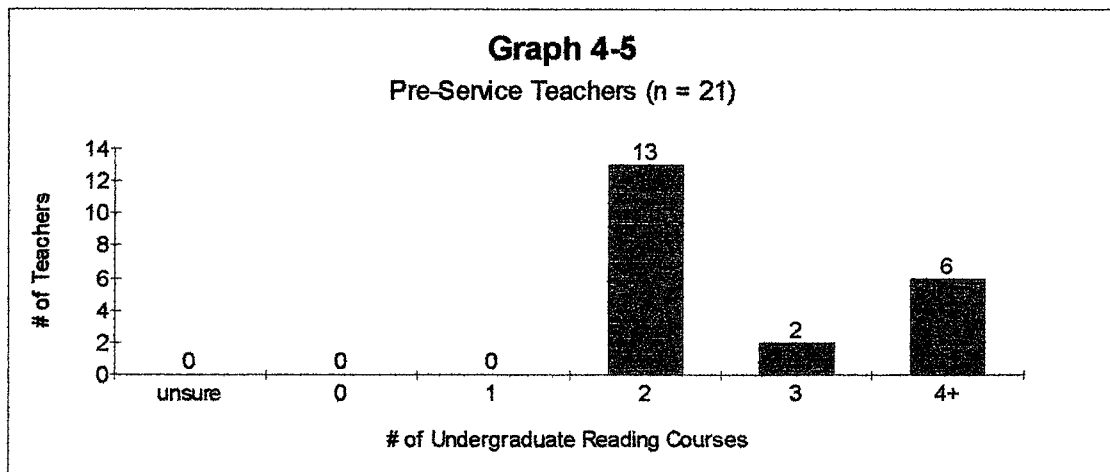
Item four on the questionnaire ascertains the number of specialized reading courses for students in special education that were taken as undergraduate students. Graph 4-6 shows the results that were reported by in-service teachers. 33% of the in-service teachers report only having one specialized reading course for students in special education. 28% report having two specialized reading courses for students in special education. 18% report taking zero, 14% report taking three and only 7% of in-service teachers report taking four or more undergraduate specialized reading courses for students in special education.

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Graph 4-6

In-Service Teachers (n = 43)
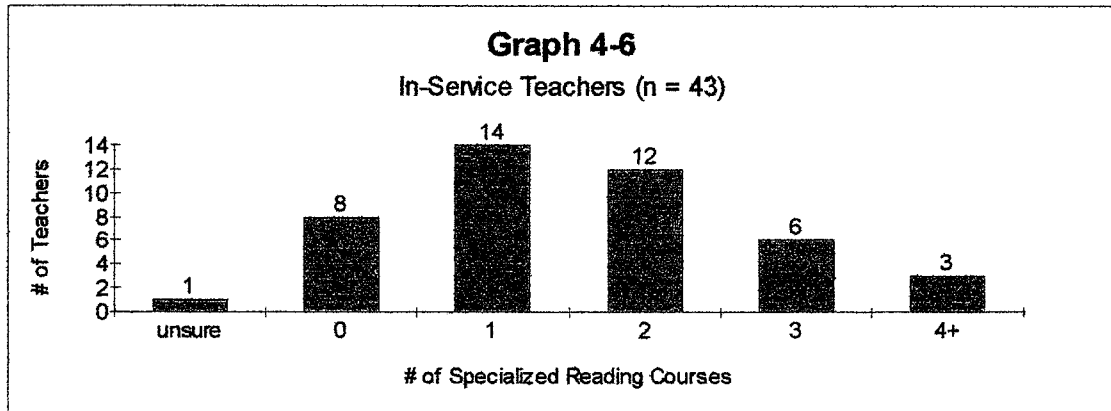
Graph 4-7 shows the results for item four for the pre-service teachers. 71% of pre-service teachers report taking only one specialized reading course for students in special education. 14% report taking four or more, 9% report taking two, and 6% report taking zero specialized reading courses for students in special education.

Graph 4-7

Pre-Service Teachers (n = 21)
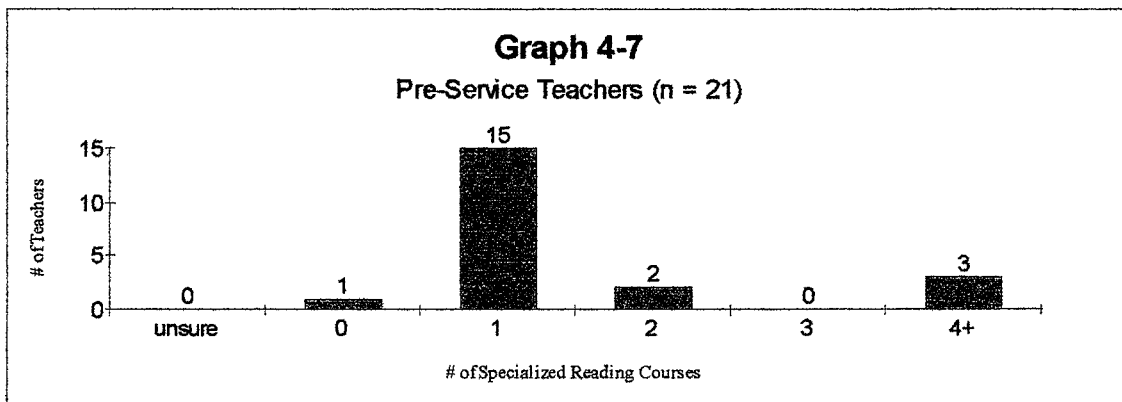
Item five on the questionnaire concerns the type of reading program being used by both in-service and pre-service teachers. The choices ranged from the restrictive basal reading series to a combination approach that utilizes more than one type of program. Graph 4-8 displays the in-service teachers' responses to item five on the questionnaire. An overwhelming percentage, 81%, of in-service teachers uses a combination approach type of reading program. 10% use tradebooks, 5% use a basal series, 2% use a special

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learning disabled reading series, and 2% use a special learning disabled reading program.

Graph 4-8
In-Service Teachers (n = 43)
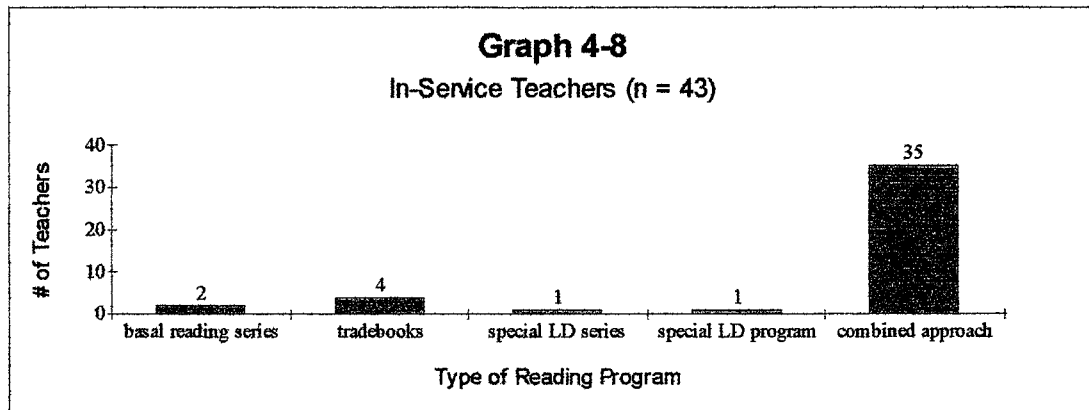
Graph 4-9 displays the responses of pre-service teachers regarding the type of reading program they have used. 43% report using a combination approach and 29% report using tradebooks for their reading program. 14% use a special learning disabled reading program, 9% use a basal reading series and 5% use a special learning disabled reading series.

Graph 4-9
Pre-Service Teachers (n = 21)
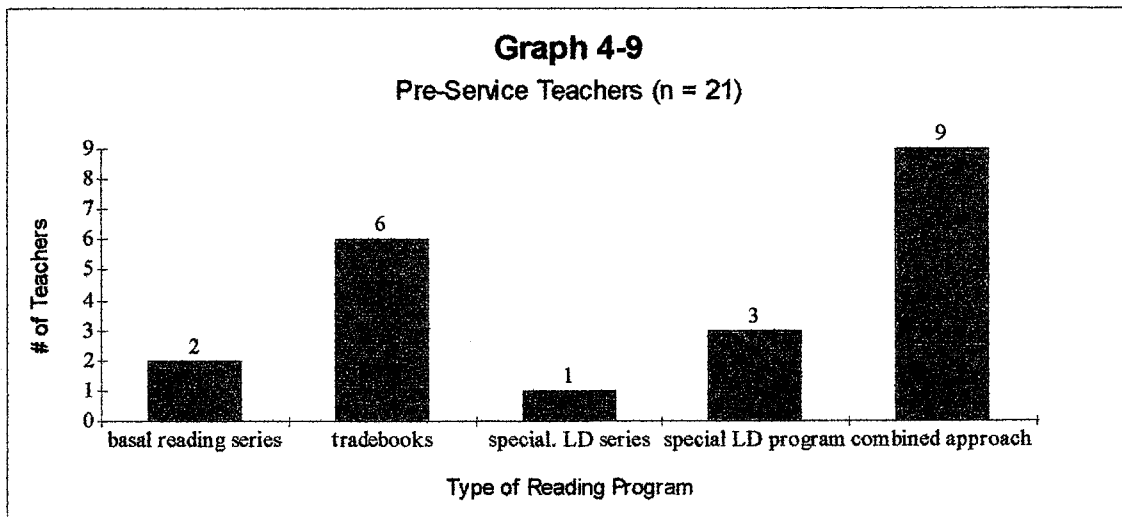
Item six on the questionnaire inquires about supplementary methods being used to teach word recognition. Many participants at both the in-service and pre-service levels

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chose more than one method and the results reflect this fact. Graph 4-10 shows the responses of the in-service teachers to item six. Flashcards are the most frequently chosen method of teaching word recognition, word walls are the second choice, and personal dictionaries are the third choice.
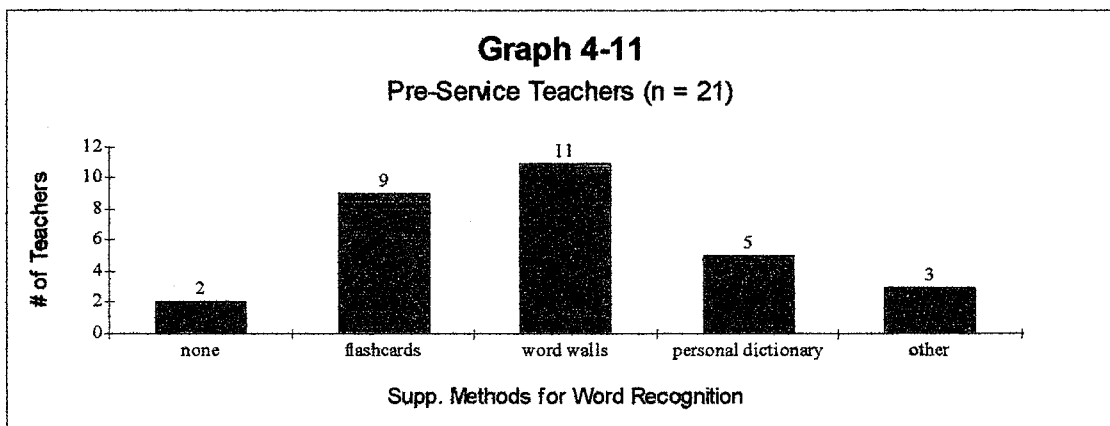
Graph 4-10

In-Service Teachers (n = 43)
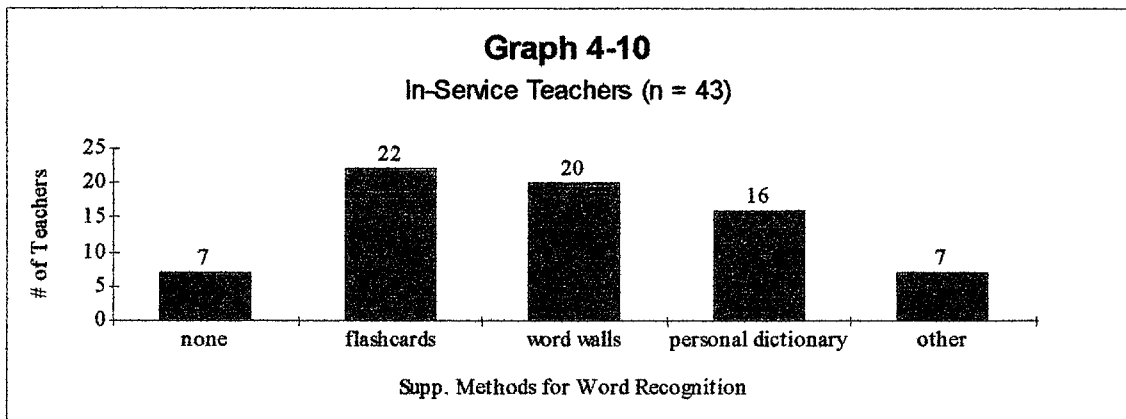
Graph 4-11 shows the responses of the pre-service teachers to item six about supplementary methods of teaching word recognition. Word walls are the most frequently chosen choice of supplementary methods to teach word recognition, flashcards are the second choice, and personal dictionaries are the third choice.
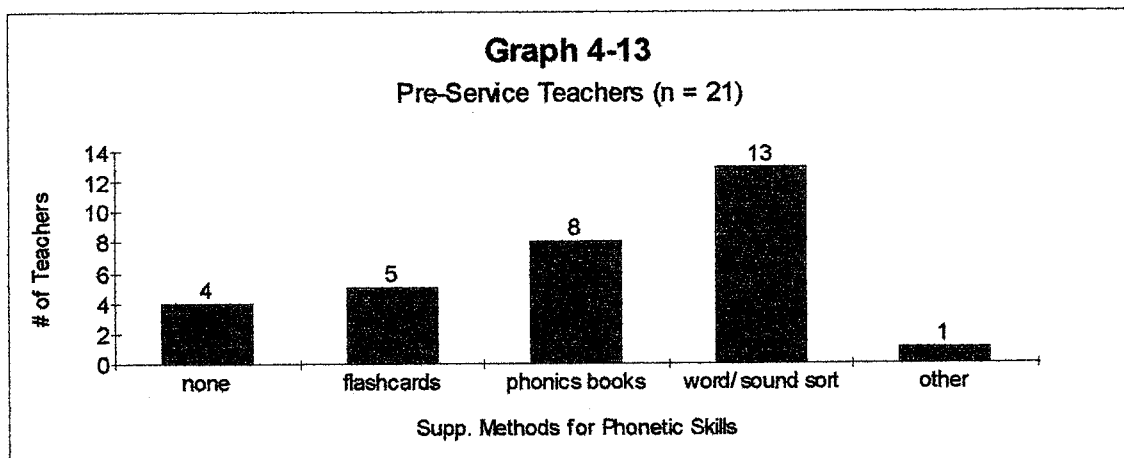
Graph 4-11

Pre-Service Teachers (n = 21)

Item seven from the questionnaire requests information about supplementary

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methods of teaching phonetic skills. Participants were able to choose more than one choice for this item. The results reflect this fact. Graph 4-12 displays the results for the in-service teachers from question seven. As a supplementary means of teaching phonetic skills, word/sound sorting is the most frequent choice, other is the second choice, and flashcards are the third choice.

Graph 4-12

In-Service Teachers (n = 43)

Supp. Method	# of Teachers
none	10
flashcards	13
phonics books	7
word/ sound sort	26
other	16

Supp. Methods for Phonetic Skills
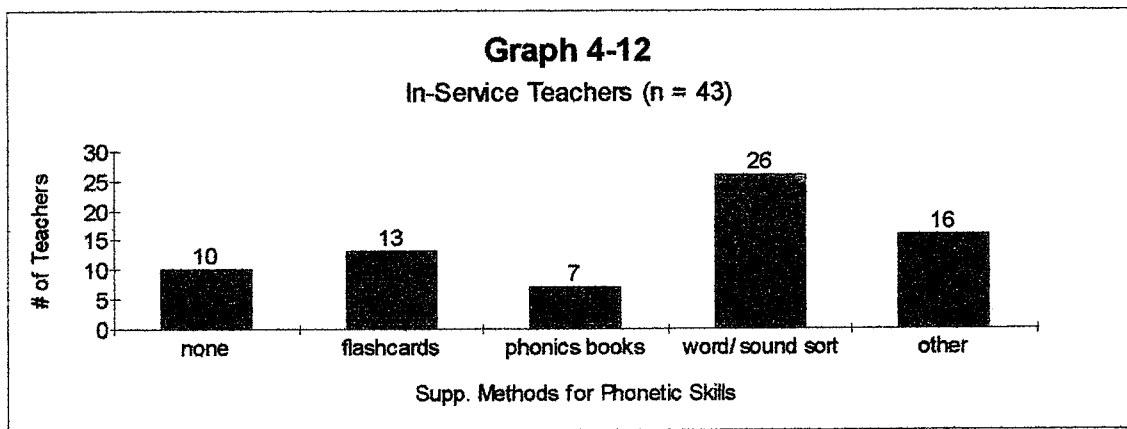
The pre-service teachers' choices for item seven are displayed in Graph 4-13. The number one supplementary method of teaching phonetic skills chosen by pre-service teachers is word/sound sorting. Phonics books are the second choice and flashcards are the third choice.

Graph 4-13

Pre-Service Teachers (n = 21)

Supp. Method	# of Teachers
none	4
flashcards	5
phonics books	8
word/ sound sort	13
other	1

Supp. Methods for Phonetic Skills

Item eight from the questionnaire asks about supplementary methods used to teach comprehension skills. Graph 4-14 displays the choices made by in-service teachers in regard to this item. Using context clues to aid in teaching comprehension skills is the number one choice. Second is re-reading and third is self-questioning.

Graph 4-14

In-Service Teachers (n = 43)

Supp. Method	# of Teachers
none	1
context clues	41
re-reading	34
self-questioning	28
other	12

Supp. Methods for Comprehension Skills
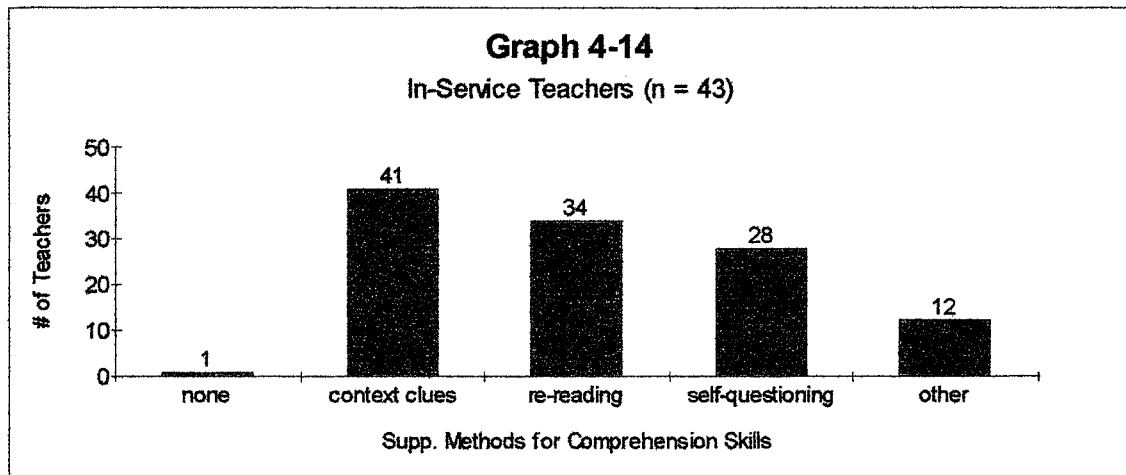
Graph 4-15 displays the choices of supplementary methods for teaching comprehension skills for the pre-service teachers. Using context clues to teach comprehension skills is most frequent choice. Self-questioning is the second highest rated choice and re-reading is third.

Graph 4-15

Pre-Service Teachers (n = 21)

Supp. Method	# of Teachers
none	0
context clues	18
re-reading	12
self-questioning	14
other	2

Supp. Methods for Comprehension Skills
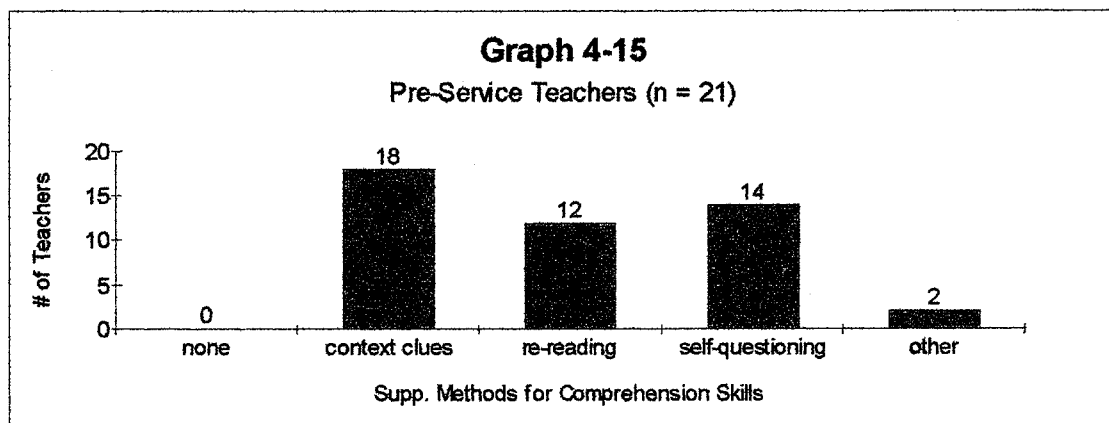
Item nine asks the participants how they assess students' reading levels. They

have a choice of using: a series' reading test, running records, levels given on the IEP, informal reading inventories, or standardized test results. The participants often made a combination of choices. Graphs 4-16 a-d display the data in terms of how many ways each in-service teacher has chosen to assess reading levels. When choosing one way to assess students' reading levels, most in-service teachers have chosen to review IEP levels as indicated in Graph 4-16-a.
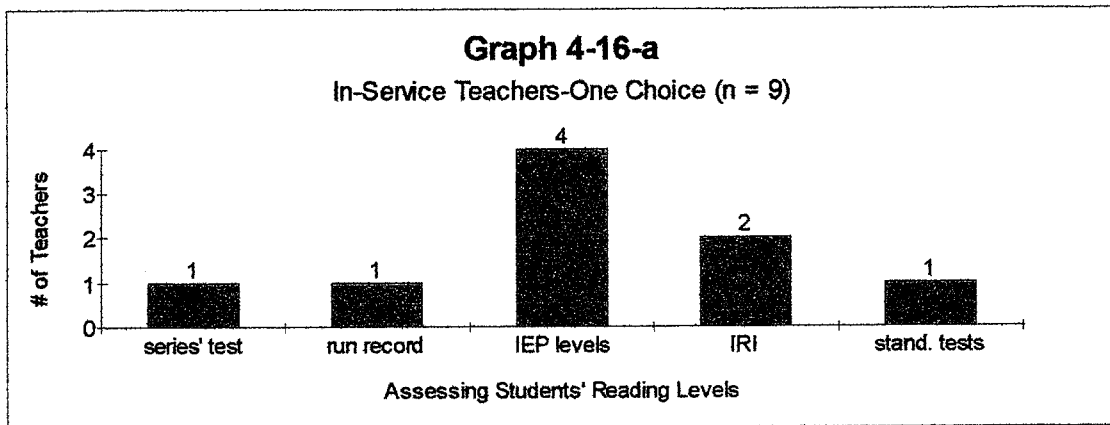
Graph 4-16-a

In-Service Teachers-One Choice (n = 9)

When in-service teachers have chosen two methods to assess students' reading levels, they have chosen the running record/informal reading inventory combination most often. This information is shown in Graph 4-16-b.
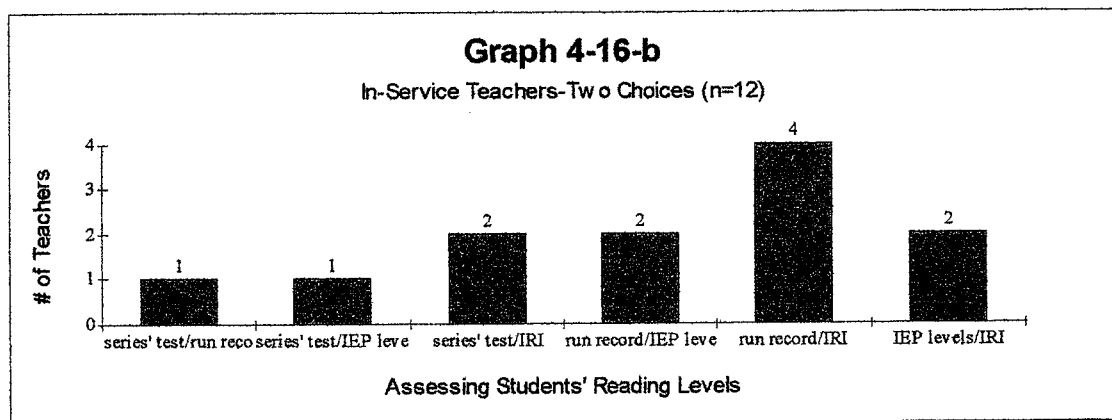
Graph 4-16-b

In-Service Teachers-Two Choices (n=12)

When in-service teachers have chosen a combination of three ways to assess

reading levels, they have chosen the combinations of using running records/IEP

levels/informal reading inventories and IEP levels/informal reading inventories
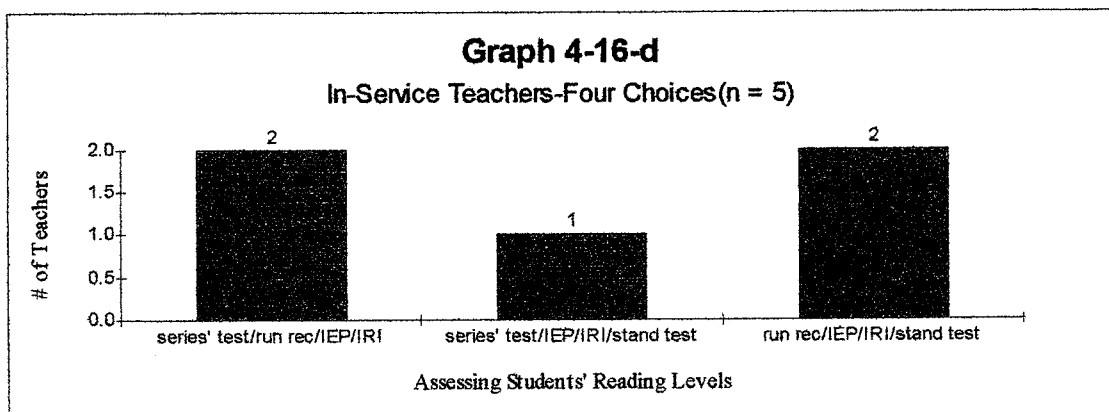
/standardized test scores most often. This information is shown in Graph 4-16-c.

Graph 4-16-c

In-Service Teachers-Three Choices(n=11)

Y-axis: # of Teachers (0.0 to 3.0)

X-axis: Assessing Students' Reading Levels

- series/IEP/IRI: 2
- series/IEP/stand. test: 2
- run rec/IEP/IRI: 3
- run rec/IEP/stand. test: 1
- IEP/IRI/stand. test: 3
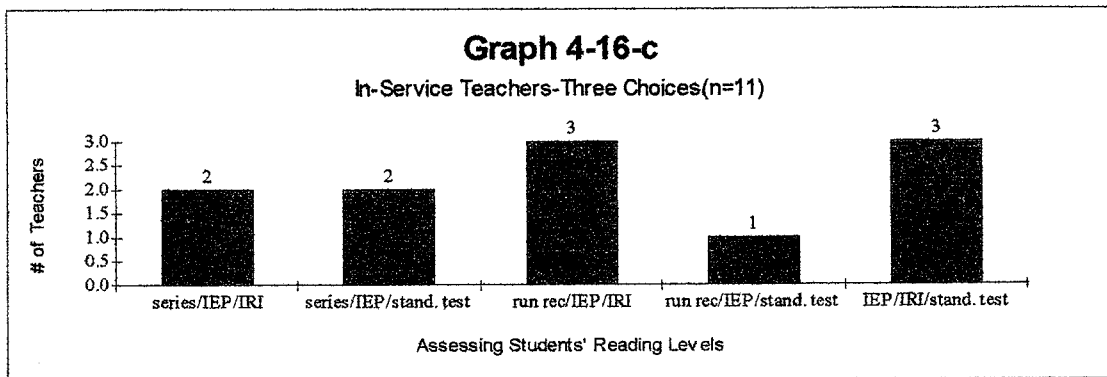
When in-service teachers have chosen four methods to assess their students'

reading levels, they have chosen either of these combinations most often: series'

test/running records/IEP levels/informal reading inventories or running records/IEP

levels/informal reading inventories/standardized tests. Graph 4-16-d shows this

information. There were also two in-service teachers who have chosen a combination of

all five ways to assess their students' reading levels.

Graph 4-16-d

In-Service Teachers-Four Choices(n = 5)

Y-axis: # of Teachers (0.0 to 2.0)

X-axis: Assessing Students' Reading Levels

- series' test/run rec/IEP/IRI: 2
- series' test/IEP/IRI/stand test: 1
- run rec/IEP/IRI/stand test: 2

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Graphs 4-17 a-b display the data in terms of how many ways each pre-service

teacher has chosen to assess reading levels. When choosing one way to assess students'

reading levels, most pre-service teachers have chosen to give basal reading series' tests or

give informal reading inventories as indicated in Graph 4-17-a.
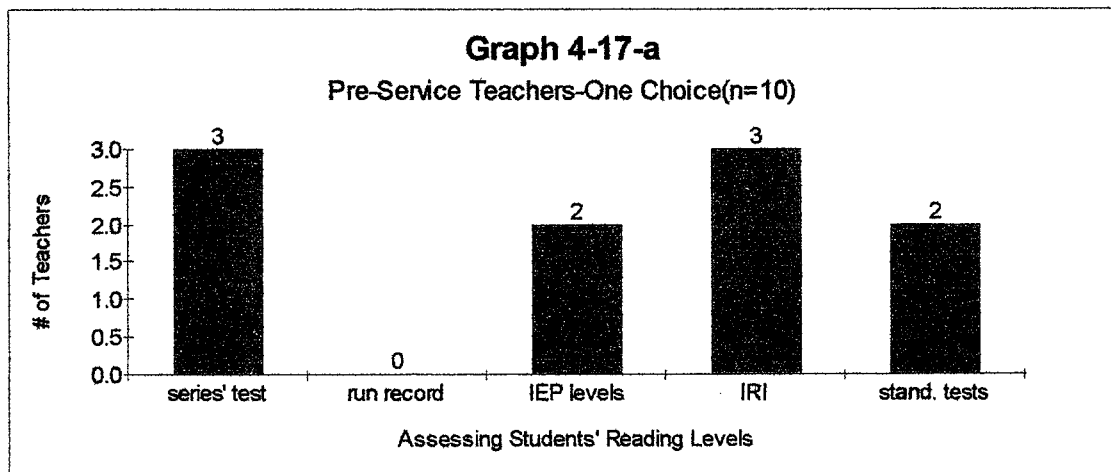
Graph 4-17-a
Pre-Service Teachers-One Choice(n=10)


When pre-service teachers have chosen two methods to assess students' reading

levels, they have chosen the IEP levels/informal reading inventory combination most

often. This information is shown in Graph 4-17-b.
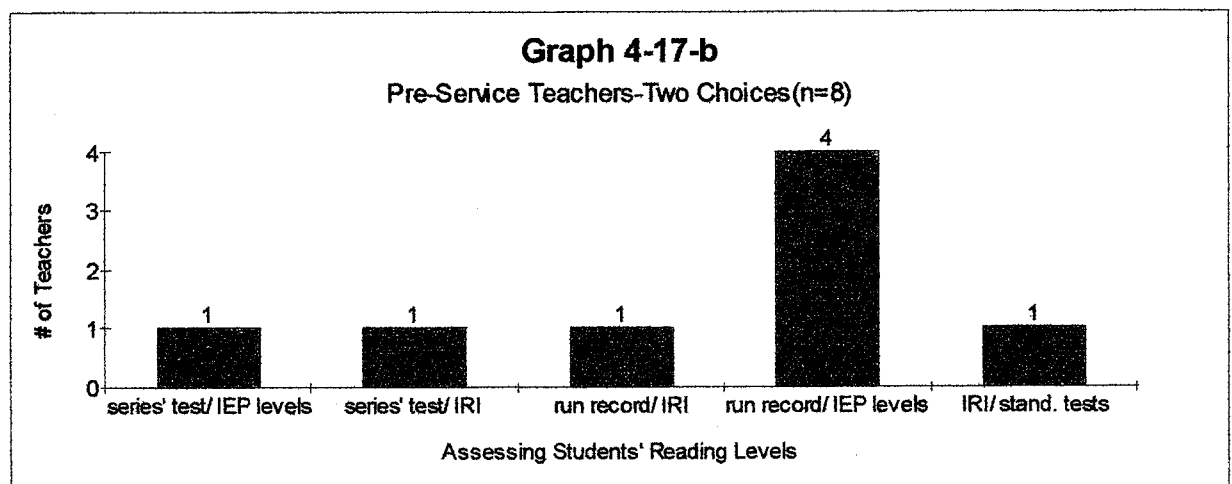
Graph 4-17-b
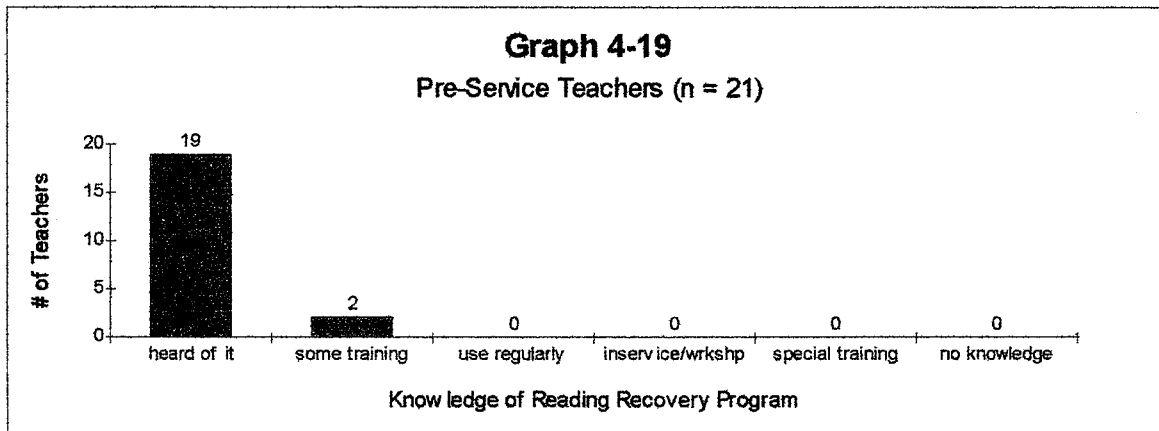Pre-Service Teachers-Two Choices(n=8)

When pre-service teachers have chosen a combination of three ways to assess

reading levels, they have chosen the combination of using running records/IEP

levels/informal reading inventories most often.

Item ten measures the extent of knowledge that the participants have concerning

the reading recovery program. The choices ranged from having extensive training to

having no knowledge at all about the program. The results from the in-service teachers

demonstrate that 37% have only heard of the program. 29% have had an in-service or a

workshop about the program and 25% report having had some cursory training about the

program. Only 9% of the in-service teachers use the program regularly. Graph 4-18

displays this information.

Graph 4-18

In-Service Teachers (n = 43)
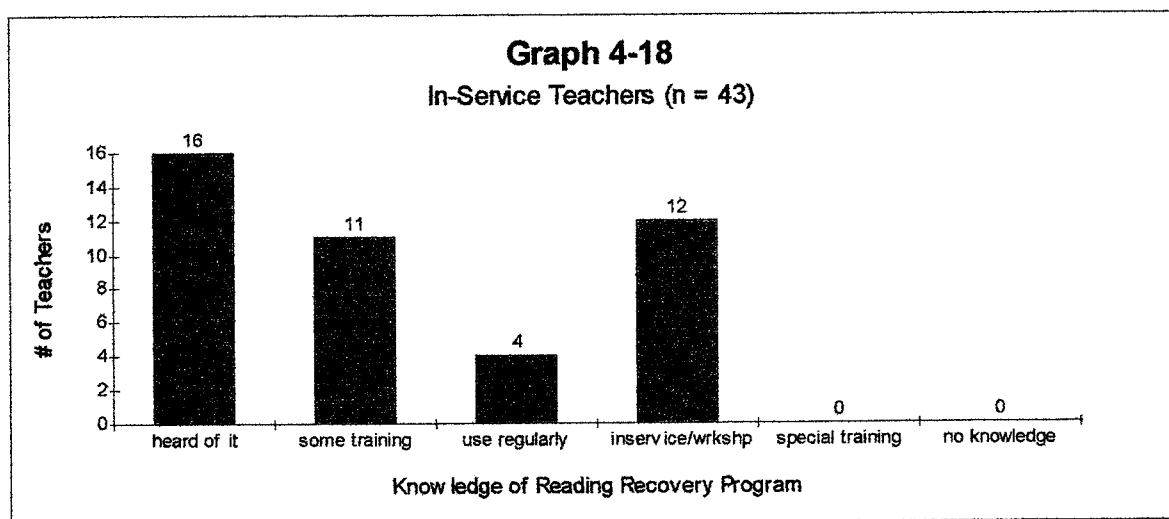
The results from the pre-service teachers in response to item ten indicate that 91%

have only heard of the Reading Recovery Program and 9% have had some training

related to the program. Graph 4-19 displays this information.

Graph 4-19

Pre-Service Teachers (n = 21)

Knowledge of Reading Recovery Program

# of Teachers

heard of it	some training	use regularly	inservice/wrkshp	special training	no knowledge
19	2	0	0	0	0

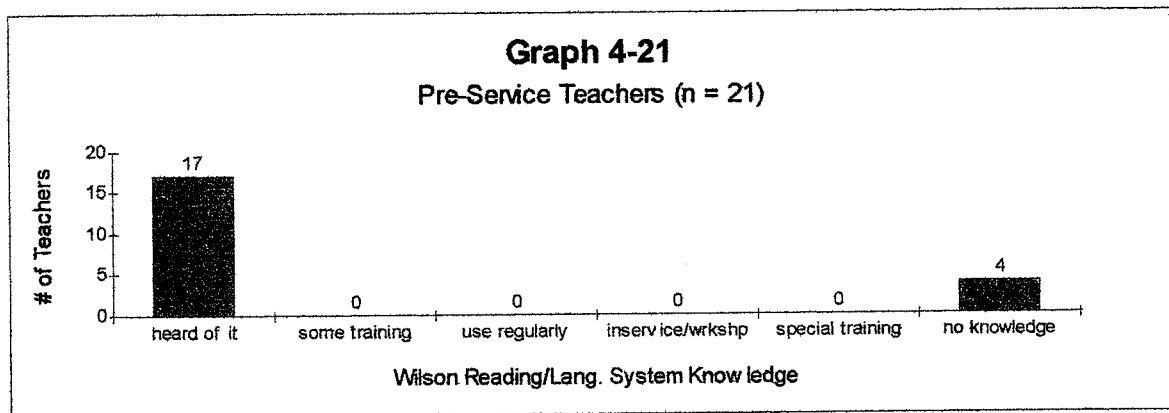Item eleven measures the extent of knowledge that the participants have concerning The Wilson Reading/Language System, a multi-sensory reading program with a strong phonetic base. The choices ranged from having extensive training to having no knowledge at all about the program. The in-service teachers' responses presented in graph 4-20 show that 33% have had in-service/workshop training, 25% use it regularly with students, 19% have heard of the program, 16% have had some cursory training, and 7% have had extensive, specialized training with the program. Every in-service teacher who responded to the questionnaire had at least some knowledge of the program.

Graph 4-20

In-Service Teachers (n = 43)

Wilson Reading/Lang. System Knowledge

# of Teachers

heard of it	some training	use regularly	inservice/wrkshp	special training	no knowledge
8	7	11	14	3	0
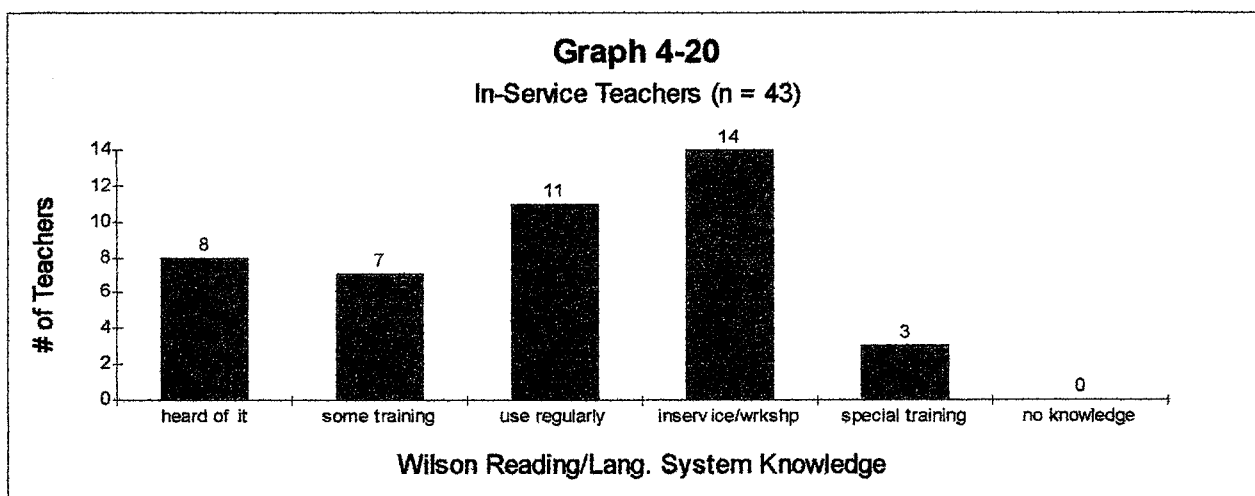
The pre-service teachers' responses for Item eleven displayed in Graph 4-21 show that 81% have heard of the Wilson Reading/Language System and 19% have no knowledge of the program at all.

Graph 4-21

Pre-Service Teachers (n = 21)

Wilson Reading/Lang. System Knowledge

(# of Teachers)

heard of it: 17, some training: 0, use regularly: 0, inservice/wrkshp: 0, special training: 0, no knowledge: 4

Item twelve on the questionnaire pertains to the Orton-Gillingham Method, which is another multi-sensory program for teaching reading. Once again, the choices ranged from having extensive training to having no knowledge at all about the program. The in-service teachers' responses to item twelve displayed on Graph 4-22 show that 56% have heard of the program, 16% have had some in-service/workshop training, 11% have had some cursory training, 7% have no knowledge of the program, 5% have had extensive, specialized training with the program and 5% use it regularly with their students.

Graph 4-22

In-Service Teachers (n = 43)

Orton-Gillingham Method Knowledge

(# of Teachers)

heard of it: 24, some training: 5, use regularly: 2, inservice/wrkshp: 7, specialized training: 2, no knowledge: 3
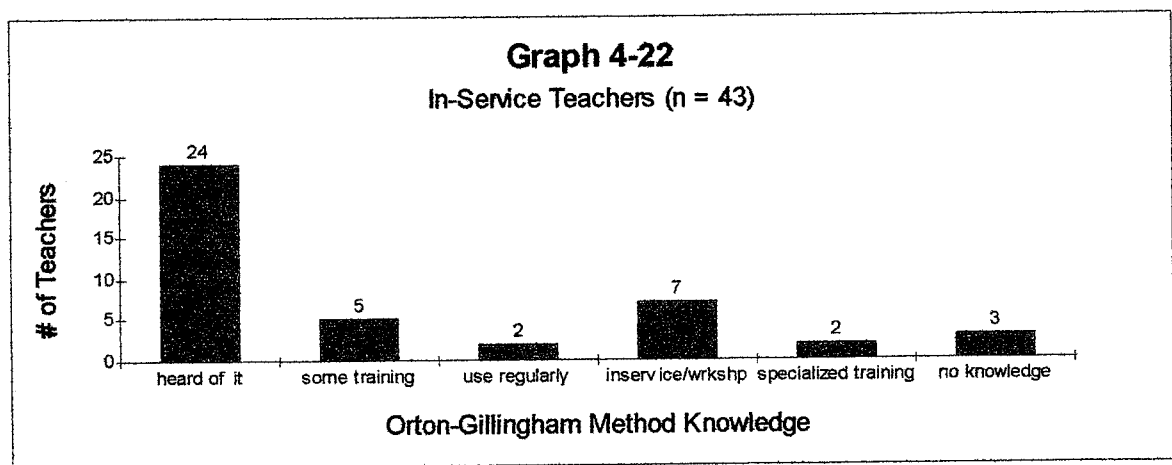
The pre-service teaches' responses to item twelve are displayed on Graph 4-23.

The graph shows that 86% of pre-service teachers have heard of the program, 9% have no

knowledge at all about the program, and 5% use it regularly with their students.

Graph 4-23

Pre-Service Teachers (n = 21)
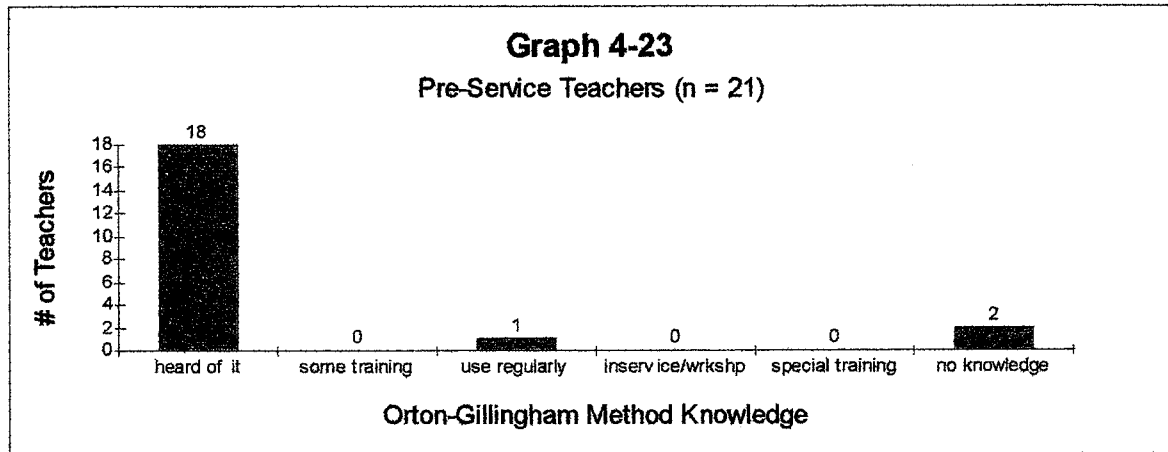
The results of the questionnaires for both in-service and pre-service teachers

produced both expected and unexpected information. There is no statistical evidence to

answer the research questions that were posed, only an interpretation of the data gathered

by the questionnaire. Research question one asks: Are pre-service special education

teachers receiving adequate training in teaching reading? Based upon the responses to

the questionnaire, the answer would be no. Research question two asks: Are in-service

special education teachers being continually trained and monitored concerning their

knowledge of teaching reading? Based upon the answers to the questionnaire, the answer

would be yes. Research question three asks: Is there a need for changes in policy at the

pre-service and in-service levels concerning the teaching of reading to special education

students? Based upon the answers to the questionnaire, the answer is yes, especially at

the pre-service level. A discussion of these results and implications for further research

will be discussed in chapter five.

CHAPTER V

SUMMARY

SUMMARY:

The purpose of this study was to determine if special education teachers at the pre-service and in-service levels have received and are receiving enough training to proficiently teach reading to their students. This study attempted to reveal the level of knowledge and training that special education personnel possess in the area of teaching reading.

Data was gathered through a questionnaire, and then the responses for all of the participants were analyzed and presented in graphs. The responses were classified as those from in-service teachers or pre-service teachers in order to compare the data between the two groups.

The findings for research question one suggest that pre-service special education teachers do not receive adequate training in the teaching of reading as evidenced by their lack of undergraduate coursework and knowledge of current research and programs. For research question two, the findings indicate that in-service teachers did have more training and knowledge than pre-service teachers, but the application of that training and

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knowledge is not being monitored in any specific way. Concerning research question three, the findings point towards requiring more undergraduate reading coursework for pre-service special education teachers and requiring accountability for the reading progress of students of in-service special education teachers.

CONCLUSIONS:

The information obtained was analyzed, and resulted in the following findings:

(1)   Pre-service special education teachers are not being given adequate training in the teaching of reading. This conclusion was evident based upon the amount of undergraduate coursework in general reading and specialized reading courses for special education students.

(2)   In-service special education teachers have had more undergraduate coursework in general reading than pre-service special education teachers.

(3)   The majority of in-service and pre-service special education teachers have only taken one undergraduate course that specialized in reading for special education students.

(4)   The majority of in-service and pre-service special education teachers are using an eclectic approach in their reading programs which research has shown to be the best way to teach reading to learning disabled students.

(5)   Both in-service and pre-service special education teachers use a variety of supplemental methods to enhance their students' skills in word recognition, phonics, and reading comprehension.

(6)   In the area of assessing reading levels, most in-service teachers use multiple ways to determine their students' reading levels whereas most pre-service teachers only used

one way to determine their students' reading levels.

(7)   The majority of in-service special education teachers have had training or actually used the elements of the Reading Recovery program, rather than just have heard of it.

(8)   The majority of pre-service special education teachers have had no training and have only heard of the Reading Recovery program

(9)   The majority of in-service special education teachers have had training and are currently using some components of the Wilson Reading/Language System.

(10)   None of the pre-service special education teachers have had any training with the Wilson Reading/Language System and some have never heard of it.

(11)   The majority of in-service and pre-service special education teachers have not had any training with the Orton-Gillingham Method, they have heard of it.

DISCUSSION AND IMPLICATIONS:

Further discussion of these results may help to clarify some of the findings. One major point of discussion is the required number of undergraduate general reading courses and specialized reading courses for the pre-service special education teachers. Sixty-two percent of the pre-service special education teachers had only two general reading courses and seventy-one percent had only one specialized reading course for special education students. The findings revealed that the majority, thirty-three percent of in-service special education teachers, had taken four or more undergraduate general reading courses. The majority, thirty-three percent of in-service special education teachers, only had one specialized reading course for special education students.

Another point of discussion revolves around knowledge and experience with

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current reading research and programs. When asked about Reading Recovery, a well-known, current reading program for at-risk readers, only nine percent of pre-service special education teachers had any kind of training with the program. The other ninety-one percent had merely heard of the program. When asked about the Wilson Reading/Language System, a multi-sensory reading program designed for remediating severe reading difficulties, none of the pre-service special education students had any kind of training with the program, eighty-one percent had heard of the program, and nineteen percent said they had no knowledge of the program at all. When asked about the Orton-Gillingham Method, a reading and language program for dyslexic students, five percent of the pre-service special education teachers have had training with the program and have used it with students, eighty-six percent have heard of the program, and nine percent said they have no knowledge of the program at all.

RECOMMENDATIONS FOR FURTHER RESEARCH:

The pre-service special education teachers in this study would appear to benefit from more training in the teaching of reading at the undergraduate level. This project only surveyed undergraduate, pre-service special education teachers from one university. It would be of interest to expand the sample to include several colleges and universities from more than just one state. Perhaps a larger, more variant sample would indicate whether the results were typical or atypical.

The in-service special education teachers in this study came from one school district and may not be indicative of the general population of public school special education teachers. These particular special education teachers from this district appear

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to be well informed about current specialized reading methods and have had access to training with these methods. Surveying other school districts throughout the state and local area would provide more information as to the continuing in-service training that special education teachers receive in the area of teaching reading.

Appendix A

The Survey Instrument

A Survey of Special Education Teachers and Their Teaching of Reading

Please check off one or more responses that best answer each question.

1. **What is your present level of experience in teaching special education?**

___still an undergraduate   ___1-3 years   ___4-6 years   ___7-10 years   ___over 10 years

2. **What student grade level(s) have you taught? (undergraduates can use practicum or student teaching experiences)**

___pre-school   ___K-2   ___3-4   ___5-6   ___7-8   ___ high school

3. **How many reading courses did you take as an undergraduate?**

___0   ___1   ___2   ___3   ___4 or more

4. **How many specialized reading courses for students in special education did you take as an undergraduate?**

___0   ___1   ___2   ___3   ___4 or more

5. **What kind of reading program do you use with your students presently? (undergraduates can use practicum or student teaching experiences)**

___a basal reading series   ___a specialized series for learning disabled

___tradebooks(books, novels)   ___a special intervention/multisensory program

___a combination approach of more than one type of program

6. **What specific supplementary method(s) do you use to teach word recognition (sight words)?**

___none   ___flashcards   ___word walls   ___personal dictionary   ___other_____

7. **What specific supplementary method(s) do you use to teach phonetic skills (phonemic awareness)?**

___none   ___flashcards   ___phonics books   ___word/sound sorting   ___other_____

8. **What specific supplementary method(s) do you use to teach comprehension skills?**

___none   ___context clues   ___re-reading   ___self-questioning   ___other_____

9. **How do you assess a student's reading level?**

___series' reading tests   ___informal reading inventories

___running records   ___review standardized test results

___review levels given on IEP

10. To what extent do you have knowledge of the Reading Recovery program?

___have heard of it   ___have attended an inservice/workshop about it

___have had some training with it   ___have had extensive training with it

___use it regularly with students

11. To what extent do you have knowledge of the Wilson Reading/Language System?

___have heard of it   ___have attended an inservice/workshop about it

___have had some training with it   ___have had extensive training with it

___use it regularly with students

12. To what extent do you have knowledge of the Orton-Gillingham method?

___have heard of it   ___have attended an inservice/workshop about it

___have had some training with it   ___have had extensive training with it

___use it regularly with students

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