

WHO IS HELPING OUR CHILDREN: THE DEVELOPMENT OF A MODEL FOR  
THE TRAINING OF TUTORS FOR AMERICA READS

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The purpose of this research study was to examine the effectiveness of training for college work study students who participated in an America Reads program, which was designed to help at-risk children struggling with reading. Two groups participated in this research study. One group of college tutors had minimal training in reading strategies at the beginning of the study and the other group of college tutors had continuous training and feedback throughout the study. The research study sought to answer the following questions: 1) Will training for college student tutors in the area of reading, more specifically in the strategies and skills, help improve their comprehension and vocabulary? And 2) Will training for college student tutors in the area of reading, more specifically in strategies and skills, significantly improve the comprehension and vocabulary scores of the children being tutored?

This was a quasi-experimental research design, used to examine the effectiveness of training college students participating in the America Reads program. The tutors were pre-and post-tested, measuring both their vocabulary and comprehension knowledge at the beginning and the end of the study. The children being tutored were also pre- and post-tested, measuring both their vocabulary and comprehension knowledge at the beginning and the end of the study. The statistical analysis for this design was the analysis of covariance (ANCOVA). The ANCOVA was used to handle the main threat to the

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## CHAPTER 1

### THE PROBLEM

#### Background of the Problem

Every Monday through Thursday, an apartment complex is bubbling with children ranging from kindergartners to sixth graders. The children begin arriving at the apartment designated for after-school tutoring around 3:30 each afternoon. They begin to anxiously look for their tutors. Their eyes are filled with laughter and their conversations are filled with excitement. They love to work with their college tutors and are waiting for them to arrive from a nearby college. Children come to the apartment from other apartments in the complex or their parents bring them from nearby homes. College students are tutoring them in an effort to help the children become better readers. Most of the children have one-on-one tutoring with one of the college students. The college students try to work with the same child every time they come, but because the children come in and out of the program at will, this is not always possible. Sometimes the tutor may have two children to tutor at a time, but never more than that.

Jack (all names are pseudonyms) is a five-year-old boy who lives in the apartment complex. Even though he has spent the entire day at school, he is anxious to share the events of the day with his buddy, as Jack calls his college tutor, Mike. He turns and asks if his reading buddy is coming to read today. Even though Jack has not yet learned to

read, he and Mike have spent a great deal of time reading together. After being assured that Mike is coming, he looks through a selection of books that he and Mike have chosen, and selects a Sesame Street book about the Cookie Monster.

Paying little, if any attention, to the words of the book, he “reads” the entire story, occasionally adding, “This book just cracks me up!”

When the book is finished, he begins looking for another to read, but the tutors have arrived, and with book in hand, he rushed to meet Mike at the apartment door.

The above vignette described a portion of the America Reads program sponsored by the Department of Education in Washington DC. This program was designed to help struggling readers improve their reading skills and become more successful at reading. Any child may participate, and the tutors, for this particular program, were paid by the nearby university as part of a grant from the government. They spent 1½ hours with the children, four days a week, tutoring them for three of those days. The degrees the college tutors were seeking ranged from Political Science to Chemistry, with only one education major in the group.

None of the students had any training in working with children who had difficulty with reading. Because the grant funding came very late in the semester, the tutoring sessions were late getting started. Therefore, the college tutors were placed into the program with little training in working with struggling readers. The Work Study Funding Program at their university had been responsible for informing most of the potential tutors about the program. Some of the college students viewed this as an easy way to make a

few dollars, while others stated that they participated in the program because they liked children and wanted to help them.

Asked to supervise the college tutors while they were tutoring at the apartment complex and to help where there was a need, the researcher for this study began working for the America Reads program in the fall of 1998. While observing the college students working with the children for some time, the researcher began to question the tutors' ability to help the children improve in reading. Questions arose, such as: Was it even possible to help children improve in reading without the tutor having some training in reading? Also, how much training was considered adequate, and could just anyone help to improve a child's reading ability?

What led to this study, therefore, was a desire to determine if college students could simply be placed into a tutoring position, with little or no training and help an at-risk reader become more successful. And, would more intensive training in specific skills and strategies not only benefit the at-risk reader, but also the college student who was tutoring the child?

For answers to these questions, a review of the research commenced. Also, the researcher was interested in learning, through the literature, what components the program needed to have incorporated in order to make the time spent with the children quality tutoring time. First, though, it would be necessary to look at exactly what the American Reads Program entailed, to examine the goals of the America Reads program, and then to search for tutoring programs that worked to achieve those goals, or to design a program based on what research found to be successful tutoring.



## The Beginning of the America Reads Challenge

Both President William J. Clinton and Governor George W. Bush, of Texas, have informed educators and parents that all children will be on grade level by the time they are in the third grade. They based this need on the research provided by the Department of Education, which stated that if children have not mastered the basic reading skills by third grade, they will struggle throughout their school life, and the likelihood of them dropping out of school increases (An Overview of the Initiative,1998). Also stated in a report issued from The Department of Education (p.1), in 1994, 40 percent of fourth graders in America failed to attain the basic level of reading, and 70 percent of children fell below the proficient level of reading on the National Assessment of Educational Progress (NAEP). So how was the nation to deal with this problem? One of the ways President Clinton decided to deal with this problem with reading was to commit to the America Reads Challenge. Through this program, every person was asked to decide how he/she could help America's children become successful readers by the time they end third grade.

Several strategies were suggested as being essential to helping children learn to be successful readers. Some of these were to create more after-school, weekend, and summer learning opportunities to supplement what was going on in the classroom reading program. The report from the Department of Education stated that studies have shown if attention is focused on sustained individualized tutoring, for students who have had reading difficulties, then these students can raise their reading levels (An Overview of the Initiative,1998). The authors of this report stated that research has demonstrated that not

only will the children's reading achievement increase, so too will their confidence, motivation, and sense of control over their reading ability, due to tutoring. This tutoring can, they say, come from volunteers, peers, cross-age tutoring or professionals and still be successful. The researcher's portion of the program would be focused on the after-school tutoring, using older students as tutors.

The next question was, then, how does the government assist in bringing at-risk readers up to grade level? The Department of Education proposed that at-risk readers could be helped through the America Reads Program, and they offered this aid through four nationwide efforts:

**1) Read\*Write\*Now!** Since children seem to not read as much in the summer, this program was introduced to try to encourage children to read for at least thirty minutes once or twice a week, with an older reader, throughout the summer holiday. It also promoted obtaining a library card and learning a new vocabulary word a day. **2)**

**Corporation for National Service:** This is a grant program that has enlisted the aid of corporations, such as AmeriCorps, Senior Corps, and Learn and Serve America.

Children's reading programs were to be a high priority. These corporations made a nationwide effort to recruit colleges and universities to incorporate the program and help with managing college students and community volunteers in some of the lowest performing schools in Washington, D.C; **3) Federal Work-Study (FWS):** Most colleges and universities offer a federal work program that assists students who are in need of some financial help by providing them with part-time employment. This portion of the America Reads program funded the college and university work study programs for

students who would like to work as tutors for preschool to elementary students in reading. This program increased the college and university FWS funding by 35%, beginning in July 1997. It also waived the requirement of the college and university to match 25% of this funding, and **4) America Reads Challenge Legislation:** This legislation was proposed to launch a nationwide effort to supplement the classroom reading instruction with quality volunteer programs. The programs were to focus on after school, weekend, and summer reading. It was also supposed to increase professional development for reading teachers, family literacy programs, and volunteer tutoring. The budget allocated \$210 million for 1998.

#### The Goals of the America Reads Program

According to the Overview of the Initiative (1998), the basic goal of America Reads was to help at-risk readers improve their reading skills and strategies. The main focus of the government's program was to have all students reading at grade level by the third grade, yet the program also suggested that all at-risk readers, regardless of age, be helped. Although there was an ongoing debate as to how much of a literacy crisis the United States had (Berliner & Biddle, 1995; Goodman, 1998), there was no debate that there are children who were struggling with their reading, and there was a need for tutoring. How, then, did the government plan to help the children? The Department of Education offered five strategies to help to attain this goal. These strategies included: 1) Create more after-school, weekend and summer learning opportunities to supplement quality classroom instruction in reading; 2) Strengthen parent involvement and our nation's investment in the early childhood years so that children develop readiness skills for learning to read by

the time they enter school; 3) Develop the best practices into the school and classroom through teacher professional development, principal leadership, and strengthening Title I programs, and highlighting successful reading programs: 4) Promote greater public awareness and local partnership building through the formation of community-wide literacy partnerships; and 5) Support research and evaluation in a range of critical areas related to reading and early childhood development (An Overview of the Initiative pg.4, 1998).

The goal, and the strategies to attain the goal, is progressing at this time. The portion of the America Reads Challenge, on which this study concentrated, was the funding of the work-study program, which was the study's source for the college tutors.

#### Purpose of the Study

In the America Reads Challenge, determining the best method for tutoring the children was decided by the people providing the service, in this case, the reading department at the University of North Texas. In this program provided by the university, there had been minimal training for the college students, due to the program beginning so late in the semester, and the college students' desire to begin working with the children as quickly as possible. As a result, it would be necessary to examine components of tutoring programs, and to try to implement the components of those programs that would be most successful with the college students and the children who were to be tutored. Also, the researcher was interested in a study that would help determine if college students trained in reading skills and strategies could help to improve the scores of the at-risk readers in comprehension and vocabulary.

Therefore, this study was designed to examine the effectiveness of a tutoring program for training college students to help at-risk readers. This study measured the differences between the scores of the children who were tutored by the trained tutors and the children who were tutored by the untrained tutors, as determined by the children's performances on the *Gates MacGinitie Reading Test* (GMRT) (1989), which is designed to test the children's vocabulary and comprehension. The children were given a pre-test at the beginning of the program and a post-test at the end of eleven weeks of tutoring.

The third purpose of this study was to determine if helping at-risk readers become successful would also help the college tutors improve their own comprehension, vocabulary, and metacognition. This was determined by a pre-test and post-test for the college readers using two forms of the *Nelson-Denny* (1990) and using the Metacomprehension Survey at the beginning and the end of the study.

#### Statement of the Problem

There are many different types of tutoring programs being used throughout the nation. The variety of training for these programs is as varied as the number of tutoring programs. Along this continuum of programs is also a range of time spent on the training of the tutors. Some programs spend hundreds of hours per tutor, while other programs spend little to no time on training the tutors. This researcher wanted to know if the effectiveness of the training made any difference on the gains an at-risk reader could produce on a standardized test for comprehension and vocabulary. Therefore, the purpose of this study was to determine the effectiveness of training for college students, tutoring at-risk readers, by comparing the results on comprehension and vocabulary assessments

for the children tutored by college students who are trained in skills and strategies for reading and for the children who were tutored by college students with minimum training in the field of reading. Next, this study looked at the results of training for college students by comparing the results from a comprehension and vocabulary assessment, given to both the control and the experimental groups at the beginning and the end of the study. Lastly, the study looked at the effects of this training on the college students' awareness of skills and strategies used while reading (metacognition) by comparing the scores on a metacognition questionnaire at the beginning and the end of the study.

#### Major Research Questions

This study was designed to provide data for comparison on the effects of training of college students to tutor at-risk readers. The study also provided data for the effects of training in the area of reading on the metacognition of both the college tutors and the children being tutored. This study will address the following questions:

Research Question 1: Will training on reading skills and strategies help improve the college tutors' comprehension and vocabulary scores, as measured by the scores on the *Nelson-Denny*?

The *Nelson-Denny* is a test of comprehension and vocabulary. Two forms of this test were utilized in order to determine if training for reading skills and strategies have any effect on the college tutors' scores. The college tutors took one form of the test in September and another form of the same test in December. These test-retest scores were compared to determine if the college tutors improved in any area on the comprehension and vocabulary portion of the test.

Research Question 2: Will training college tutors on reading skills and strategies help improve comprehension and vocabulary scores of the children being tutored, as measured by the *Gates MacGinitie Reading Test* (GMRT)?

Two forms of the GMRT (forms K and L) were utilized in order to determine if the children being tutored by the college tutors with training in the field of reading skills and strategies improved over an eleven week tutoring session. These scores were then compared between the two groups of children, those tutored by the college tutors with training and those tutored by the college tutors with minimal training. This information was used to provide the data to evaluate the effectiveness of the training.

Research Question 3: Will training college students to be more aware of a reader's skills and strategies used before, during, and after reading, help the tutor to become more aware of his/her own reading skills and strategies (metacognition)?

Using the Metacomprehension Strategy Questionnaire, at the beginning of the study and again at the end of the study, both the college students and the children answered questions about their awareness of skills and strategies used before, during, and after reading. The answers to these questions were used to determine what skills and strategies the tutors were metacognitively aware of and if there was any change in the metacognition of the college tutors. Lastly, the questionnaire was used to help determine if there was more awareness of the skills and strategies being used before, during, and after reading by the group of tutors in the experimental group than those tutors in the control group.

## General Hypotheses

The design of this study was based on hypotheses that will be restated in testable form in chapter three. This study was designed to test the following null hypotheses:

Question 1:

**Null hypothesis 1:** No difference will be found in the reading comprehension scores as measured by the *Nelson-Denny*, between the college students who were given minimal training and the college students who were given extra training in the areas of comprehension, vocabulary, and metacognition.

**Alternate hypothesis 1:** The improvement on the reading comprehension scores, as measured by the *Nelson-Denny*, will be greater for the college students who received extra training in the areas of comprehension, vocabulary, and metacognition than the college students who received minimal training.

Question 2:

**Null hypothesis 2:** No difference will be found in the reading vocabulary scores as measured by the *Nelson-Denny*, between the college students who were given minimal training and the college students who were given extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 2:** There will be greater improvement on the reading vocabulary scores, as measured by the on the *Nelson-Denny*, for the college students who received extra training in the areas of metacognition, comprehension, and vocabulary than the college students who received minimal training.



Question 3:

**Null hypothesis 3:** No difference will be found in reading comprehension, as measured by the Gates MacGinitie, for the children who were tutored by the college students with minimal training and the children who were tutored by the college students with extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 3:** There will be greater improvement in the area of reading comprehension, as measured by the Gates MacGinitie, for the children who are tutored by the college students with extra training than for the children who are tutored by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Question 4:

**Null hypothesis 4:** No difference will be found in reading vocabulary, as measured by the Gates MacGinitie, for the children who are tutored by the college students with minimal training and the children who are tutored by the college students with extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 4:** There will be greater improvement in the area of reading vocabulary, as measured by the Gates MacGinitie, for the children who are tutored by the college students with extra training than for the children who are tutored by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Question 5:

**Null hypothesis 5:** There will be no differences of scores on the metacognition questionnaire, the Metacomprehension Strategy questionnaire, between the college students who had minimal training and the college students who had extra training in the area of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 5:** There will be greater improvement on the metacognition questionnaire, the Metacomprehension Strategy Questionnaire, for the college students who had extra training in the area of metacognition, comprehension, and vocabulary than for the college students who had minimal training.

#### Significance of the Study

A great deal of research has dealt with the reading skills of young children. There is no skill more basic to children's success in school, yet it has been shown that children who struggle with reading in the first grade will most likely have problems with reading for quite some time. Therefore, it is important that children who struggle with reading are helped as early as possible in order to keep them from continuing to struggle throughout their school years. One of the most important aspects of any reading program is that children with problems in reading be identified and prescribed the right help to prevent failure. The earlier this intervention, the more successful it seems to be (Clay, 1998; Taylor, Hanson, Justin-Swanson, & Watts.1997). The importance of this early intervention and the success of this intervention, though, depend on the components of the intervention program.

Birman, et al. (1987) state that one out of every nine children enrolled in an American elementary school in 1987 was served by a pull-out program such as Chapter I, which is defined as a specific reading program designed to look at the individual needs of a child and specifically target those needs. In order to qualify for this type of program, the child is first given a battery of tests and if it is determined that the child needs this specific help, the child is then “pulled out” of the regular classroom reading program and placed in a classroom with four to five other children receiving the same type of aid. In Allington’s and Walmsley’s book, No Quick Fix (1995), Dyer and Binkney stated that the problem with this type of pull-out program was that not only was this an expensive way of trying to aid at-risk readers, due to the small number of children with whom the teacher was working at one time, it was usually not successful for most children .Yet, many schools continue these often-unsuccessful pull-out programs to work with at-risk readers (Kennedy, Birman, & Demaline, 1986).

One reason for the lack of success seems to stem from the fact that most of the at-risk readers usually miss some of the most important aspects of a reading program by leaving the classroom during the allotted time for the classroom’s reading program. Also, many of the children, who are placed in a pull-out program, are not successful while in the pull-out program, yet, end up spending a great portion of their school years in the same unsuccessful programs, some as long as six years. And, the number of children being placed into these programs seems to be growing. Perhaps the most difficult problem for children in pull-out programs stems from the fact that many schools want to wait until children are identified as in need of remediation, trying to remedy the problems,

instead of looking at prevention (Pikulski, 1994). Therefore, the value of some special pull-out programs, such as the Chapter I programs, or the special education programs, or even retaining children are being questioned as to the effectiveness of the programs and of retention.

Researchers have investigated schools where older children tutor younger children (Juel, 1996; Taylor, et al., 1997) and research has been performed to look at the success of tutoring programs, such as Reading Recovery, the Howard Street Tutoring program, and Book Buddies (Wasik, 1998). There are other tutoring programs being used throughout the United States, working with at-risk readers, and, according to Wasik (1998), many of these tutoring programs have also been found to be successful. The argument, then, is not if tutoring can be successful, but what helps to make tutoring programs successful.

What needs to be included as important components has also been extensively researched (Clay, 1985; Juel, 1991; Pikulski, 1994; Topping, 1998; Wasik, 1998). Therefore, the components of a successful tutoring program should model some of the successful reading intervention programs. In 1981 and 1984, Bloom reviewed several studies which showed that children who had one-on-one tutoring scored about two standard deviations above students receiving conventional classroom instruction. He stated that one-on-one tutoring was one of the most effective forms of instruction (1981). This may be due to the amount of time the tutor spent with an individual child, focusing only on that child, unlike the special education classroom where the teacher was dealing with many children at once.

What are some of the components found to be successful in the one-on-one tutoring program? One common strand running through these programs dealt with training of tutors. Topping stated (1998) that training is one aspect of a tutoring program that was especially important, in order for the tutor or the child being tutored not to be set up for failure. He added that the training, support, and monitoring should focus on the tutoring method and this should be outlined, scaffolded, and monitored throughout the program. Cunningham and Allington (1999) suggested that there really was not a single approach in reading that worked for all children, but there are certain components of reading approaches that are successful for most children. In a tutoring session, where the tutor was working with a child one-on-one, the focus must be not only what skills and strategies the child needed help with, but also, what approach worked best for that child. How would a tutor know what was best for the child? Invernizzi, Juel, & Rosemary (1997) noted that the tutoring program should actually be made up of what they called a key triad, in that there was not only the child and the tutor, but a reading coordinator. This coordinator, which some called the reading specialist, must provide on-going support for both the child and the tutor. This person must also assess the child being tutored, which may consist of both formal and informal assessment, and train the tutors. Topping cautioned (1998) that tutors were not to be viewed as teachers with a watered down curriculum. If one was to take that approach, then the whole point of tutoring had been missed. Yet, he continued, it was important that the program supported the instructional efforts of the teachers. Although there were assessments done before and

after tutoring sessions, it was the classroom teacher who probably was best able to assess the areas of strengths and weaknesses of the child being tutored.

The value, then, in this researcher looking at successful tutoring programs was important. Although there were many successful tutoring programs on which this study could model itself, there were components of many of these that would not work for the particular tutoring needs of this study. For instance, the Reading Recovery program had many components that could be implemented and was an intense tutoring program for about the same amount of time this study would allocate for the research, but the tutors for Reading Recovery were trained teachers, the training was expensive, and the training took a great deal of time. Other tutoring programs used school age children to tutor other children, and the teacher was in contact with the tutors throughout the entire school day. Yet, for this study, no school-aged children would be tutoring.

What then was feasible? The next step was to look at many different tutoring programs and research and try to determine what, if any, components of successful programs might prove successful for the training of the tutors in this tutoring program. Therefore, the significance of this report should provide an examination of the change in the college students' and the children's comprehension and vocabulary scores on standardized tests, helping to determine if this training was effective for both the college students and the children being tutored.

#### Definition of Terms

For purposes of clarity and consistency, the following definitions are provided:

**Comprehension**-deriving meaning from the material that has been decoded (Coles, 1998).

**Metacognition**-knowing about cognitive skills with enough understanding of these skills that one can talk about when and how to use specific skills and what these skills accomplish, and the ability to monitor these cognitions (Forrest-Pressley & Gillies,1983).

**Social constructivist**- a philosophy in which the emphasis is on learning as a process through language, which includes both written and oral language. The skills and strategies are usually taught through the literature used in the classroom (Raphael & McMahon, 1994).

**Training**-to make proficient by instruction and practice (The Lexicon Webster Dictionary, 1980).

**Tutor**-a person who is privately instructing another. (The Lexicon Webster Dictionary, 1980).

**Vocabulary**-a collection of age and grade appropriate words used in a book, in speech, in writing, etc. (Harris & Hodges, 1995).

### Assumptions

The amount of time spent on tutoring can vary greatly according to what tutoring programs were used. It was assumed that sufficient time was given for improvement in reading skills and strategies. It was assumed that both the *Nelson-Denny* and the *Gates-MacGinitie Reading Test* were valid and reliable measures for reading comprehension and vocabulary. It was also assumed that the survey on metacognition was reliable and

measured what it was intended to measure. Lastly, it was assumed that the sample was equally distributed in sex and ability.

### Summary

Chapter I included background of the problem and information about the America Reads Challenge. It also included the problem that arose from the America Reads Challenge, namely the effectiveness of training. The purpose of this study was to examine the training of college students. The statement of the problem, major research questions, the general hypotheses, the significance of this study, terms that needed to be defined and the assumptions were also included.



## CHAPTER II

### REVIEW OF THE RELATED LITERATURE

#### Introduction

The focus of this chapter is to determine what are important concepts, theories, strategies and skills for the researcher to include in a model for training college tutors. The researcher wanted the tutors to be aware of what was important to include in a tutoring session. The researcher also wanted the tutors to understand why it was important to discuss and include certain concepts, theories, strategies, and skills to help at-risk readers become more successful.

In this chapter, the focus was on what studies revealed about different types of tutoring programs, how these tutoring programs helped at-risk readers, what had been determined as being important for successful tutoring programs, and what this study researched in order to determine if the tutoring program that the researcher developed for at-risk children would also be successful.

A great deal of research has dealt with the reading skills of young children. There is no skill more basic to children's success in school, yet it has been shown that children who struggle with reading in the first grade will most likely have problems with reading for quite some time (Clay,1998). Therefore, it was important that children who struggle with reading are aided as early as possible in order to keep them from continuing to

struggle throughout their school years. One of the most important aspects of any reading program was that these children be identified and prescribed the right aid to prevent failure. The earlier this intervention, the more successful it seemed to be (Clay, 1985; Taylor et al.1997). Loyd (1978) commented that children in the third grade who were significantly behind in reading skills would have little chance of graduating high school. So, reaching at-risk readers early was vital to the children's successes and failures later in their school lives.

The importance of this early intervention and its success depend on the components of the intervention program. What needed to be included as important components had also been extensively researched (Clay, 1985; Juel, 1991; Pikulski, 1994; Topping, 1998; Wasik, 1998). Therefore, the components of a successful tutoring program should model some of the successful reading intervention programs.

#### Theoretical and Philosophical Basis for the Study

Several components considered important in helping to create a successful tutoring program have also been written about and researched. One component was the philosophy of a tutoring program. One such philosophy was that of Marie Clay, that at-risk readers could be helped. For instance, Clay (1998) stated that "children learn to be constructive, problem-solving doers and thinkers, each working towards more complex ways of responding. They initiate, construct and actively consolidate their learning as they interact daily with their own special worlds" (p.3). This was important for the tutors to understand. On the other hand, so was the social aspect of the philosophy of reading, in that the children were active in constructing their cognitive understandings. The

advocates of social constructivism stated that a child's development was constructed, enhanced, and facilitated by peers and the more "knowledgeable knower" (Vygotsky, 1978). Also, it was important that through interactions with the more knowledgeable knower, children will be facilitated in the shared understanding of meaning. This was one reason why a tutoring program could be so successful. It was this one-on-one social interaction between the tutor and the tutee that helped to push the child's cognitive development. Gee (1998) stated that "cognition was not an individual process, but the result of a social activity, since the existing stock of knowledge exceeded the range available to any one individual" (p.83). Therefore, the tutor must have some knowledge of the skills and strategies upon which children needed to focus, and be able to facilitate this learning. In addition, it was important for the tutors to understand that the child could not be expected to know how to achieve all their reading goals, and neither would the tutor. This would be an unrealistic expectation. Therefore, being the child's more knowledgeable knower, did not mean the tutor would always know what to do in order to help the child and that this was when it would be necessary to ask for the aid that would be provided by the reading specialists. Since only one of the tutors for this study came from the field of education, most tutors had little, if any, experience with the methodology and perhaps the philosophy of what was considered important for the program. The tutors needed to know and even believe in their importance to not only the program, but to the children. There was a need for a bond to exist between the child and the tutor, a sense of trust.

Vygotsky (1978) stated that there must be an important connection between the child and the more knowledgeable others (in this case, the tutors) in order for cognitive development to occur. Vygotsky added that it was important that the child be at the top of the zone of proximal development (ZPD) during this collaboration of learning. According to Vygotsky (1978), the zone of proximal development, or the ZPD, was, “the difference between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p.86).

In other words, the ZPD was the area in which children could not solve problems independently, but with help or assistance from a more knowledgeable knower, these problems could be solved, and with practice and this assistance, the child would eventually be able to do this independently. Vygotsky (1978) added that with this interaction and the assistance of the more knowledgeable knower (the tutor), the abilities the child demonstrated during this time were in the process of being internalized. Gee (1998) agreed with Vygotsky’s theory that cognition was not an individual process, but the result of a social activity, since the existing stock of knowledge exceeded the range available to any one individual (p.83). It was important for the tutors to understand that the child could not be expected to know how to achieve all their reading goals. Therefore, the tutor must have some knowledge of the skills and strategies upon which the child needed to focus, and be able to facilitate the learning for the child. The conclusion to this, therefore, was that training was a necessity and the training must be on-going.

The researcher determined it to be important that the tutors also understood that the literacy lessons of the tutees should not be broken down into small pieces of skills drilled into the children through the use of worksheets the teachers may send home or through worksheets the tutors may create. Then the tutors had to be made aware of the importance of using literature with the children. Coles (1998) stated that there were three features important to a reading environment: textual, conversational, and instructional. Each of these features were considered to be essential for influencing the process of reading. The textual features were the words, illustrations, and graphs that are found in the reading material. Each of these must be noticed and used when trying to understand the context of the literature. Coles indicated that the conversational part of this learning environment was the communication that goes on between the child, with other children, and between the child with the teacher (tutor) while reading the book. It was through this type of discourse that the tutor could elicit a more elaborate discussion and could discover more of what the child actually knew and understood. It was through the use of this particular feature that the tutor should be able to build a good trusting relationship with the child. The child must believe he/she was in a risk free environment in order to do as well as he/she was capable of doing. Finally, the instructional feature should include the plans a teacher (tutor) had for the learning activities that would enhance the child's understanding of the book, or any strategy the tutor may want to implement into the lesson (Coles, 1998). All three features would be implemented into the tutoring program.

#### Tutor Training

Keith Topping (1998) warned that a tutor must be trained in order to not only keep the child at the top of what Vygotsky (1973) called the child's zone of proximal development (ZPD), but to also keep the tutors from being outside of their own zone of potential development. In other words, the tutor could not aid the child's cognitive development if the tutor did not understand how to do this. The tutor needed to understand the child and the specific literacy strengths of that child in order to provide the mediating and facilitating of the child's literacy learning. According to many, there were important aspects of tutoring that should be included in the training (Clay, 1998; Pikulski, 1994; Topping, 1998; Morrow, 1992; Wasik, 1998). The trainer/reading specialist in this program could not expect that if the tutors do just anything with the children that reading skills would automatically improve. In order for the tutors to be successful, the program had to be carefully planned, modeled, and implemented. The focus needed to be on the people implementing the program, (the reading specialist, and the tutors), in order for the tutoring sessions to be successful. Therefore, it was important for the trainer (specialists) to consider the goals of the program, to look at how much the tutors already knew, and then to decide what were the most important areas to cover. The training was considered by many to be of the utmost importance (Clay, 1998; Pikulski, 1994; Topping, 1998; Morrow, 1992; Wasik, 1998).

Some research has examined children's tutoring programs, and the training for these tutoring programs. One such study (Taylor, Hanson, Justin-Swanson & Watts 1997) evaluated a seven week enrichment reading intervention program, implemented into a second grade class. Cross-aged tutoring was a part of this program, with children of one

age, fourth graders, tutoring children of another age, second graders. The enrichment portion of the program was incorporated into the classroom instruction, and the tutoring was performed twice a week for 25 minutes. There were three criteria the tutors must have met: 1) they were identified as being behind in their reading skills and therefore were likely to benefit from the tutoring sessions themselves, 2) there could not be a scheduling conflict with other enrichment classes, and 3) they could read a basal reader on a 3.1 level with 85% word accuracy. In other words, the tutors were at-risk readers as well, and it was hypothesized that the students would benefit from working with the second graders. The children selected as tutors in the Taylor et al. study were fourth graders in the same school as the second graders who were to be tutored. Before the program began, the fourth graders met for 14 weeks, 45 minutes a day, with a teacher or the researcher who modeled strategies that could help the younger children. This was considered an important aspect of the study for the participants and the researchers. During this time, the tutors and the researchers or teachers discussed word recognition strategies and the tutors kept a journal of different strategies as a reference. These fourth graders also practiced reading the books the second graders would be reading. The tutors, along with the teacher or researchers, planned an extension activity focused on comprehension and based on a picture book the fourth graders had selected to read with the second graders. Every Wednesday and Thursday, the fourth graders tutored the second graders for 25 minutes. There was a debriefing, with the instructor, after each of the tutoring sessions, in which the students would discuss what they had done with their second graders and suggestions were given as to how to handle any problem they may

have had. Again, the importance of on-going training was an important aspect of the study.

Once the seven week intervention program ended, the cross age tutoring continued for up to 21 weeks. The end of the program assessment consisted of oral reading to the project assistant. The researchers were looking for 90% accuracy for word recognition. According to Taylor et al., the students were also given the Metropolitan Achievement Test (MAT7). The results of the test showed that the second graders, who were a part of the intervention and included in the tutoring group, scored significantly higher on the MAT7 in the fall. They also found that the students, who were in the intervention, plus the tutoring group, also did well on the oral reading portion of the assessment. Out of the twelve children, nine scored at the 90% accuracy for word recognition in their oral reading.

The fourth grade tutors also progressed. All twelve were reading below grade level at the beginning of the program, and by May, all twelve could read from the end of the fourth-grade basal with at least 95% accuracy (Taylor et al, 1997). The importance of this study, from this researcher's point of view, was the success of the student being tutored. The results of this study indicated that successful tutoring did not have to be with a teacher, but that the training sessions were an important part of the program.

Another study, ( Morris, Shaw, and Perney, 1990), gathered data collected from a treatment and a control group to determine the effectiveness of an after school neighborhood tutoring program. A supervisor was paid to monitor the tutors and to help write lesson plans. The tutors ranged from undergraduate college students to suburban



mothers to retirees, and training was a part of the program. The researchers screened and pre-tested 50 second and third graders in an inner city area of Chicago. They looked at word recognition measures, spelling, and basal reading passages. The students were matched on a word recognition score adapted from a standardized test. They were then randomly assigned to one of the two groups. The treatment consisted of one-on-one tutoring instruction in reading for an average of 50 hours during the school year. Students were then administered a post-test on the same reading and spelling battery that was used for the pre-test. An overall positive effect for the tutored group was found in comparison to the untutored group. The largest gain for the tutored group was in basal passages that required oral reading. Here the tutored group outperformed the control group in what was considered a substantial amount by the researchers (Morris et al., 1990).

The same researchers conducted a similar study the next year, with similar results (Morris et al., 1990). In this second study, the children who were tutored scored better on the timed and untimed assessments for word recognition, on basal word recognition, on basal passage assessment, and spelling. The researchers reported that in the experimental group for this study, one third of the students who were tutored were reading at grade level by the end of the year, another third gained about a year, but were still not up to grade level, and the last third had improved, but at a slower rate. Yet, in the control group, 50% of the children still reading at a slower rate made limited progress, with only one child reading at grade level by the end of the year. The other half made gains of a year but were still not up to grade level (Morris, 1990). This study was important in that it showed that the tutoring program could be duplicated with similar results. The tutors

were successful in helping at-risk readers, with a supervisor there to monitor and help with planning.

Invernizzi, Juel, and Rosemary (1997) investigated a volunteer tutoring program. The program was developed to promote literacy development of young children and used volunteers from the community to tutor the children. A volunteer recruited the community members, business owners, and other interested parties to help tutor. The volunteer tutors were trained three times a year during two-hour training sessions. Video-taped tutorial lessons and walk-through lesson plans were used to help train the volunteers. The reading coordinator at each elementary school was also available to provide additional training and support for the tutors. Assessment was provided twice a year, and lesson plans were coordinated with the classroom teacher's literacy program. The children were primarily first grade students, and the tutoring sessions were 45-minute sessions, twice a week. Invernizzi et al. found that with each year of the program, there were significant increases on the measures of alphabet, phonemic awareness, and word recognition, using the Wide Range Achievement Test and the Diagnostic Survey. The children were also tested on read-alouds, using the children's book Little Bear, since "it had been found to be a prototypical milestone book for first grade reading" (p.308). The researchers found that the children who were tutored were able to read at better than 90% accuracy while unassisted. These researchers concluded that although the first year data showed there was a need for refinement of certain components of the program, such as beginning tutoring earlier in the year, lesson plans including more word study, and volunteer training including more small group, building-level seminars (p.308), and that

some children needed more than a year of tutoring, the program was considered successful by the volunteers, researchers, and the school district.

Connie Juel (1996) conducted a study in which she had student athletes tutor children at an elementary school. These twenty athletes were those who had scored poorly on the *Nelson-Denny* reading test. The twenty children selected qualified for free breakfasts and lunches, many came from single parent homes, they were in the lowest reading groups, and they were considered candidates for retention, which qualified them as at-risk. The children were tutored for 45 minutes twice per week. The tutors were engaged in reading a wide variety of self-selected novels, writing in response journals, and learning how to teach reading, while tutoring the children. The success of the program was proven through the progress of the children, most of whom were moved into higher reading groups. Only two of the children being tutored were retained in first grade. The following year, the program used a formal evaluation. The district administered the Metropolitan Readiness Test (MRT) in September, and the Iowa Tests of Basic Skills (ITBS) were administered in April. The children being tutored rose from the 26<sup>th</sup> percentile to the 41<sup>st</sup> percentile when the mean scores were used. Informal data provided by the parents, the teachers, and the principal, indicated that in addition to improved reading abilities, the children's confidence and self-esteem of the children also seemed to improve.

All of these programs, which were considered successful by the researchers, stressed the importance of initial training, and of continued training throughout the program. Not only should tutors be trained, there are certain skills and strategies that

should be incorporated into the training, so the tutors could help the at-risk readers improve.

According to many of the cited studies, it was also important that college students working as tutors were instructed in the appropriate use of literature to use with at-risk readers. In order to have this happen successfully, the tutors, for the current study, needed to understand the social constructivist philosophy of reading and to have an explanation as to why the use of literature was preferred by the researcher. Yet there was also research to illustrate the importance of reaching at-risk children as early as possible to help improve their chances of becoming successful readers.

#### Early Reading Intervention

For many years, researchers have attempted to help administrators understand that helping children with their reading before they fall far behind their peers was much better, not only for the at-risk readers, but was the most cost efficient for the school districts. Many studies concentrating on early reading intervention have looked at children in the first grade. This seems logical since it was most often in the first grade when there was a great deal of concentration on beginning readers. The primary focus, then, of early reading intervention was to work with the first graders who were considered at risk of falling behind in their reading skills. In 1993, Wasik and Slavin found that one-on-one tutoring benefited most children struggling with reading. The researcher needed to know what would be best for the children struggling with reading who were to be tutored in this study.

There were tutoring programs that were incorporated into the school day. One such early tutoring intervention that targeted at-risk readers in this way was the Reading Recovery program. For several years many schools have implemented the Reading Recovery program as an additional part of the first grade curriculum. This early reading intervention program targeted at-risk readers in the first grade and focused on accelerating these emerging readers, instead of trying remediation after the reader had failed to become successful. The tutors for this program were certified teachers who have received specialized training in the Reading Recovery approach. Unfortunately, the training for Reading Recovery lasted for a year and was on-going professional training could last for several years and all of this was rather expensive. Also, included in the Reading Recovery tutoring program was the intense concentration on five activities that were to be incorporated into the day's lesson. The first activity was to read a familiar story. In the second activity, the child read a book that was introduced the day before, while the teacher took a running record, which was an assessment that aided the tutor in deciding which skills the child was still having problems with. The third activity was to work with letter activities, although this could actually take place several times throughout different lessons. The fourth activity was sentence or story dictation in which the child told the tutor a sentence or a very short story while the teacher recorded what was being said. The story was then read back to the child who was helped at writing it correctly. This was then written on strips of paper and cut into individual words, giving the child something to reconstruct. The fifth and final activity was the reading of a new book. This program

has been successful for many school districts, but the time and expense was more that this training model could afford.

Another early intervention reading program was Success for All. Pikulski (1994) stated that this program was designed to work with children in grades one through three. The children were heterogeneously grouped, except for their reading classes, which were about ninety minutes long. During reading the children were grouped across all three grades. For those children who were still struggling and needed more individualized help, there was a 20-minute tutoring session in which the classroom lessons were supplemented. Most often the child's reading teacher was also the tutor.

Pikulski (1994) also studied the Early Intervention in Reading (EIR), which was also a first grade intervention program. Five to seven of the children in a first grade class, who were having the most difficult time with reading, were tutored by their teachers for an additional 20 minutes of reading instruction. These children were in small groups that concentrated on quality literature, developing phonemic awareness and learning to use phonics, and to use syntactic and context clues while reading. The children also had time to read and write. This program was an in-class tutoring; the children were not pulled out of the regular reading class for remediation or tutoring. Although it was like the Reading Recovery program in that it focused on helping at-risk children become more successful readers, it was less costly and worked with small groups rather than one-on-one tutoring.

A fourth early intervention reading program was the Boulder Project. This program focused on reorganizing and modifying Chapter 1 classes (Pikulski, 1994). The children were placed into small groups of about three, and the teacher worked with them

for about thirty minutes a day. The focus was on repeated readings, teaching word identification skills, writing words from word pattern instruction, and writing about their choice of topics. An aide worked with the other children who were not in the tutoring session at that time. This program focused on very small group instruction and was organized as a pull-out program.

It was an important goal of each program to prevent at-risk children from falling behind their peers in reading. Studies showed that the tutoring in each of these programs was and still is successful. Some of the programs' costs were greater at implementation, or used Chapter 1 teachers and, therefore, was not as applicable to the regular classroom. Many school districts found that one-on-one tutoring was not feasible for their classrooms due to the number of children in need of this help and the lack of tutors.

In conclusion, tutoring children early in their reading programs seemed to be successful in a number of different programs (Clay, 1998; Taylor et al., 1997; Wasik, 1998). What was important about each of the programs was that the at-risk readers were diagnosed early and improved.

Pikulski (1994) looked at the above mentioned five early reading intervention programs and came to several conclusions as to what good programs should include. There was a planned program for the children. Also, the amount of time spent in the tutoring sessions was an important factor. Children who were struggling in reading should be spending more time with reading instruction, yet what was happening in many schools was that the at-risk readers were spending more time with an aide or working on dittos and workbooks. Each of the programs mentioned earlier in this paper spent at least 20

minutes working with the child, in addition to the time spent in regular reading classes. So basically, what was important for the success of each of these programs seemed to be the focus on what was being taught. The instruction for each of the programs was carefully planned. The tutoring coordinated with what was going on in the children's classroom reading programs. Pulling struggling readers out of their regular classes for a different or special program and objectives seemed to lead to only more confusion and a lack of transference of the strategies or skills taught in either class.

Literature found to be interesting to the children was used in each of the previously mentioned tutoring programs to help motivate and interest the children in working at improving. The choice of books was important to all the programs listed above. For instance, predictable and easy to read books were used. Walker & Morrow (1999) noted that one focus of tutoring was to help children become fluent as readers. In order to do this, familiar texts were important. The children needed to be able to read familiar books so their focus was on the meaning, and not on how to decode new words. Hence, this was one reason that Reading Recovery and other programs reread familiar books at the beginning of their tutoring sessions. This helped the children to focus not only on word identification, but, more importantly, meaning. Phonemic awareness and phonetic instruction were also a part of successful programs, as well as syntactic and context clues to help figure out unknown or misread words. Writing was also incorporated into each program. For many years, the important connection between reading and writing has been researched and written about in numerous articles and



books. There is no doubt that this was an important component of all of the early reading intervention programs or tutoring programs addressed above.

### Using Literature to Teach Literacy Skills

Because the researcher of this study thought it was important to select literature that would be enjoyable to the children being tutored, a review of the importance of using literature in a tutoring program was performed. What does research say about the importance of using literature with children? Goodman (1998) stated that reading is a process of constructing meaning from text. In order to do this, Goodman reported, the readers must make use of their knowledge of cues. These cues included letter patterns, letter-sound relationship, recurrent spelling patterns, articles (the, a, an), syntax patterns, whole known patterns, personal information and similar language and experiential knowledge. Goodman also contended that it was important for the reader to understand that the meaning “is not in the text”, but that meaning came from the thoughts of the author and the reader who read the thoughts of the author and transacted with the text for understanding. Coles (1998) included in the reading process, that readers are constantly were working towards meaning through predicting, inferring, confirming.

Louise Rosenblatt (1983) has long been known for her theory of the transaction between the reader and the text in order to construct meaning. Her theory suggested that meaning came from the reader’s prior knowledge and the transaction the reader had with the text. This transaction may vary somewhat with individual readers due to their prior knowledge, but the transaction was important. The reader should understand that just because his/her interpretation of the text may vary somewhat from another reader’s

interpretation, did not necessarily mean that one reader's understanding of the text was right and the other reader's understanding of the text was wrong. They were just different. As long as the reader could come back to the text and explain why the text was understood as it was, there may be justification in that understanding.

This was what Dewey called a warranted assumption. Each reader must be able to explain his/her own interpretation of the reading, using the text, itself, along with the reader's own schema. Gee (1998), added to Dewey's warranted assumption theory by explaining that there could be a multiplicity of interpretations of reading, but that the reader should not interpret this to mean that "anything goes" (p.101). Gee advocated that there would always be this multiplicity of interpretations because of different levels of how the text was interpreted, how "deeply" one may get into interpreting the text, and to the readers' individual schemata. Then there were also the interpretations that were just wrong. Gee elaborated by explaining that readers must understand that sometimes their interpretations were simply wrong and must then have it explained to them as to why this was wrong. These mixed interpretations come from the variety of schemata and experiences brought to the readings and discussions. Yet, there are strategies that could be taught to the reader in order to help construct meaning from the story.

Goodman stated (1984) that "reading requires an overt decision to activate appropriate strategies and schemata" (p.833). This was not done through the use of worksheet after worksheet with a story thrown into the lesson every now and then. Therefore, since the tutors were to use literature with their tutee, it was vital they understood the importance of the transactional theory of Rosenblatt (1983), the

construction of meaning as discussed by Goodman(1984), and the importance of the environment in which they would be working that Coles (1998) determined was also necessary. It was also important that the tutors understood how to take literature and create their individualized lessons for the child they were to tutor.

Reading literature in the classroom was not a new phenomenon. As a matter of fact, using literature in the classroom has been found to be successful as far back as 1791, when a German educator, Friedrich Gedike, proposed that educators could take the boredom out of the teaching of reading by “immediately occupying the children with whole ideas...” as cited by Coles (1998). It seemed Gedike disagreed with the idea that slowly going from letters to sounds to blends was the best way of progressing with the reading process. Then, again, in 1837, Thomas Palmer, from Pittsford, Vermont, stated that due to the way the reading process was taught, “ the heavy, dull, vacant countenances of the pupils,” being taught with the alphabet method of reading produced children who were not engaged in the meaning of the books because of the attention to the pronunciation of the words...” as cited by Coles (1998). Yet, using novels to teach reading skills and strategies was also not a new phenomena (Baumann & Ivey, 1997; Walker & Morrow, 1999; Routman, 1991).

Standardized testing has been used by the school districts for quite some time, yet what was beginning to be seen across the nation was the use of novels to teach reading skills and strategies, and the ability of the students to do well on standardized testing without the use of worksheets that were geared towards teaching to these tests. (Routman, 1991). Even so, many educators were concerned about the results of these standardized

tests. These concerns were contributed to the teachers putting away the novels and using test formatted worksheets, such as those used for the Texas Assessment of Academic Skills (TAAS) test and practice TAAS tests bought from publishers to prepare the students for the state mandated tests. This was a concern of the tutoring program, as well, for these children would be taking the TAAS test or other standardized test given by their school districts.

Although some state-mandated tests were being revamped to the format of literacy-related standardized tests, such as in Michigan, many states were still using tests that break reading down into sub-skills to be analyzed and given a grade. Studies in the last few years have examined using literature to teach skills and strategies versus the worksheets and practice tests (Allington, 1983; Langer, 1995; Morrow, 1992,). Some researchers and educators have become interested in using a literature-based curriculum in their classrooms and many are doing this through a procedure or technique of readers responding to literature in book talks and literature circles, (Raphael & Heibert, 1996; Rosenblatt, 1983; Routman, 1991,). Even though responding to literature is not a new phenomenon, it may still be something many teachers do not feel comfortable doing in their classrooms. This may be because of the number of years teachers relied on the basal reading curriculum to give them the questions the editors of the series thought to be important, or because of the added stress the administration placed on the teachers to have all students passing mandated tests. If teachers were asked if they used a reader's response forum in their classroom, many would probably answer yes, even if all they have asked their students to respond to were simple knowledge or detail questions. This was

not necessarily the fault of the teachers who were trying to use the discussion groups in their classrooms, but the training given these teachers usually was short workshops with very little, if any, follow-up training. In order to use this type of forum, training is important, for not only was this a teaching method, it involved a philosophy that teachers must understand in order to do well (Goodman, 1998; Raphael, 1994). The transaction a student has with literature in a classroom environment was exactly the same type of transaction the researcher wanted for the children being tutored. So, it was necessary to include what a reader's response forum consisted of and the theory behind it.

Therefore, should a tutoring program for at-risk children, using the reader's response forum be any different than a program for children in a regular classroom using a reader's response forum? There have been many labels that have been attached to children for all kinds of reasons. The latest seems to be at-risk. What exactly did it mean for a child to be labeled "at-risk"? Gutknecht and Gutknecht (1991) reported that the label of at-risk has been given to children by educational policy and decision makers because these children were expected to have or were expected to have experienced difficulty or even failures as learners. Usually they were identified as being at-risk of retention or dropping out of school. What else could contribute to becoming labeled as at-risk? It may be because the child came from a low socio-economic home, or the child came from a one-parent family, or the child had not yet passed a state mandated test, which concluded the child was not reading on grade level, as used in the state of Texas.

What did that mean for the educating of these children? Gutknecht and Gutknecht (1991) stated that the majority of children who were labeled at-risk, even after falling

behind, could catch up when given appropriate instruction. They also reported that children who were considered at-risk could be taught to perform as well as those children who were not considered at-risk. The children also thrive on “intellectual challenges, not on low-level basic/remedial work” (p.11). Cunningham and Allington (1999) emphasized that the programs that were successful for good readers could usually help the at-risk readers as well. In other words, instruction that focused on thinking and responding to what has been read, worked for the good readers and was important for at-risk readers as well.

In 1993, Block was interested in discovering if systematically teaching diverse children reading and thinking skills through literature would help these children with vocabulary and comprehension. Block implemented a yearlong program for 352 children from 48 classrooms, using grades 2-6. The experimental groups were taught the same way, with 1½-hour lessons taught by research assistants twice a week for 32 weeks. Through the lessons, the children had the teachers modeling and explaining a cognitive strategy through the use of written strategy application guides and then the application of the strategy through the reading of a book selected by the student. In the control group, the teachers used a more conventional method of teaching in that the lessons did not emphasize strategy instruction. Results of this study indicated that the students in the experimental group showed significant findings for the vocabulary, comprehension, and total reading scores of the Iowa Tests of Basic Skills test.

In 1992, Morrow conducted another study in which she investigated the impact of teaching skills through the use of literature. She took the basal reading program already in

place at the school and added a literature-based program to an experimental group. She looked at 166 culturally diverse children in nine-second grade classrooms. There were two experimental groups and one control group. In one of the experimental groups, the children were taught reading and writing skills through literacy centers, teacher-directed literacy activities, and independent reading and writing periods as an extension of a basal program. The other experimental group was taught exactly this same way, but had the added feature of at-home literacy activities supported by their parents. The control group was taught through the basal reader instruction program. Morrow found that there were no significant differences between the two experimental groups, even though one participated in the at home literacy activities. However, on informal comprehension tests, measures of reading attitude and records of books read in and out of the classroom, the experimental groups demonstrated superiority over the control group. From this study, Morrow concluded that the addition of this literature-based instruction with the basal reading program was more powerful than the basal program alone. However, neither of these studies looked at the combination of a reading and writing program using good literature.

In 1997, Baumann and Ivey conducted a study, which used a combination of reading and writing in conjunction with good literature. They implemented a year long integrated program that consisted of literature, skills, and strategy instruction. The subjects were 13-second grade students whose reading and writing was examined over a seven-month school year. Baumann taught from the philosophy that reading construction consisted of three principles: immersion in a environment of good literature; instruction

in reading and writing skills using the texts; and practice in literate activities essential for success in reading, writing, and oral language (Baumann & Ivey, 1997). There were multiple reading and writing activities during the reading period, and the instructor integrated strategy instruction during this time. Instruction would also be integrated throughout the school day while other disciplines were being taught. This determined that students immersed in literature became more knowledgeable about and highly engaged with literature. Also, it was confirmed that the reading instruction could be integrated effectively with and through literature. Transferring of skills from literature to other texts was successful when the instruction was strategically timed and placed. Next, the researchers concluded that the teaching of skills did not detract from the literature itself. By this, the researchers meant that the teaching of these skills did not distract the students from the story line, nor from their interacting with the text or with each other. In fact, the students improved in their ability to read and understand the literature because of the specific instruction. Finally, (Baumann & Ivey, 1997) found that the students in this study, all of whom were considered “at-risk”, prospered by learning through a literature/strategy environment. Cunningham and Allington (1999) contended that the children who have a good classroom program and one-on-one tutoring, could make considerable gains in reading. The results of Bauman and Ivey’s study were encouraging to those who have long believed that literature-based instruction could be successful. This was especially encouraging to those who also believed that the “at-risk” students could be taught this way, as well, and did not need more of the drilling of skills through worksheets found in many remedial classes. Also, Allington (1983) contended that a



teaching theory that worked well with students in a “regular” classroom would also work with the “at-risk” students. A program typically provided for the good readers and writers in a classroom would work well with the at-risk readers and writers **if** the teacher had an expectation of student success, focused on meaning ,and provided fluency-oriented instruction. Several standardized tests have shown that it was possible to use literature in the classroom, and the children performed well or as well on the testing of specific reading and writing skills as those classes that used worksheets and publisher created tests study packets for instructional purpose. There is a need for more studies of this kind to support these findings. Yet, it certainly seemed possible that this kind of program could be successful with the right mind set of the teacher and the understanding that there was a need for a degree of order, teaching strategies, and careful consideration of what the students were needing at any particular time of the teaching day.

#### Reader’s Response

What exactly was a reader’s response forum? According to Louise Rosenblatt (1938; 1983), there was a transaction that occurred between readers and literature, and there were important aspects of helping the students to respond to the literature in a powerful way. Much of this had to do with the reader’s prior knowledge and how much literature the reader had been exposed to.

Langer (1992) asserted that students should not be taught that they must have interpretations provided by the teacher to be memorized, but, instead, the literature should be treated as a body of knowledge, skill and strategies that the learner constructed out of the interaction with the literature. Rosenblatt (1983) stated that it was important for the

readers to become involved with the story and not be just casual observers of the characters and the plot. She elaborated by explaining that the transaction between the reader and the book was on-going and could be different for everyone, for it was the experiences the reader brought to the reading and what the reader took from the reading that created this transaction. Moreover, teachers know that just allowing this transaction between the reader and the text to transpire was not usually enough for administrators or teachers. There was always a standardized test waiting in the near future that may be used to prove whether the children were learning in the classroom. Therefore, the tutor needed to be able to apply Louise Rosenblatt's transactional theory, allowing the child to read good literature, yet still teach the skills the child was lacking. This, then, would be the best of both worlds. The blending of the skills, which were already integrated into the literature, and a book with which the child could relate, had to be the ideal situation for a tutoring program

### Social Constructivist Theory

Taffy Raphael (1994) looked at instruction using literature from the social constructivist perspective, in which the emphasis was on learning as a social process through language, which was both oral and written language, and the skills were taught within the literature. Through the use of the social constructivist style of teaching, learning opportunities are created and meanings are constructed. Raphael (1994) asserted that the social constructivist's theory was based on three assumptions. These assumptions were:

- a) it is through the use of language that teachers and students construct

knowledge. Therefore, whether it was in small groups, whole class groups or the student and teacher, language and literacy are the “foundations for students’ intellectual and social development”(p.10);

b) reading and writing reflect “higher mental processes” (p.10). In 1996,

Raphael

and Hiebert added to this that the importance of metacognitive knowledge about reading and writing was one important example of higher psychological processes. This higher psychological process was learned not only in the classroom, but was extended to multiple contexts found outside the classroom as well; and

c) cognitive development was facilitated through interactions. Vygotsky (1978) stressed this important theory by adding that higher mental processes were learned through social interaction, and he went on to stress the importance of education as being one example of this social interaction in which higher mental processes were learned. Therefore, the research discussing this theory was important to this researcher’s tutoring program.

Langer (1992) stated that students should not be taught that they must have interpretations provided by the teacher to be memorized, but, instead, the literature should be treated as a body of knowledge, skills, and strategies that the learner constructed out of the interaction with the literature. Further, Langer (1992) argued that the teacher’s goal was to have a well-constructed, well-articulated overall theory of the teaching and learning of literature (p.12). Langer added that if this theory was to become a part of the teaching practices of the classroom, there would be a degree of order as to what took

place, as to what was taught, and as to how it was taught. In other words, the social constructivists were not saying that there was not a need for structure in the classroom. There could also be a time and need for the use of good quality worksheets and writing logs, which could be a part of the lessons throughout the school year. However, it was important to stress that the worksheets did not replace the literature of the classroom. It is also important to note that the social constructivist theory did not state that all answers or interpretations were accepted as correct. The student's response must be warranted interpretations (Gee, 1998; Raphael & Hiebert, 1996).

Krashen (1992) has often written about the need of students to spend a great deal of time engaged in reading in order to become better at reading. Krashen commented that a student, even a second language learner, could improve his/her reading skills by simply doing just that, reading. Krashen added that the more free time a student spent on reading, as long as the student was reading something enjoyable, the more likely the student was to improve as a reader. Although what Krashen stated was important, many teachers know from experience that a student was not going to learn all the reading and writing skills needed by simply sitting down with a good book and reading all the time. What was needed was what many have termed as the delicate balance between the teaching of skills and strategies through the use of a good book (Coles, 1998; Langer, 1995;; Pressley 1998; Raphael et. al, 1996; Routman, 1991). Some may call this literature-based instruction, while others often used the term integrated reading and writing instruction. Some may even label it as an example of the social constructivist theory of literary instruction. Whatever the label used, it was essential for the teacher, or

as in this case, the tutor, to allow plenty of time for the students to engage in reading; therefore, this lead to the important question of when and how to teach the strategies the teacher found essential for the students to learn. Many teachers made use of mini-lessons as the best way to implement the instructional part of the curriculum. Others, such as Durkin (1978) have argued for the use of unplanned instruction caused by the students at “teachable moments.”

So, what was the best strategy to employ, planned lessons or spontaneous teaching? It was important for the tutors to strive for both. They could plan lessons to be taught through mini-lessons, which should possibly last about 10-15 minutes of the tutoring period and took place at the beginning of the session, or they could be taught at any point in the allotted tutoring time. Keene and Zimmerman (1997) reported that mini-lessons could set an important tone and important goals for comprehension. However, the mini-lessons also needed to be flexible enough to use these “teachable moments” when they arose. As a matter of fact, the tutors needed to understand that some skills may never appear as teachable moments and must be brought to the reader’s attention by the instructor through mini-lessons or whatever means the tutor had for the teaching of these skills.

In 1991, Routman suggested that it was important for the teaching of reading strategies to be in conjunction with good literature. She continued, however, it was important for the instruction to be well thought out in order for it to be effective. If this was done, transferring the skill to other contexts was far more likely to occur. What strategies should be taught in a good tutoring program?

## Strategies and Skills

Some people might become confused when they hear the words strategies and skills. Is there actually a difference between the two? Garner (1987) defined strategies as "...activities for which learners need to acquire both the component processes and a routine for organizing the processes into integrated strategic wholes... and that strategies are deliberate, planful activities undertaken by active learners... when the entire strategic routine becomes automated, they are better labeled skills" (p.50). Raphael and Hiebert (1996) stated that strategies are "... conscious, deliberate, and flexible plans that readers apply and adapt to the variety of books that they read or tasks in which they engage..."(p. 195), and that skills are "...highly routinized behaviors, ones that can be performed automatically or without conscious attention" (p.195). Therefore, the activity began as a strategy that could be taught and once it became internalized by the child, and it became automatic, it became a skill.

For the purpose of this study, the strategies and skills focus comprehension and word identification. One such instructional method would be the think aloud. In a study by Alvermann (1984) second grade children were given a thirty-minute lesson on think-alouds. The researcher then asked second graders to read aloud from a basal and to think aloud after each sentence about what they were thinking and doing while reading the story. The children demonstrated empathy, inferencing, and detecting of inconsistencies in the story. The children were also good at using imagery, which Alvermann suggested, may have been attributed to the fact that the teacher had been working with the children on imagery in the classroom. In Alvermann's opinion, this was an important aspect of the

think-aloud because it demonstrated the way children could transfer the strategy taught in the classroom situation to their own reading. Modeling was once more thought to be an important aspect of metacognitive awareness of the need for a strategy or skill.

Bommarito and Meichebaum (1979) demonstrated another important aspect by effectively teaching children to talk through what they are thinking as they read, as cited by Pressley (1998). In this study, middle school aged children were shown how to “self-verbalize” comprehension strategies. This was first modeled by an adult while looking for the main idea, sequencing the events, and thinking about the characters’ feelings and motivation. The middle school aged children, who were capable of reading but claimed to not understand what they read, watched these comprehension strategies being modeled, and by the end of six training sessions, the students were able to attend to and use the same strategies modeled and taught by the adult. Because of the gains between the pre-test and post-test scores, the researchers concluded that adults could help to push the students’ cognitive development through the use of scaffolding, once again supporting Vygotsky’s theory that a child’s cognitive development can be pushed through scaffolding and modeling. This scaffolding was done, as previously discussed, through modeling and direct teaching of the strategy. Direct teaching of reading strategies empowered the readers to construct their own meaning through monitoring and reflecting upon what they have read and comprehended (Wiener & Cohen, 1997).

There have been numerous research on comprehension and the strategies important to comprehending stories ( Forrest-Pressley & Gillies, 1983; Garner, 1987; Raphael & Engerlert, 1989) and most agreed that there were certain strategies upon which

to focus when teaching comprehension. The comprehension strategies on which this research study concentrated included:

Summarizing

Determining what is important in the text

Inferences

Text re-inspection

Monitoring comprehension

Summarizing was important in that if a child could not provide a synopsis of what was read, it became obvious the child did not understand the passage. The difficulty of this strategy was due to the need for the child to make a judgment as to what was important in the story and condense this information into a few sentences. Those who were poor at this strategy would, many times, try to retell the story, which was also important to comprehension, but it was not as complex a comprehension strategy as summarizing.

Determining what was important in the text was critical to the child's comprehension. If the child was to summarize, the child must first determine what was important to remember about the story. One important aspect of determining what was important in the story was to understand the purpose for reading the story. Different information would be generated if the was reading to discuss characterization rather than reading to discuss the problem and solution in the story. Therefore, this strategy could be complex and confusing for the child if it was not modeled, discussed, and scaffolded. Beck and McKeown (1981) acknowledged that there were two purposes for asking



questions. One was due to the fact that comprehension took place in the mind of the child and in order for comprehension to be observed by the teacher, questions were asked. The second reason Beck and McKeown cited for the asking of questions was that questions were a way to assist the child in comprehending the story. Questions could be thought of as comprehension tools that the teacher could use to aid the child's comprehension of a lesson. The importance of questioning could not be overlooked, for studies have shown that many times the type of questions a teacher asked may assess comprehension. Thus, the problem arose when the questions did not actually aid comprehension.

Durkin (1979) studied the questions that teachers asked of students during classroom discussions, and found that teachers rarely asked questions that actually aided in the comprehension of reading. Most of the questions asked in these discussions were of the detail type and did not allow the child to reflect upon or analyze what was read. Therefore, the types of questions asked by teachers must be carefully planned and thought out in order to include critical thinking.

Besides questioning children, Raphael and Hiebert (1996) list mapping as one strategy that could be used to help the child while reading. This type of graphic aid could be used to establish some kind of organized construct to help guide comprehension. There were, of course, many other types of mapping that may be used as well. Raphael and Hiebert suggested story mapping, cognitive mapping, and concept mapping, to list a few. The use of mapping also made it easy for the teacher or tutor to check very quickly to assess if the child was able to determine important ideas about what was read. Mapping

could also be used to help the child to synthesize or reconstruct the story. The child must not only write out the important ideas, but by explaining why that particular idea was chosen could lead to quick and invaluable assessment by the teacher or tutor.

When a child was asked to make an inference, the teacher was basically asking the child to draw upon prior knowledge and to predict. Raphael and Hiebert (1996) acknowledged that this helps to focus the child upon what was being read. By asking the child about his/her prior knowledge of a situation or activity, the child was able to make a personal decision about the story and relate it to him/herself. This not only caused more interest in reading the story, due to a personal experience, but it helped the child to infer why certain events might be happening based upon what the child had experienced or learned about this topic at other times.

Re-inspection of the text was a strategy that many good readers used, but poor readers must be taught this skill (Allessi, Anderson & Goetz, 1979). Many poor readers might try to reread an entire story or chapter to try to find missed information or to better understand the plot of the story, while good readers were more capable of skimming a passage for information or only rereading a small section to clear up a misunderstanding. This was a strategy used by good readers to support their understanding when answering questions or discussing parts of the book. They did not have to rely on memory. The importance of this strategy was to understand when and why to use it. In a study conducted by Allessi, Anderson, and Goetz (1979), college freshmen were placed into two groups. They were then asked to read a 5,000 word physiological psychology text with multiple choice questions interspersed throughout. One group of students was told

to look back in the text when they were not sure or could not remember the answers. The other group was not told to look back in the text. The performance of the students who used the re-inspection of the text when answering target questions was much higher. In other words, those who were told they could look back in the text almost completely eliminated the deficit due to the lack of or the loss of important information. Therefore, not only was re-inspection of the text sometimes important for comprehension, it was a strategy that must be taught to poor readers.

Monitoring comprehension means that the student has learned to think about their own comprehension, ask if what was read made sense, then decide what the problem for misunderstanding, if there was misunderstanding, might have been. Wiener and Cohen (1997) claimed that it was not enough that the reader knew strategies and how to use them. It was also important for the reader to be able to monitor his/her understanding. They added that one way of doing this was through self-reflection, which could be a powerful tool for the child. This meant that the child could look at what he/she had read and comprehend what was read because the strategy that would aid comprehension of the material was known and used by the child. According to Wiener and Cohen (p.24-25), self-monitoring was important in order for the student to be able to do the following:

Know what reading strategy works.

Know when understanding does not take place.

Know when understanding occurs.

Know what needs to be known.

As stated earlier, most of the children tutored in this study were considered at-risk. It was the at-risk children who seemed to be the most lacking in vocabulary skills. White, Graves, and Slater (1989) estimated that at-risk children usually learned close to 3,500 words a year, from grades one to three, while children of the middle class sector usually learned closer to 5,000 words a year. Vocabulary was important for reading comprehension. Therefore, the relationship between teaching vocabulary and reading was more complex than just teaching children a great deal of new words. Many teachers have tried to teach children a word a day, providing the word and its definition, sometimes in the context of a sentence. The children were then tested on the five new words at the end of the week. Words taught randomly like this were usually not successful. The child did not retain the words. In order for vocabulary words to be retained, the child must want to “own” the word. The word had to become internalized. The best way for doing this was to have the words come from the story that was going to be read, have the child use the word, define the word, speak the word, discuss the word and use the word in daily conversations and writings. Raphael and Hiebert (1996) claimed that choosing vocabulary that was relevant to the story was very important. Selecting key words or concepts that were relevant to the story and discussing and using these words throughout the lesson or discussion of the story, had been found to help the child’s comprehension, whereas simply looking words up and defining them did not.

Baumann and Kameenui (1991) emphasized that there was a need for a balance in direct teaching of vocabulary, and in learning it from the context of what has been read. As discussed earlier in this paper, a balanced approach was not only needed for the

teaching of reading comprehension skills, a balanced approach was also needed when teaching vocabulary.

Because the second portion of both the tutors' testing and the children's testing was vocabulary, it was important to also know what strategies should be the focus in the tutoring lessons. Graves (1986) claimed that there were basically two types of word learning tasks. One was "learning new labels" and the other was, "learning new concepts." The first way was to provide children another name for the new word, in other words, synonyms. The second way was to teach new words for difficult or new concepts.

Pinnell and Fountas (1998) maintained that in order to do the best teaching possible for a student, the instructor must focus on the student and not depend upon one program to be right for all, which was exactly what has been seen in many schools today. Programs were being developed and provided for school districts in which the teacher's teaching monologue was scripted in bold print and told the appropriate places for the teacher to pause for a response, (hopefully a "correct" response), so the instruction could continue. Juel (1996) pointed out that successful tutoring programs devoted more time to reading books with familiar vocabulary and working on direct word strategies. An important outcome from Juel's study, was that children should be actively involved in not only the word analysis of an activity, but the reading. There needed to be a connection for the children that the strategies they are learning will help them to read the books they want to read. Therefore, direct instruction without the reading and writing connection was almost pointless.

Pinnell and Fountas (1998) stressed that the vocabulary program should provide

support and structure for reading, but this support and structure should not *become the reading program*. They added that there was a need for self-monitoring, and how to self-monitor must be taught to the child. The child must be able to notice when a word did not sound right or did not look right or did not make sense in the story. Guiding the child to consistently stop and ask him/herself if the sentence or story was making sense, needed happen during each lesson, until the child was able to do this without the guidance of the teacher or tutor. The child must also be able to know how to search the story and the illustrations for clues as to what the word is, or even how to look the word up in the dictionary. Also, the child must have different strategies at his/her disposal so he/she could pick and choose what would be the best aid for figuring out the word. Lastly, the child must know when to ask for help. To do this the child must become what Pinnell and Fountas called a “word solver.” This was important, they claimed, because the final goal of a reader was to read fluently and be able to comprehend what was being read. In order to do this, a child could not slow down to analyze every other word. Pinnell and Fountas stressed that there must be a balance of teaching word solving strategies and reading and writing. Word solving should be a part of the language arts program, but, again, not the program itself. Cunningham and Allington (1999) explained that although phonics instruction was important to a reading program, the teacher or tutor must be careful to not let the phonic instructions become the reading program. This was especially important for the tutor to understand because many who had not had reading as a part of their college classes seemed to think that telling the child to “sound it out” was helping the child to become a better reader. Because telling the child to “sound it out” was exactly what some

of the tutors were doing in their reading sessions, keeping them from doing this would have to be stressed, over and over if necessary. Because the children who were being tutored in this research study were at-risk children, struggling with reading, focusing a part of the instruction on word solving strategies would be an important part of the program.

The word solving strategies that were taught in this program were the following:

- Maintaining a focus on meaning.
- Learning to predict using meaning and syntax and using the illustrations as needed.
- Monitoring oneself to see if the chosen word makes sense.
- Using parts of the word to help figure the word out. (For instance the beginning or ending sounds.)
- Learning high frequency words to help with predicting and fluency.

These strategies could be taught in a number of ways, and the tutors in this research study had training in enough ways that the repertoire of lessons from which to chose would keep the child from having to do the same lessons, only with different words, over and over until the child became bored and tuned the lesson completely out. Keene and Zimmermann (1997) maintained that mini-lessons for comprehension and vocabulary set an important tone and goals for comprehension. The mini-lesson must be well thought-out, and if the lesson was not successful in accomplishing the goal set by not only the tutor, but the child being tutored, then it could not be looked upon as a failure, but as a need to reassess the goal and look at other ways to achieve this goal. Therefore,

once again, not only should the training that the tutors received be a continuous part of the study, the communication between the tutor and the specialists must be on-going as well.

In a sense, if the student knew how to use certain strategies and why these strategies helped, then the student was more likely to use the strategies when the strategy was needed. In order to do this, though, the strategy must not only be taught and modeled for the student, it must also be explained as to why the strategy was being used at that time. This knowledge of the strategy and the knowing that the strategy was being used and why it was being used at that particular moment is referred to as metacognition.

Forest-Pressley and Gillies (1983) defined metacognition as: a) knowing about cognitive skills in that one can talk about when and how to use specific skills and what these skills accomplish, and b) the ability to monitor these cognitions. There are two kinds of metacognitive knowledge: declarative and procedural knowledge.

According to Raphael and Hiebert (1996), declarative knowledge could be defined as the nature of the texts in which students demonstrated an understanding of something as simple as explaining that print was read from left to right to more complex explanations of how different types of genre were structured. Raphael and Hiebert also included under the heading of declarative knowledge, certain tasks. This, they claimed, included knowing the difference in answering questions at the end of the chapter to interpreting a reading in small groups. The next type of declarative knowledge was goals. Under this type of knowledge the student would understand the difference in the goal for reading or writing activity. Raphael and Hiebert used the example of “writing to



demonstrate what they have read to writing to share an event with a peer” (p.196). The last type of declarative knowledge was when the student knew and understood him/herself as a “literate individual.” In this case the student could describe which situations in which they would be successful or not as successful. For instance, one example would be when students might say that they were really better at reading and understanding expository text than they were at understanding poetry.

Procedural knowledge, according to Raphael and Hiebert (1996), was “...knowing how actually to proceed in the use of strategies and skills, knowing the ‘how to’s’ of the reading strategy repertoire” (p.196). This knowledge was usually acquired from direct instruction and exposing the students to the type of classroom that repeated the use of the strategies and skills. Forest-Pressley and Gillies (1983) stated that the efficient use of reading skills and strategies could not be accomplished without the knowledge and monitoring of when and how to use reading skills and strategies. Raphael and Hiebert (1996) added to this that although both procedural and declarative knowledge were important, the successful reader would understand the when and why a certain strategy or skill was used. Pressley (1998) stated that “metacognition increases the likelihood of long-term, appropriate use of strategies” (p.202). One such way to help students become metacognitively aware of the need for certain strategies and skills was through teacher modeling and talking. Pressley (1998) continued that long-term use of taught strategies, when the teacher not only taught the strategy but also explained the usefulness of the strategy and why, it would help the child become aware of cognitive strategies.

It was important for teachers to explain when and why they were using certain skills and strategies throughout the lesson. One such way to do this was the think aloud. This strategy helped the student to become aware of the mental processes going on with the teacher as he/she worked his/her way through the reading of a story or text. For instance, if the teacher was reading a part of a story to the children, this teacher might stop at certain intervals and predict or question what was going on in the story. This teacher might also try to do some problem solving as to what a character might do in order to solve the problem that had developed in the story. This was done by verbally asking questions such as, “I wonder why the character did this, perhaps it was because...” or “I am confused about this part of the story, perhaps it would make sense to me if I go back and read this section again.” This type of modeling was important because it helped to make visible to the student exactly what skills or strategies were being used by the teacher and why certain skills or strategies were being used. Modeling strategic ways to comprehend was especially important for at-risk children.

Cunningham and Allington (1999) stated that children who watched and heard a think aloud, could better understand what processes one might go through in order to complete the task at hand, whether it be a reading or a writing activity. Also important for the students was the use of monitoring by the teacher, which then would become a self-monitoring process for the students. For example, the teacher might begin by telling the students what the purpose for reading a particular passage was and then explained and discussed what type of strategies the students should use while reading the passage. If the purpose was only to find certain information to answer detail questions, skimming might

have been the best choice for the reading strategy. Later, as the student becomes more competent at questioning and deciding on the purpose for reading a passage, the teacher would do less of the monitoring and the student would take more control of this. This type of instruction was temporary and was slowly taken away as the student became more capable of thinking through the process and deciding on what needed to be done. If a new goal for reading should occur, the teacher could once again aid the student in what strategy was necessary and once again remove this help, as the student became capable of this decision making. This is called scaffolding the student's learning.

Vygotsky (1978) commented that a child could be pushed to develop cognitively, but that it was only through the interaction between the adult, or more knowledgeable other, and the child in which the child was kept within his/her ZPD and the adult was scaffolding the child's learning. If taken beyond the child's ZPD, frustration on the part of the child would occur. Raphael and Hiebert (1996) added that this type of instruction was "temporary" in that the teacher gradually removed the aid, as the student became more proficient. Scaffolding was also "adjustable" in that the teacher could guide more when the help was needed or pull away when not needed, and was "supportive" in that the student was able to achieve strategies and skills that would not have been accomplished without this guidance.

Vygotsky (1976) declared that it was very important for the teacher, instructor, tutor, or more knowledgeable other, to understand not only what help was needed, but how much help should be given in order to keep the child at the potential area in the zone of proximal development. Raphael and Hiebert (1996) asserted that there were two types

of scaffolding, both of which took place in the child's ZPD. One was to question or prompt the child for additional information or explanation. This could be done by simply asking the child, "Could you tell me more about that?" or "Could you tell me what you mean by...?" Gee (1998) reported that this allowed the child to often discover meaning while trying to explain what is meant by what he/she just said. The child must, in fact, interpret or decode his/her own meaning so the listener could understand. Gee concluded that in some instances the speaker not only may discover meaning while explaining, but "... upon reflection, come to see that she meant more than she thought" (p.101).

A second type of scaffolding discussed by Raphael and Hiebert (1996) was to create what they called a "sequential structure." To do this, Raphael and Hiebert described how the teacher might begin by modeling, then questioning, then creating a group context for the students to discuss and think together, supporting and negotiating what they understood from the story read. Forrest-Pressley and Gillies (1983) added that mature or successful readers have more knowledge of different strategies, know when to use these strategies, and monitor and adjust these strategies to support the purpose. Therefore, the at-risk readers may need more scaffolding, more time for reflecting, and more time to decode their own meaning.

### Summary

In summary, this chapter defined at-risk children and reviewed various research based aspects of an effective tutoring program, such as balance between direct instruction, good literature, and mini-lessons. This chapter also examined the research literature on different tutoring programs and elements of the programs that were important for a

successful tutoring program. The research findings of many studies were included to demonstrate that the elements the researcher determined as important to the tutoring program, had sound research behind them. Finally, this chapter discussed some particular reading strategies that were to be implemented into the program because they, too, have sound research determining the usefulness of these strategies. Most importantly, though, this chapter included research, which reported that children considered at-risk could improve their vocabulary and comprehension skills in a one-on-one tutoring program if there was good assessment, training, and planning by the tutors and the supervisor of the program.

## CHAPTER III

### ONE MODEL FOR TRAINING OF TUTORS FOR AMERICA READS

#### Introduction

After looking at the research that had been done on tutoring, the researcher decided to implement the components of tutoring programs that were found to be successful into the training of the tutors for this study, as discussed fully in Chapter II. There were three areas of concern for this researcher: comprehension, vocabulary, and metacognition. The researcher was also concerned with the environment of the tutoring sessions. There was a need for a risk-free environment so the children were encouraged to think aloud and voice opinions or concerns. Finally, there was a need for the tutors to understand reasons for using literature in their tutoring sessions.

#### Initial Training of Tutors

Once the tutors had agreed to be a part of the America Reads Program at the University of North Texas, the researcher began the training sessions. All the tutors were brought together in one classroom for the initial training. Most of the students were new to the program and had no idea of what the America Reads Program was about. The initial eight hours of training took place for two hours a day for four days. The tutors were asked to participate in the study at the beginning of the training and to sign consent letters. It was only after the initial eight hours of training that the tutors decided if they

wanted to participate in the study as a part of the control or the experimental group. The training was divided into eleven weeks since that was the length of the study.

**Week 1:** The initial training was for eight hours. The tutors met between 3:30 and 5:30 for four days. (For word lists and teaching ideas, see Appendix A). The training was as follows:

**What is America Reads?** The researcher decided to begin the training by explaining what the program was and what the goals of the program were.

**What are the goals of the tutoring program?** The researcher was interested in developing a successful tutoring program, and it was explained to the tutors that their program should include several components that were found to be successful in other programs. These were time management, quality instruction for the children, interesting materials, and an open, risk-free environment, discipline for the children, attendance by both the tutors and the children, and quality training, modeling and scaffolding of the learning.

It was explained to the tutors that they would be tutoring children who were considered at-risk readers. The tutors were told what the researcher's expectations of them were, to provide quality tutoring for the children and the tutors were asked to develop, discuss, and write their own goals.

**How do you write a lesson plan?** The researcher then began preparing the tutors to work with the children who would be a part of the America Reads Program. The tutors were to begin by writing lesson plans. The lesson plans were to include four mini-lessons in each day's lesson. The lesson was to begin with an easy reader. The tutors were to

select a book that was at the child's independent level of reading to begin the lesson. This was to be done first, so the child would feel successful at the beginning of each tutoring session. Fluency was a key to the choosing of the book as well. The tutors were taught how to use the Word Lists from the CARP to help them find an independent level for the child.

The next section of the lesson plan was to include a guided reading. For this particular lesson, the tutor was to choose a book that was at the child's instructional level of reading. This portion of the lesson was to include the comprehension strategies that would be taught each day. The tutors were shown how to do some mapping, predicting, questioning techniques.

The third portion of the lesson was to include word analysis lesson. This could be done in a variety of ways and the tutors were given ideas for word walls, use of context clues and illustrations, and decoding strategies.

The final portion of each lesson plan was to include some kind of writing. This could be a story the tutors and children were creating, poetry, journals, or simple sentence writing.

The tutors were given time to practice the writing of lessons and discussing these lessons with each other and the supervisor. The tutors were given several creative ideas for the teaching of vocabulary and comprehension, any of which they were encourage to use or develop their own.

**How did one read aloud to a group of children?** The researcher wanted the tutors



to be able to model to the children the importance of reading to others. She wanted the tutors to understand that the way they modeled reading aloud to the children by using predicting, thinking aloud, and expressive voices were all-important aspects of reading. The video by Jim Trelease was used to help model a read aloud. The researcher also modeled the read aloud, stopping at certain parts of the book to ask predicting questions or have the college students join in the reading or repeating of phrases. The students were then given choices of books to read aloud to partners. After practicing several times with different partners, the college students each read aloud to the whole group of tutors. They then agreed on a date to read aloud to the children at the apartment complex. Every tutor, at one time, began the tutoring sessions by reading a book chosen by the tutor to the whole group of children at the apartment complex. The children came to expect the tutoring sessions to begin as one big group listening to a read aloud and then breaking off into individual tutoring groups. This not only modeled good reading skills, but also was enjoyable for the children, who would join in on certain phrases or verses. This was also a cue to all the children that the tutoring sessions were about to begin, and they would gather in the apartment room to listen to, and occasionally join in, the read aloud.

**How did one decide where to begin with a child?** The tutors were given the word lists and the retelling assessment from the Classroom Assessment of Reading Processes (CARP), ( Swearingen & Allen 1997). The researcher modeled how to use the word list and the tutors broke off into small groups to practice. Once they felt comfortable using the word list to decide a child's independent and instructional levels of reading, they were then given lists of books for various grade levels to choose a book for the next portion of

the assessment. This list of books also came from the CARP. The researcher then modeled a retelling as a way of assessing the child's comprehension level. Then the tutor, staying with the same partner and after having chosen a book for that partner's "reading" level would then practice assessing their partner's reading comprehension with a retelling. The tutors would then trade places with their partner and become the child to be assessed.

**How does one get the children to behave and work?** The final portion of the training pertained to discipline. The researcher made it clear to the tutors that there must be rules for the children to abide by and that the tutors were to come to the researcher if a problem with a child persisted. The tutors were concerned as to how much discipline they would be allowed to control. They decided to set rules and consequences. They were aided in this area by the researcher, but most of the rules and consequences were theirs to develop and implement. They also decided on rewards for attendance and improvement. The tutors decided to have monthly award ceremonies and attendance parties.

The tutors finalized their lesson plans, organized folders with their assessment information, wrote letters to the parents telling who they were and what they wanted to aid the children in accomplishing. They then set a date for a Meet the Parents Meeting and prepared to meet the children.

This ended the initial training. All the tutors met twice more for two one and one-half hour training sessions. During this time, the lesson plans were checked, questions were answered, more details were given to questions, dates were set for activities, and problems and concerns about the tutoring sessions and the children were addressed. The

tutors were eager to begin their tutoring and the children had already begun to meet at the apartments for after school activities. Because the program had already been in place the year before, many of the children were anticipating the arrival of the tutors and were ready to begin their tutoring sessions. The sessions would begin with snacks provided by the apartment complex, the Read Aloud, and then the children and tutors would break off into individual tutoring sessions.

### The Experimental Group Training

Each Wednesday for the next ten weeks, the experimental group would meet at the University of North Texas and participate in one and a half to two extra hours of training. The researcher provided all the training and the tutors volunteered to participate in this training.

#### **Week Two:**

Article: “Jim Trelease Speaks on Reading Aloud to Children” (1989)

Comprehension: Questioning Techniques, such as “Does that make sense?”, “Is there anything in the illustration that could help you figure out the word?”, “What does the word begin with?”.

Vocabulary: Context Clues (Synonym Clues, Definition Clues, Comparison or Contrast Clues, Mood or Situation Clues) and Beginning and Ending Letters (Sounds).

#### **Week Three:**

Follow up for all tutors as previously mentioned.

Lesson plans

Questions and Answers

Discipline update

Time Management

**Week Four:**

Article: “Story Map Instruction: A Road Map for Reading Comprehension” (Davis & McPherson, 1989). The purpose of this article was to establish some kind of organized construct to aid comprehension

Comprehension: Story Mapping; Story Elements.

Vocabulary: Maintain focus on meaning.

Writing: Journals (Ideas)

**Week Five:**

Article: Social Linguistics and Literacies: Ideology in Discourses (Gee, 1996) pp166-180.

Comprehension: Character Mapping

Vocabulary: Continue with focus on meaning

Writing: Journals: All about me. I used to be..., but now I am...

**Week Six:**

Article: “Vocabulary Development in the Whole Literacy Classroom (Blachowicz & Lee, 1991)

Comprehension: Summarizing; Main Idea

Vocabulary: Word Walls (See Pinnell & Fountas, 1998); Flash cards for sight words

Writing: Sentence Strips

**Week Seven:**

Comprehension: Re-inspection of Text

Vocabulary: Context Clues Revisited

Writing: Poetry: Bio poems (Synonyms)

**Week Eight:**

Article: Creating an Integrated Approach to Literacy Instruction (Raphael & Hiebert, 1996) pp. 86-91; 112-117.

Comprehension: Story Elements

Vocabulary: Decoding: Attending to beginning, middle and ending of a word.

Writing: Letter to a character

**Week Nine:**

Article: “Miscue Analysis for Classroom Use” (Argyle, 1989)

Comprehension: Miscue Analysis: Does this make sense?

Vocabulary: Running Records

Writing: Choice of Tutors

**Week Ten:**

Article: “Using Think Alouds to Assess Comprehension” (Wade, 1990)

Comprehension: Inference: How did I draw this conclusion?

Writing: Choice of Tutors

**Week Eleven:**

Comprehension: Informal Assessment for retesting.

Summary

This chapter included a model designed and implemented by the researcher for the training of college students to work with at-risk children in an America Reads. All tutors participated in the initial eight hours and three follow-up hours of training. Only the tutors in the experimental participated in the extra twenty hours of training. The model was designed to include an article for discussion and various teaching strategies and ideas in the areas of vocabulary, comprehension, and metacognition.

## CHAPTER IV

### PROCEDURES AND METHODOLOGY OF THE INVESTIGATION

#### Overview

This study was designed to determine if training college students to tutor children in specific strategies for comprehension and vocabulary would improve the comprehension and vocabulary skills of the children being tutored. This study was also designed to determine if training college students to tutor children in specific strategies for comprehension and vocabulary would improve the comprehension and vocabulary of the college tutors attending this training. Two groups of tutors who were trained and tested. The control group received minimum training in working with at-risk readers. The control group received eight hours of training before they began working with the children, and an additional three hours after the tutoring sessions began. Their training included how to develop a lesson plan, using a book that was easy for the child to read, time management, and techniques for discipline. The lesson plans incorporated guided reading, with activities to help with comprehension and vocabulary; a writing activity, which should have been an extension of the guided reading; and the introduction of a new book.

The experimental group of college student tutors received the same basic training as the control group, but also received an extra twenty hours of training in reading skills

and strategies, meeting each Wednesday for the next ten weeks of tutoring. The strategies taught were put into the next lesson plan and were to be used throughout the semester, when appropriate. These strategies included activities to help with comprehension and vocabulary, as well as metacognition. Some of the strategies were comprehension and vocabulary activities, such as mapping, graphic organizers, read alouds, miscue analysis, word analysis, and reading/writing connections. The tutors also received training in assessment techniques, including running records and retellings of children's books.

The experimental group also attended training sessions in which research that explained the uses and importance of these strategies was discussed. They also read and discussed articles on metacognition, comprehension, vocabulary, and assessment.

This chapter describes the procedures used to implement this study. The chapter includes a description of the community from which the children to be tutored were drawn; a description of the community from which the tutors were drawn; the procedure for selecting the control and the experimental groups; and a description of the treatment (the training) and the selection of the materials. A statement about the design of the study is included, along with the treatment of the data, and both the research and directional hypotheses. The chapter concludes with the limitations of the study and a summary.

#### Description of the Community

The apartment complex in which this study took place was located in a small city in the northern part of the southwestern region of the United States. The subsidized apartment complex was within two blocks of an elementary school. The apartment manager and the local housing director allowed the use of two small apartments, located



side by side, to be used for the tutoring of the children. Most of the children who lived in the apartment complex attended the local elementary school. Many of the children attending the tutoring sessions also attended an after-school activity program funded by the local apartment building, thus keeping most of the children from being latchkey kids. The ethnicity of the children was 61% Hispanic, 32% African American, and 7% Caucasian. All of the children in the study were considered at-risk, because they lived in low-income housing and were a part of the free lunch program at the nearby school.

#### Description and Selection of the Population

The study was designed to look at the comprehension and vocabulary growth of fourteen children and seventeen tutors. The children were selected based on their age, since the program serviced kindergarten through grade three. We allowed children who were in grades kindergarten through fifth grade, since so many of the children were three to four reading grade levels below their grade levels. They were also considered to be at-risk readers, which was determined by the teachers from the nearby school, and through testing done at the apartment complex.

The college students who tutored the children were chosen because they 1) were in the Work-Study program at the nearby university and 2) volunteered to be a part of the study. Therefore, there was no random selection for this study.

The seventeen college students who agreed to participate in the study were given the choice of being in the control or the experimental group. As required by the university, all of the college students who participated in the study signed a consent form (Appendix B). There were eight tutors in the experimental group and nine tutors in the

control group. The children for the two groups were also volunteers, and were randomly assigned to a group. There was no switching of children between the two groups, and all volunteers were satisfied with the group for which they first volunteered.

The parents and the children gave permission for the children to be tutored as a part of this study. First, a letter was sent home (See Appendix C) to the parents, and then there was a follow up call if the letter was not returned within two to three days, or if the parent was concerned as to what the study entailed. All children who participated in the study returned signed permission slips from a parent or guardian. Permission to conduct the study was given from the housing director located at the apartment complex.

The design of this study required at least minimal training for both groups, in read alouds, discipline, guided reading, and lesson plan writing. This consisted of eight hours prior to tutoring and three hours during the semester. The experimental group had more intensive training on metacognition and strategies for both comprehension and vocabulary, read articles on strategies and metacognition, and met once a week for training, practice, and discussion. This extra training consisted of an additional twenty hours of training, practice, or discussion, giving the experimental group thirty-one total hours of training. Because the training was so critical to the study, any tutor who missed more than two training sessions did not continue participation in the study.

#### Research Instruments

Both sets of tutors were assessed before and after the training. Two forms, Form G and Form H, of the *Nelson-Denny* (Brown, Fisco, & Hanna, 1990) were used. One

form was used for the beginning assessment and the second form was used at the end of the study.

The *Nelson-Denny* was chosen for assessing the tutors' growth or lack of growth in the areas of comprehension and vocabulary. The *Nelson-Denny* had two subtests, the vocabulary section and the comprehension section. The vocabulary section contained 80 items, in which the reader chose a synonym for a word given in a sentence. This sentence gave no context clues as to the meaning of the word. An example of a sentence that might be found in the test is: A *chef* is one who... The reader then had five words from which to choose the best answer. The second portion of the *Nelson-Denny*, the comprehension portion, had seven passages and a total of thirty-eight questions. Each question had five answers from which to choose. Both portions of this assessment tool had time limits. The vocabulary section had a time limit of fifteen minutes, and the comprehension section had a time limit of twenty minutes. If the test giver wanted a reading rate for the test takers, it was to be taken during the first minute of the first comprehension passage. The researcher chose not to take a reading rate since it would not be a part of this study.

A second reason the *Nelson-Denny* was chosen was because of the accessibility of the test materials to the researcher and because the assessment tool already had two forms available. Also, the assessment instrument was considered to be quite reliable and valid for assessing both comprehension and vocabulary. Another reason for choosing the *Nelson-Denny* as an assessment tool was due to the fact that the tests were considered to be unbiased. In order to eliminate the chances of biased questions, the authors of the test

analyzed all 592 vocabulary and comprehension items in trial studies used nationwide. Three analyses were performed on each item: Black versus white, Hispanic versus white, and male versus female. The second step in trying to eliminate any chance of biased questions was to create a panel, consisting of men and women of different ethnicities. The men and women on this panel were asked to read and react subjectively to the items and reading passages. Eighteen of the original thirty-two passages were discarded and the remaining fourteen were chosen to use in Form G and Form H (p.2-3). The comprehension passages in the *Nelson-Denny* come from a variety of disciplines. This was to ensure that if a student was strong in one subject area, this student would not be favored strongly by the test passages. Also, the comprehension section of the test was divided equally in the use of literal and interpretative questions, which meant that some higher level thinking skills would be necessary. Therefore, it was necessary for the student to think critically for one-half of the test questions. This assessment tool was considered to be one of quality, that would give reliable and valid results, and it was used to answer research question one:

Will training on reading skills and strategies help improve the college tutors' comprehension and vocabulary scores, as measured by the *Nelson-Denny*?

The instrument for assessing the children both at the beginning and the end of the study was the *Gates-MacGinitie Reading Test* (MacGinitie & MacGinitie, 1989). This assessment instrument also had two forms. Forms K and L were used for this study. The instrument was used to test for comprehension and vocabulary abilities of children and was considered both reliable and valid in assessing these two areas. There were two sub-

tests for this instrument. The comprehension test involved reading and comprehending whole passages. The passages began at an easy reading level and gradually became more difficult by the conclusion of the test. The latter passages tested for understanding of more complex verbal relationships. Each passage was accompanied by three illustrations. The child was to choose the picture that best illustrated the passage or answered a question asked about the passage. The passages for this sub-test were written to suit the knowledge and interest of children beginning to read . A variety of content areas were included. Readability of the passages were assessed with three readability formulas: Dale-Chall, Fry, and Harris-Jacobson .

The vocabulary sub-test was primarily a test of decoding skills. There were 45 items. Each item consisted of four printed words and an illustration. The child was to choose the word that best described the illustration. The four word choices looked and sounded very similar; therefore, the child was required to know the sound that corresponded to a specific letter or letter sequence (p.1).

The sample used to standardize the testing instrument was based on the 1980 United States Census. The school districts were stratified according to the geographic region, district enrollment size, and district socioeconomic characteristics. The standardization was longitudinal, in that the same students were tested in the fall and the spring in grades one through twelve. Kindergarten children were tested in the spring only.

The words used for the vocabulary section of the tests were selected from two vocabulary lists, *Basic Reading Vocabularies* and *The Living Word Vocabulary* (p.31).

These words were selected by determination of their usefulness. The authors avoided rare or specialized words. This instrument was used to answer question two:

Will training college tutors on reading skills and strategies help improve the comprehension and vocabulary scores, as measured by the GMRT for the children being tutored?

The second type of assessment used for both the experimental and control groups of tutors was a questionnaire, developed by Schmitt (1990) to measure the tutors' awareness of strategic reading processes (metacognition). The Metacomprehension Strategy Index (MSI), is a multiple-choice questionnaire that can be used to assess students' knowledge of strategic reading processes (p.454). Both groups of tutors were assessed at the beginning of the study and at the end of the study. The questionnaire consisted of 25 items, with four options given for each item. The questionnaire asked the student about strategies that could be used before, during, or after reading a narrative passage. The MSI then assessed the awareness the tutor had of a variety of metacomprehension behaviors that fit into six categories: 1) predicting and verifying, 2) previewing, 3) purpose setting, 4) self questioning, 5) drawing from background knowledge, and 6) summarizing and applying fix-up strategies (p.455). This assessment tool was used because it was already found to be both reliable and valid. The Kuder-Richardson Formula 20 was used to test for internal consistency and the MSI was found to have an internal consistency value of .87. The validity data was tested in several ways. Schmitt compared it to The Index of Reading Awareness (IRA) and found a statistically significant correlation between the two assessments at  $r = .48$ ,  $p < .001$ , which suggested

that both instruments were measuring similar constructs. Furthermore, Schmitt found that students who received training in metacomprehension strategies scored significantly higher on the MSI than students in a control group. Also, Schmitt compared the MSI and two comprehension measures, an error detection task ( $r = .50, p < .001$ ) and a cloze task ( $r = .49, p < .001$ ), which further provided evidence of validity (p.454-455). The MSI was used to answer research question three:

Does tutoring a child help the college tutor become more aware of his/her own reading skills and strategies (metacognition)?

#### Description of the Intervention

The intervention in this study consisted of twenty extra hours of enriched training for the tutors in the experimental group. This extra training focused on three areas of concern. The first area of concern was the assessment of the child's reading ability. In order to determine what strategies needed to be stressed, the tutors were trained in administering the retelling assessment found in the Classroom Assessment of Reading Processes ( Swearingen & Allen 1997). According to the authors of the Classroom Assessment of Reading Processes (CARP), the retellings would help the tutors to determine specific reading activities to help improve the child's reading progress. There are two types of retellings in the CARP, narrative and expository. The use of both of these assessment tools would aid the tutors in determining the child's prior knowledge, and strategies that the child needed would be stressed, such as main idea, supporting details, inferencing, and sequencing. The CARP was also used to aid the tutor in determining what the child's independent, instructional, and frustration reading levels

were, since a part of the teaching lesson, the guided reading, was to be at the child's instructional level. According to Vygotsky (1978), this occurs while keeping the child in their ZPD, and it is at this level at which the child's cognitive development can be scaffolded in such a way that the tutor can aid the development most successfully. The tutors also taught to a running record. A running record aided the tutor in discovering errors that occur while the child was reading orally. From this running record, the tutors were taught to transfer the information into a miscue analysis for further evaluation. This would further aid the tutor by allowing the tutor to immediately observe what the child may or may not be doing as he/she reads, which may include omissions, substitutions, mispronunciations, and insertions.

The CARP was chosen as the assessment tool for the tutors to use because it was relatively easy to use. The instructions were clear, and there were enough stories in the book for practice. The authors stressed four important differences between the CARP and other Informal Reading Inventories: a) activation of prior knowledge, b) assessment of narrative and expository texts, c) open ended responses through retellings, and d) greater flexibility for silent or oral reading. Finally, the CARP had been found to be both valid and reliable in that both content reliability and concurrent validity have been established. The content validity was established in that the content of the passages, which were central to the process of reading, and the concurrent validity was established by comparing students' results from standardized tests to the results of their CARP assessments (p.6). Reliability was addressed also. The authors of the CARP maintained reliability by comparing results of different persons scoring the same passages and



comparing the results of those scores. There was also an alternate form reliability found, in that a child's score on one passage was compared, by independent judges, to the child's score from the other passages (p.6).

The second area of concern was the improvement of the child's comprehension skills. This was addressed in the training by reading, discussing, and practicing comprehension and metacognition strategies, such as think alouds, webbing, story maps, self-reflection, story elements, and other comprehension strategies. Journal articles and other sources of information and research were used for the readings and discussions.

The final area of concern was vocabulary. In order to improve the child's vocabulary skills, the tutor first assessed by using the CARP word lists, the Gates-MacGinitie Reading Assessment vocabulary section, and other informal assessments. As stated earlier, the tutors in the experimental group were trained in strategies for the improvement of vocabulary strategies, including the reading of articles, discussions, and training in specific strategies, such as word walls, tutor/child created word lists, webbing, and other strategies.

Books for the children to read were provided in two ways. The first way was through the tutor selecting the books from public libraries, the university library, or the library developed by the America Reads program at the apartment complex site. Other selections of books were furnished by the children being tutored. This included books the child had checked out from the library or books that were being read in the classroom.

The tutors in the experimental group had a one and one-half hour training session each Wednesday during this study, for eleven weeks. During this time, articles, research,

and strategies were discussed. A new strategy was introduced at each session, allowing enough time for the tutors to practice and write their lesson plans for the following sessions. The training session also allowed time for reflection of the lessons, with the trainer suggesting ideas and activities to implement new strategies or improve strategies already being used. The lesson plans were individualized for each child, taking into account the child's reading level and the information obtained from the assessments.

The training of the control group was somewhat similar, in that training was started before the tutors began working with the children, in the areas of administering assessment tools, such as a retelling, developing and implementing lessons each week, and discipline issues. There was training in ways to have a guided reading session with activities to help the child in comprehension and vocabulary. The control group was not, however, given the extra training in specific metacognition, comprehension, and vocabulary strategies, nor did these tutor receive articles to read and discuss. The reading specialist/trainer was at the tutoring site in case a tutor from the control group needed guidance with an activity or lesson plan or discipline. If the tutor needed specific help with a particular strategy, the specialist/trainer assisted.

#### Data Collection Procedures

The *Nelson-Denny* was administered at the beginning of the study. All tutors, whether in the control or the experimental group, took the comprehension and the vocabulary portion of the test. Once permission from the parents and assent from the children had been gathered by the trainer, the children were administered the reading comprehension and vocabulary portion of the Gates-MacGinitie form K at the beginning

of the study. Form L from the Gates-MacGinitie was given on the last day of the study. All testing was performed and assessed by the researcher.

The tutoring sessions took place at the apartment complex, and the researcher and the apartment manager determined the tutoring time. The sessions lasted for approximately one and a half hours each Monday, Tuesday, and Thursday. Every Wednesday, the experimental group was in training sessions, and the control group was at the apartment complex to help with activities, such as a soccer game or a field trip. The tutors from the control group might, also, at this time, tutor children who did not want to participate in the games or field trips. The tutoring began as soon as the testing was completed.

### Research Design

The research design was selected based on the selection of the sample. Because the tutors volunteered to tutor the children and were not randomly selected, this experimenter used a quasi-experimental design, which is suggested for this type of research by Gall, Borg, and Gall (1996). The type of quasi-experimental design used for this study was the nonequivalent control-group design. This design is used when the sample is not randomly selected and there will be a pre-test-post-test given. The steps involved in this design are: a) there was a pre-test administered to both groups. The college tutors were administered form G for the *Nelson-Denny* for their pre-test and the children being tutored took the form E of the *Gates-MacGinitie Reading Test* at the beginning of the study. The purpose of the pre-test was to measure reading achievement in both comprehension and vocabulary for the children being tutored and the tutors'

before the treatment begins. The tutors also took the Metacomprehension Strategy Index at the beginning of the study; b) there was an administration of a treatment to only the experimental group. The experimental group in this study received training in metacognition, comprehension, and vocabulary strategies that the control group did not receive; and c) there was an administration of a post-test to both the control group and the experimental group. The purpose of the post-test was to measure the achievement of the students' reading vocabulary and comprehension scores after the study has been completed. The tutors took Form H of the *Nelson-Denny* at the end of the study and the children took Form F of the *Gates-MacGinitie Reading Test*. Both groups of tutors had the Metacomprehension Strategy Index administered at the end of the study. Both the control group and the experimental group were treated as much alike as possible except for the treatment, the training.

The statistical analysis for this design was the analysis of covariance (ANCOVA). The ANCOVA was used to handle the main threat to the internal validity of this research design, due to the fact that the tutors for the control and experimental group were not selected randomly. This meant that any initial differences between the two groups' before a comparison of the within-groups variance and between-group variance were made, could be controlled. The effect of the ANCOVA was to "make the two groups equal with respect to the control variable", [the training]. (Gall, et al, 1996, p.392). If, for some reason there was still a difference between the two groups, this difference could not be explained by the control variable. The ANCOVA would statistically reduce the effects of the initial group differences by making compensating adjustments to the post-test means

of the two groups (p.508). Hinkle, Wiersma and Jurs (1998) stated that there are two major benefits to using the ANCOVA in this experimental design: a) There is an adjustment for preexisting differences that may exist among the intact groups prior to the research; and b) there is an increase in the precision of the research by reducing the error variance (p.518).

There are certain underlying assumptions of the ANCOVA that must be met by the researcher in order to use this statistical analysis. The importance of the assumption being met lies in the appropriate use of the F distribution as the sampling distribution for testing the research hypothesis. According to Hinkle et al.(1998), the primary assumptions of the ANCOVA include:

1. The treatment could be randomly assigned to groups but subjects could not be randomly assigned to treatment groups. Therefore, there was an adjustment for preexisting differences that might exist among the intact groups prior to the research and there was an increase in the precision of the research from reducing the error variance.
2. The distributions of the populations from which the samples were selected were normal. This assumption implies that the dependent variable was normally distributed (a theoretical requirement of the underlying distribution, the F distribution) in each of the populations.
3. The variances of the distributions in the populations were equal. This is called the assumption of homogeneity of variance. This assumption, along with the normality assumption and the Null hypothesis, provides that the distribution in

the populations have the same shapes, means, and variances, that is they were the same population.

4. The relationship between the dependent variable and the covariate were linear.
5. The regression lines for the individual groups were assumed to be parallel.

They have the same slope, called the homogeneity of regression or parallelism and it was necessary in order to use the pooled within groups regression coefficient ( $b_w$ ) for adjusting the sample means. Failure to meet this assumption implied that there was an interaction between the covariate (post-test) and the treatment (training). This researcher used the Levene's Test of Equality of Error Variances to determine the slope of regression. A test of the homogeneity of regression slope was a prerequisite to conducting ANCOVA in order to adjust the Sum of Squares within each group using correlation coefficients between the dependent variable and the covariate for the respective groups.

#### Research Hypothesis

The design of this study was utilized to test the following null hypotheses:

Question 1:

**Null hypothesis 1:** No difference will be found in the reading comprehension scores as measured by the two categories of the *Nelson-Denny*, comprehension and vocabulary, between the college students who were given little training and the college students who were given training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 1:** The reading comprehension scores on the *Nelson-Denny* will be greater for the college students who received training in the areas of metacognition, comprehension, and vocabulary than the college students who received minimal training.

Question 2:

**Null hypothesis 2:** No difference will be found in the reading vocabulary scores as measured by the *Nelson-Denny*, between the college students who were given little training and the college students who were given training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 2:** The reading vocabulary scores on the *Nelson-Denny* will be greater for the college students who received training in the areas of metacognition, comprehension, and vocabulary than the college students who received minimal training.

Question 3:

**Null hypothesis 3:** No difference will be found in reading comprehension, as measured by the Gates MacGinitie, for the children who are tutored by the college students with minimal training and the children who are tutored by the college students with training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 3:** There will be greater improvement in the area of reading comprehension, as measured by the Gates MacGinitie, for the children who are tutored by the college students with training, than for the children who are tutored by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Question 4:

**Null hypothesis 4:** No difference will be found in reading vocabulary, as measured by the Gates MacGinitie, for the children who are tutored by the college students with minimal training and the children who are tutored by the college students with training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 4:** There will be greater improvement in the area of reading vocabulary, as measured by the Gates MacGinitie, for the children who are tutored by the college students with training than for the children who are tutored by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Question 5:

**Null hypothesis 5:** There will be no differences of scores on the metacognition questionnaire, the Metacomprehension Strategy questionnaire, between the college students who had minimal training and the college students who had training in the area of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 5:** There will be greater improvement on the metacognition questionnaire, the Metacomprehension Strategy Questionnaire, for the college students who had training in the area of metacognition, comprehension, and vocabulary than for the college students who had minimal training.

#### Limitations of the Study

1. The population was not randomly selected.
2. The population was limited to kindergarten to third grade students.



3. The population was limited to having only college students who were provided by the Work Study Program at the university.
4. The study was limited by the fact that there was no control as to what was taught to the children in the classroom.
5. The training and tutoring for this study was for only eleven weeks.

### Summary

In this chapter, the population, method of selection of subjects, the research instruments, and the treatment were described. The procedures for implementing the study and the description of the research design were also addressed. The null hypotheses and alternate hypotheses were stated and the limitations of the study were listed.

The subjects for the college tutors were provided through the Work Study Program in the financial aid department of the university. The subjects to be tutored were volunteers from the nearby apartment complex. The total number of subjects for this study was thirty-three. The researcher compared the effects of training in the field of reading in the areas of comprehension and vocabulary on a diagnostic pre-test and post-test for both the children and the college tutors in the study. The researcher compared the effects of training on the metacognitive skills of the children and the college tutors by using a metacognitive questionnaire for reading strategies as a diagnostic a pre-test and post-test for both the children and the college tutors in the study. The research design for this study was a quasi-experimental nonequivalent control-group design because subjects were not randomly selected. The statistical analysis for this study was the ANCOVA. The analysis of covariance, according to Gall et al.(1996), would statistically reduce the

effects of initial group differences “by making compensating adjustment to the post-test means of the two groups” (p.508). The control group in this study was given minimal training in the area of specific strategies to use to help the at-risk readers. The experimental group was given extra training in specific strategies to help the at-risk reader in the area of comprehension, vocabulary, and metacognition, and they were also provided with research in these areas. Lastly, the tutors from the experimental group were provided with many opportunities to discuss and reflect upon the research, the strategies, and the lessons by the researcher.

## CHAPTER V

### AN ANALYSIS OF THE DATA

#### Introduction

This study was designed to examine the effectiveness of training college students to tutor children who were struggling with reading. The tutors and the children being tutored were placed into two groups. One group of tutors received additional training in skills and strategies designed to help the children become more successful readers. This group of tutors, the experimental group, also attended one and one-half to two hour meetings each week of the study. During this time, informational and research articles were read and discussed, lesson plans were reviewed and refined, problems with lessons and children were discussed, and a new strategy was introduced for the tutors to incorporate into the next week's lessons. The effectiveness of this training was determined by examining the results of pre- and post-test scores, in the areas of comprehension and vocabulary, on standardized tests, given to both the tutors and the children. The tutors were given the *Nelson-Denny* and the children were given the *Gates-MacGinitie Reading Test*. The experimental group of children and tutors were expected to increase their scores on the standardized tests at a significantly higher level than those in the control group.

The children tutored for both the experimental and the control groups were volunteers for the America Reads program and lived at a nearby subsidized apartment complex. They were all considered to be at-risk, and most were reading below grade level. The tutors were also part of the America Reads program, sponsored by a nearby university, and paid through the federal work-study program.

### Population

The study was designed to look at the comprehension and vocabulary growth of fourteen children. These children were selected based on their age, since the program serviced kindergarten through grade three. They were also considered to be at-risk readers, which was determined by the teachers from the nearby school and through testing done at the apartment complex.

The college students who tutored were chosen because they: a) were in the Work-Study program at the nearby university; and b) volunteered to be a part of the study. Therefore, there was no random selection for this study.

The seventeen college students, who agreed to participate in the study, were given the choice of being in the control or the experimental group. There were eight tutors in the experimental group and nine tutors in the control group. The children for the two groups were also volunteers, and were randomly assigned to a group. There was no switching of children between the two groups, and all volunteers were satisfied with the group for which they first volunteered. The parents and the children gave permission for the children to be tutored as a part of this study. First, a letter was sent home to the parents. If there was no response by the next week, there was a follow up call. Also, all

parents were encouraged to come to a parents' meeting to discuss the research study and discuss any concerns they may have had about what the study entailed and to meet the researcher and tutors.

### Measurement

There were two variables in the research study. The dependent variable was the post-test, and the independent variable was the training. The covariate was the pre-test for the two groups. The dependent variables, the post-tests used by this researcher, were used to measure the effects of the independent variable, the training. The post-tests were selected because they could be administered in the relatively short time the researcher had to conduct the study, and they were found to be both reliable and valid instruments. The independent variable for this study, the training, was controlled and manipulated by the researcher in that she decided how much training was needed for both the control and the experimental groups, and she decided what was to be included in each training session, although the tutors' questions and area of interest during the training sessions could contribute to the selection of the next week's materials. The last variable used in this study was the covariate, the pre-test. Once again, the pre-tests were selected because of the reliability and validity factors and the ease of use and interpretation.

### Instruments

Both sets of tutors were assessed before and after the training. Two forms, Form G and Form H, of the same test were used. Form G was used for the beginning assessment, and Form H was used at the end of the study. The *Nelson-Denny* (Brown, Fishco & Hanna, 1990) was chosen to assess the tutors' growth or lack of growth in the

areas of comprehension and vocabulary. The *Nelson-Denny* was composed of two sub-tests, a vocabulary section and a comprehension section. The vocabulary section contained 80 items, in which the reader chose a synonym for a word given in a sentence. This sentence gave no context clues as to the meaning of the word. An example of a sentence that might be found in the test was: A *chef* is one who... The reader then had five words from which to choose the best answer. The second portion of the *Nelson-Denny*, the comprehension subtest, had seven passages and a total of thirty-eight questions. Each question had five answers from which to choose. Both portions of this assessment tool had time limits. The vocabulary section had a time limit of fifteen minutes, and the comprehension section had a time limit of twenty minutes. The test instrument also contained a sub-test for reading rate, to be administered during the first minute of the first comprehension passage. The researcher chose not to take a reading rate since it would not be a part of this study.

A second reason the *Nelson-Denny* was chosen was because of the accessibility of the test materials to the researcher and because the assessment tool already had two forms available. Also, the assessment instrument was considered to be quite reliable and valid for assessing both comprehension and vocabulary. Another reason for choosing the *Nelson-Denny* as an assessment tool was due to the fact that the tests were reported to be unbiased. In order to eliminate the chances of biased questions, the authors of the test analyzed all 592 vocabulary and comprehension items in trial studies used nationwide. Three analyses were performed on each item: Black versus white, Hispanic versus white, and male versus female. The second step in trying to eliminate any chance of biased

questions was to create a panel, consisting of men and women of different ethnicities. The men and women on this panel were asked to read and react subjectively to the items and reading passages. Eighteen of the original thirty-two passages were discarded and the remaining fourteen were chosen to use in *Form G and Form H* (p.2-3). The comprehension passages in the *Nelson-Denny* come from a variety of disciplines. This was to ensure that if a student was strong in one subject area, this student would not be favored strongly by the test passages. Also, the comprehension section of the test was divided equally in the use of literal and interpretative questions, which meant that some higher level thinking skills would be necessary. Therefore, it was necessary for the student to think critically for one-half of the test questions. This assessment tool was considered to be one of quality, that would give reliable and valid results, and it was used to answer research questions one and two.

1. Will training on reading skills and strategies help improve the college tutors' Comprehension scores, as measured by the *Nelson-Denny*?
2. Will training on reading skills and strategies help improve the college tutor's vocabulary scores, as measured by the *Nelson-Denny*?

The instrument for assessing the children both at the beginning and the end of the study was the *Gates-MacGinitie Reading Test* (MacGinitie & MacGinitie, 1989). This assessment instrument also had two forms. Forms K and L were used for this study. The instrument was used to test for comprehension and vocabulary abilities of children and was considered both reliable and valid in assessing these two areas. There were two sub-tests for this instrument. The comprehension test involved reading and comprehending

whole passages. The passages began at an easy reading level and gradually became more difficult by the conclusion of the test. The latter passages tested for understanding of more complex verbal relationships. Each passage was accompanied by three illustrations. The child was to choose the picture that best illustrated the passage or answered a question asked about the passage. The passages for this sub-test were written to suit the knowledge and interest of children beginning to read (p.31). A variety of content areas were included. Readability of the passages was assessed with three readability formulas: Dale-Chall, Fry, and Harris-Jacobson (p.31)

The vocabulary sub-test was primarily a test of decoding skills. There were 45 items. Each item consisted of four printed words and an illustration. The child was to choose the word that best described the illustration. The four word choices looked and sounded very similar, therefore, the child was required to know the sound that corresponded to a specific letter or letter sequence (p.1).

The sample used to standardize the testing instrument was based on the 1980 U. S. Census. The school districts were stratified according to the geographic region, district enrollment size, and district socioeconomic characteristics. The standardization was longitudinal, in that the same students were tested in the fall and the spring in grades one through twelve. Kindergarten children were tested in the spring only.

The words used for the vocabulary section of the tests were selected from two vocabulary lists, *Basic Reading Vocabularies* and *The Living Word Vocabulary* (p.31). These words were selected by determination of their usefulness. The authors avoided rare or specialized words. This instrument was used to answer questions three and four.



1. Will training college tutors on reading skills and strategies help improve the comprehension scores, as measured by the *Gates MacGinitie Reading Test*, for the children being tutored?
2. Will training college tutors on reading skills and strategies help improve the vocabulary scores, as measured by the *Gates MacGinitie Reading Test*, for the children being tutored?

The second type of assessment used for both the experimental and control groups of tutors was a questionnaire, developed by Schmitt (1990) to measure the tutors' awareness of strategic reading processes (metacognition). The Metacomprehension Strategy Index (MSI), (See Appendix C), was "a multiple-choice questionnaire that could be used to assess students' knowledge of strategic reading processes" (p.454). Both groups of tutors were assessed at the beginning of the study and at the end of the study. The questionnaire consisted of 25 items, with four options given for each item. The questionnaire asked the student about strategies that could be used before, during, or after reading a narrative passage. The MSI then assessed the tutors' awareness of a variety of metacomprehension behaviors that fit into six categories: 1) "predicting and verifying, 2) previewing, 3) purpose setting, 4) self questioning, 5) drawing from background knowledge, and 6) summarizing and applying fix-up strategies" (p.455). This assessment tool was used because it was already found to be both reliable and valid. The Kuder-Richardson Formula 20 was used to test for internal consistency, and the MSI was found to have an internal consistency value of .87. The validity data was tested in a couple of ways. Schmitt compared it to The Index of Reading Awareness (IRA) and found a

statistically significant correlation between the two assessments at  $r = .48, p < .001$ , which suggested that both instruments were measuring similar constructs. Furthermore, Schmitt found that students who received training in metacomprehension strategies scored significantly higher on the MSI than students in a control group. Also, Schmitt compared the MSI and two comprehension measures, an error detection task ( $r = .50, p < .001$ ) and a cloze task ( $r = .49, p < .001$ ), which further provided evidence of validity (p.454-455). The MSI was used to answer research question five:

5. Does tutoring a child help the college tutor become more aware of his/her own reading skills and strategies (metacognition)?

#### Description of the Intervention

The intervention in this study consisted of eighteen extra hours of enriched training for the tutors in the experimental group. This extra training focused on three areas of concern. The first area of concern was the assessment of the child's reading ability. In order to determine what strategies needed to be stressed, the tutors were trained in administering the retelling assessment found in the *Classroom Assessment of Reading Processes* (Swearingen & Allen 1997). According to the authors of the *Classroom Assessment of Reading Processes* (CARP), the retellings would help the tutors to determine specific reading activities to help improve the child's reading progress. There are two types of retellings in the CARP, narrative and expository. The use of both of these assessment tools would aid the tutors in determining the child's prior knowledge, and strategies that the child needed would be stressed, such as main idea, supporting details, inferencing, and sequencing. The CARP was also used to aid the tutor in

determining what the child's independent, instructional, and frustration reading levels were, since a part of the teaching lesson, the guided reading, was to be at the child's instructional level. According to Vygotsky (1978), this is the level at which the child's cognitive development can be scaffolded in such a way that the tutor can aid the development most successfully. A second type of assessment was also taught to the tutors for use with their child. This assessment was a running record. A running record (Clay, 1985), which is also called a miscue analysis (Goodman, 1984), aided the tutor in discovering errors that occur while the child was reading orally. This would further aid the tutor by allowing the tutor to immediately observe what the child may or may not be doing as he/she reads, which may include omissions, substitutions, mispronunciations, and insertions.

The CARP was chosen as the assessment tool for the tutors to use because it was relatively easy to use. The instructions are clear, and there are enough stories in the book for practice. The authors stressed four important differences between the CARP and other Informal Reading Inventories: a) activation of prior knowledge, b) assessment of narrative and expository texts, c) open ended responses through retellings, and d) greater flexibility for silent or oral reading. Finally, the CARP has been found to be both valid and reliable in that both content reliability and concurrent validity have been established. The content validity was established in that the content of the passages, which are central to the process of reading, and the concurrent validity was established by comparing students' results from standardized tests to the results of their CARP assessments. Reliability was addressed also. The authors of the CARP maintained reliability by

comparing results of different persons scoring the same passages and comparing the results of those scores. There was also an alternate form reliability found, in that a child's score on one passage was compared, by independent judges, to the child's score from the other passages.

The second area of concern was the improvement of the child's comprehension skills. This was addressed in the training by reading, discussing, and practicing comprehension and metacognition strategies, such as think alouds, webbing, story maps, self-reflection, story elements, and other comprehension strategies. Journal articles and other sources of information and research were used for the readings and discussions.

The final area of concern was vocabulary. In order to improve the child's vocabulary skills, the tutor first assessed by using the CARP word lists, the Gates-MacGinitie Reading Assessment vocabulary section, and other informal assessments. As stated earlier, the tutors in the experimental group were trained in strategies for the improvement of vocabulary strategies, including the reading of articles, discussions, and training in specific strategies, such as word walls, tutor/child created word lists, webbing, and other strategies.

Books for the children to read were provided in two ways. The first way was through the tutor selecting the books from public libraries, the university library, or the library developed by the America Reads program at the apartment complex site. The child being tutored furnished the other selection of books. This included books the child had checked out from the library or books that were being read in the classroom.

The tutors in the experimental group had a one and one-half hour training session each Wednesday during this study, for eleven weeks. During this time, articles, research, and strategies were discussed. A new strategy was introduced at each session, allowing enough time for the tutors to practice and write their lesson plans for the following sessions. The training session also allowed time for reflection of the lessons, with the trainer suggesting ideas and activities to implement new strategies or improve strategies already being used. The lesson plans were individualized for each child, taking into account the child's reading level and the information obtained from the assessments.

The training of the control group was somewhat similar, in that training was started before the tutors began working with the children, in the areas of administering assessment tools, such as a retelling, developing and implementing lessons each week, and discipline issues. There was training in ways to have a guided reading session with activities to help the child in comprehension and vocabulary. The control group was not, however, given the extra training in specific metacognition, comprehension, and vocabulary strategies. The control group, also, was not given articles to read and discuss. The reading specialist/trainer was at the tutoring site in case a tutor from the control group needed guidance with an activity or lesson plan or discipline. If the tutor needed specific help with a particular strategy, the specialist/trainer would assist in this area, as well.

#### Procedure

Attrition was considered a risk in this research study, in that the children were participating on a voluntary basis. The study was a part of the America Reads Challenge

at a subsidized apartment complex as a portion of an after school program. The children were invited to come and participate as a part of an after-school program sponsored by the complex. The families living in the complex were considered very transient. Thus, keeping the children in the program was difficult at times. Although the number of children participating in the program continued to grow throughout the semester, the participants would often change. So if a child was pre-tested, that child might not be living in the apartment complex at the time of the post-test.

The study began with twenty children and ended with fourteen. Incentives were often used to encourage the children to continue in the program. The children were given snacks when they arrived, and every Wednesday the children were allowed to participate in group games, such as soccer or basketball games or leave the apartment complex for supervised field trips.

Two apartments were used by the researcher. The apartments were side-by-side, which made the distribution of the children and tutors easy to setup. One apartment was used for the control group, and the other apartment was used for the experimental group. The researcher would walk through both apartments observing and commenting as needed. The smaller rooms, such as the bedroom or kitchen areas in each apartment were used for children who needed a quieter atmosphere in order to concentrate. All rooms had chairs and tables or small desks available for sitting. When the weather permitted, some of the children would be tutored on the connecting balcony of the two apartments.

The books and supplies were kept in one of the apartments and were easily accessible to both groups. All pre-testing and post-testing was conducted by the

researcher in one of the apartments. The children were put into a large room and given the test at the same time. The tutors were tested in a classroom at the university.

The tutoring took place three times a week, Mondays, Tuesdays, and Thursdays. The tutors met at the university and were driven to the apartment complex, which was ten minutes from the university. The tutoring lasted from 3:45 to 5:00 each day. The last fifteen minutes were spent writing or amending lesson plans, finding the supplies and books needed to teaching the next day's lessons, and cleaning up their tutoring area.

#### Power Size

The researcher established the power size used for this research study a priori. The level of significance, the  $\alpha$  level, was set at .05. The statistical control used by the researcher was the ANCOVA. The tests were therefore, non-directional, or two-tailed. Another factor for this study was the effect size. This is defined by Gall et al (1996) as the "degree to which a phenomenon exists" (p.322). In other words, "effect size is the difference between the value specified in the research hypothesis and the value specified in the alternative hypothesis, or the desired difference to be detected" (p.322-323). This researcher examined the Eta Squared on each of the post-tests to determine the proportion of variance for the dependent variable that could be attributed to the variance in the independent variable.

#### Limitations and Complicating Factors

Complications for this study were attributed to attrition. Several children left the program before the post-testing was done, therefore making a small sample size even smaller. A second complication for this study was that the children were participating in

another program offered by the university, held at the apartment complex, and there were time conflicts, between the tutoring and other events during the time they were to participate in the study. Tutors being absent from their sessions also contributed to the complications for the study. Although the absenteeism was minimal, it meant that one of the other tutors had to alter the lessons in order to tutor children other than their assigned child. Also, some of the tutors were absent during the time of the final survey for metacognition, and the researcher had to repeatedly ask for the college students to submit the survey. One of the tutors graduated without submitting the form, while some quit the program and did not fill out the survey before leaving.

#### Analysis

The computer program used for the analysis of this study was the SPSS program provided by the University of North Texas. This program was used to compute the figures used in the tables, once the researcher provided and input all the information. The Pearson product-moment correlation coefficient was used to determine if there was any correlation between the two variables. According to Hinkle et al. (1996), the computed value of the correlation coefficient can range from the  $-1.00$  to  $+1.00$ . A relationship between the two variables was determined with all correlation coefficients being at or higher than  $.655$ , and the level of significance being at the  $.01$  level. The relationship between the two variables in this study was found to be a positive relationship (See Appendix D).

#### Presentation of the Hypotheses

This study was designed to test the following questions and hypotheses:



Question 1:

**Null hypothesis 1:** No difference will be found in the reading comprehension scores as measured by the *Nelson-Denny*, between the college students who were given minimal training and the college students who were given extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 1:** The improvement on the reading comprehension scores, as measured by the *Nelson-Denny*, will be greater for the college students who received extra training in the areas of metacognition, comprehension, and vocabulary than the college students who received minimal training.

Question 2:

**Null hypothesis 2:** No difference will be found in the reading vocabulary scores as measured by the *Nelson-Denny*, between the college students who were given minimal training and the college students who were given extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 2:** There will be greater improvement on the reading vocabulary scores, as measured by the on the *Nelson-Denny*, for the college students who received extra training in the areas of metacognition, comprehension, and vocabulary than the college students who received minimal training.

Question 3:

**Null hypothesis 3:** No difference will be found in reading comprehension, as measured by the Gates MacGinitie, for the children who were tutored by the college students with

minimal training and the children who were tutored by the college students with extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 3:** There will be greater improvement in the area of reading comprehension, as measured by the Gates MacGinitie, for the children who are tutored by the college students with extra training than for the children who are tutored by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Question 4:

**Null hypothesis 4:** No difference will be found in reading vocabulary, as measured by the Gates MacGinitie, for the children who are tutored by the college students with minimal training and the children who are tutored by the college students with extra training in the areas of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 4:** There will be greater improvement in the area of reading vocabulary, as measured by the Gates MacGinitie, for the children who are tutored by the college students with extra training than for the children who are tutored by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Question 5:

**Null hypothesis 5:** There will be no differences of scores on the metacognition questionnaire, the Metacomprehension Strategy questionnaire, between the college students who had minimal training and the college students who had extra training in the area of metacognition, comprehension, and vocabulary.

**Alternate hypothesis 5:** There will be greater improvement on the metacognition questionnaire, the Metacomprehension Strategy Questionnaire, for the college students who had extra training in the area of metacognition, comprehension, and vocabulary than for the college students who had minimal training.

### Research Design

The research design was selected based on the selection of the sample. Because the tutors volunteered to tutor the children and were not randomly selected, this experimenter used a quasi-experimental design, which was suggested for this type of research by Gall, Borg, and Gall (1996). The type of quasi-experimental design used for this study was the nonequivalent control-group design. This design should be used when the sample is not randomly selected and there will be a pre-test-post-test given. The steps involved in this design are: a) There was a pre-test administered to both groups. The college tutors were administered form G for the *Nelson-Denny* for their pre-test and the children being tutored took the form E of the *Gates-MacGinitie Reading Test* at the beginning of the study. The purpose of the pre-test was to measure reading achievement in both comprehension and vocabulary for the children being tutored and the tutors' before the treatment began. The tutors also took the Metacomprehension Strategy Index at the beginning of the study; b) There was an administration of a treatment to only the experimental group. The experimental group in this study received training in metacognition, comprehension, and vocabulary strategies that the control group did not receive; c) There was an administration of a post-test to both the control groups and the

experimental groups. The purpose of the post-test was to measure the achievement of the students' reading vocabulary and comprehension scores at the end of the study. The tutors took Form H of the *Nelson-Denny* at the end of the study and the children took Form F of the *Gates-MacGinitie Reading Test*. Both groups of tutors had the Metacomprehension Strategy Index administered at the end of the study. Both the control group and the experimental group were treated as much alike as possible except for the treatment, the training.

The statistical analysis for this design was the analysis of covariance (ANCOVA). The ANCOVA was used to handle the main threat to the internal validity of this research design due to the fact that the tutors for the control and experimental group were not selected randomly. This meant that any initial differences between the two groups' before a comparison of the within-groups variance and between-group variance were made, could be controlled. The effect of the ANCOVA was to "make the two groups equal with respect to the control variable", [the training]. (Gall, et al, 1996, p.392). If, for some reason there was still a difference between the two groups, this difference could not be explained by the control variable. The analysis of covariance would "statistically reduce the effects of the initial group differences by making compensating adjustments to the post-test means of the two groups" (p.508). Hinkle, Wiersman and Jurs (1998) stated that "there are two major benefits to using the ANCOVA in this experimental design: a) There was an adjustment for preexisting differences that may exist among the intact groups prior to the research; and b) the increase in the precision of the research from reducing the error variance" (p.518).

There are certain underlying assumptions of the ANCOVA that must be met by the researcher in order to use this statistical analysis. The importance of the assumption being met lies in the appropriate use of the F distribution as the sampling distribution for testing the research hypothesis. According to Hinkle et al.(1998), the primary assumptions of the ANCOVA include:

1. The treatment could be randomly assigned to groups, but subjects could not be randomly assigned to treatment groups. Therefore, there was an adjustment for preexisting differences that might exist among the intact groups prior to the research, and there was an increase in the precision of the research from reducing the error variance.
2. The distributions of the populations from which the samples were selected were normal. This assumption implies that the dependent variable was normally distributed (a theoretical requirement of the underlying distribution, the F distribution) in each of the populations.
3. The variances of the distributions in the populations were equal. This is called the assumption of homogeneity of variance. This assumption, along with the normality assumption and the Null hypothesis, provides that the distribution in the populations have the same shapes, means, and variances, that is, they were the same population.
4. The relationship between the dependent variable and the covariate was linear.
5. The regression lines for the individual groups were assumed to be parallel.

They have the same slope, called the homogeneity of regression or parallelism, and it was necessary in order to use the pooled within groups regression coefficient ( $b_w$ ) for adjusting the sample means. Failure to meet this assumption implied that there was an interaction between the covariate (post-test) and the treatment (training). This researcher used the Levene's Test of Equality of Error Variances to determine the slope of regression. A test of the homogeneity of regression slope was a prerequisite to conducting ANCOVA in order to adjust the Sum of Squares within each group using correlation coefficients between the dependent variable and the covariate for the respective groups.

#### Research Question

Question 1:

A test of homogeneity-of-regression assumption was a prerequisite to conducting the ANCOVA. According to the underlying assumptions of the ANCOVA, the relationship between the regression lines within each of the groups must be linear. Additionally, the regression lines must also be assumed to be parallel. This homogeneity of regression was necessary in order to use the pooled within groups regression coefficient for adjusting the sample means. The researcher demonstrated this by using the Levene's Test of Equality of Error Variances. (See Table 5.1)

**Table 5.1**

#### Levene's Test of Equality of Error Variances

Dependent Variable: Post Comprehension

F	df1	df2	Sig.
1.594	1	15	.226

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

With a level of .05 level of significance, the critical value of the F ratio for this test of homogeneity-of-regression assumption was 1 and 15 degrees of freedom was 4.54. Since the F value ( $F = .226$ ) does not exceed this critical value, the null hypothesis must be retained. According to the table, the researcher concluded that there was no difference between the two means.

**Step 1: State the Hypothesis:**

The null hypothesis for ANCOVA was that there were no differences in the population means on the reading comprehension scores as measured by the *Nelson-Denny*, between the college students who were given little training and the college students who were given training in the areas of metacognition, vocabulary, and comprehension. The alternate hypotheses was non- directional, although the researcher expected there would be a greater gain, as measured by the *Nelson-Denny* for the tutors in the trained group than for the tutor in the control group.

The null and alternative hypotheses were:

$$H_0: \mu'_1 = \mu'_2$$

$$H_a: \mu'_1 \neq \mu'_2$$

Where:  $\mu'_1$  = control group

$\mu'_2$  = experimental group

**Step 2: Set the Criterion for rejecting  $H_0$ :**

The test statistic for this one-way ANCOVA was the F ratio defined as the ratio of  $MS'_B$  and  $MS'_W$ , both of which had been adjusted for the covariate, in that:

$$F = \frac{MS'_B}{MS'_w}$$

The sampling distribution for this F ratio was the F distribution with K-1 and N-K-1 degrees of freedom. For this design, there were K-1 = 2-1 = 1 degrees of freedom associated with MS'\_B and N-K-1 = 17-2-1=14 degrees of freedom associated with MS'\_w. Thus, with  $\alpha = .05$ , the critical value of F for 1 and 14 degrees of freedom was 4.60.

**Step 3: Compute the Test Statistic:**

In ANCOVA, two test statistics are computed; one for testing the significance of the relationship between the covariate (post-test) and the dependent variable (pre-test), and one for testing the null hypothesis identified in Step 1,  $H_0: \mu'_1 = \mu'_2$ .

The second test statistic was defined in the following step:

$$F = \frac{MS'_B}{MS'_w}$$

And was used to test the null hypothesis:

$$H_0: \mu'_1 = \mu'_2$$

Note the data in the Summary ANCOVA, (see table 5.2)

$$F = \frac{42.364}{61.887} = .685$$

**Step 4: Interpret the Results:**

The critical value of F for this test statistic was identified in the F distribution for 1, and N-K-1 = 17-2-1=14 degrees of freedom. With  $\alpha = .05$ , and  $F_{cv} = 4.60$ . Since the



calculated F value ( $F = .685$ ) did not exceed the critical value ( $F_{cv} = 4.60$ ), the null hypothesis was retained, in that there was no significant difference between the scores on the pre-test and the post-test for comprehension, as assessed by the *Nelson-Denny* forms F and G, for the tutors in the control and experimental groups.

**Table 5.2**

**Tests of Between-Subjects Effects**

Dependent Variable: Post Comprehension

Source	Type III Sum of Square	Degrees of freedom	Mean Square	F	Sig.	Eta Squared
Corrected Model	3561.578 <sup>b</sup>	2	1780.789	28.775	.000	.804
Intercept	5.198	1	5.198	.084	.776	.006
PRECOMP	2923.133	1	2923.133	47.233	.000	.771
GROUP	42.364	1	42.364	.685	.422	.047
Error	866.422	14	61.887			
Total	45245.000	17				
Corrected Total	4428.000	16				

a Computed using alpha = .05

b R Squared = .804 (Adjusted R Squared = .776)

**Question 2:**

A test of homogeneity-of-regression assumption was a prerequisite to conducting the ANCOVA. According to the underlying assumptions of the ANCOVA, the relationship between the regression lines within each of the groups must be linear. Additionally, the regression lines must also be assumed to be parallel. This homogeneity of regression was necessary in order to use the pooled within groups regression

coefficient for adjusting the sample means. The researcher demonstrated this by using the Levene's Test of Equality of Error Variances. (See Table 5.3)

**Table 5.3**

**Levene's Test of Equality of Error Variances**

Dependent Variable: Post Vocabulary

F	df1	df2	Sig.
.250	1	15	.625

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

With a level of .05 level of significance, the critical value of the F ratio for this test of homogeneity-of-regression assumption at 1 and 15 degrees of freedom was 4.54. Since the F value (F = .625) does not exceed this critical value, the null hypothesis must be retained. According to the table, the researcher could conclude that there was no interaction between the covariate and the treatment.

**Step 1: State the Hypotheses:**

The null hypothesis for ANCOVA was that there were no differences in the population means on the reading vocabulary scores as measured by the *Nelson-Denny*, between the college students who were given little training and the college students who were given extra training in the areas of metacognition, vocabulary, and comprehension. The alternate hypotheses was non-directional, in that there would be a significant difference, as measured by the *Nelson-Denny*, for the reading vocabulary scores between the college students who were given little training and the college students who were given extra training in the areas of metacognition, vocabulary, and comprehension.

The null and alternative hypotheses were:

$$H_0: \mu'_1 = \mu'_2$$

$$H_a: \mu'_1 \neq \mu'_2$$

Where:  $\mu'_1$  = control group

$\mu'_2$  = experimental group

### **Step 2: Set the Criterion for rejecting $H_0$**

The test statistic for this one-way ANCOVA was the F ratio defined as the ratio of  $MS'_B$  and  $MS'_w$ , both of which had been adjusted for the covariate, in that:

$$F = \frac{MS'_B}{MS'_w}$$

The sampling distribution for this F ratio was the F distribution with K-1 and N-K-1 degrees of freedom. For this design, there are K-1 = 2-1 = 1 degrees of freedom associated with  $MS'_B$  and N-K-1 = 17-2-1=14 degrees of freedom associated with  $MS'_w$ . Thus, with  $\alpha = .05$ , the critical value of F for 1 and 14 degrees of freedom was 4.60.

### **Step 3: Compute the Test statistic:**

In ANCOVA, the test statistics was used to test the null hypothesis identified in Step1 for Question 2, in that:

$$H_0: \mu'_1 = \mu'_2$$

The test statistic was defined as:

$$F = \frac{MS'_B}{MS'_w}$$

Note the data in the Summary ANCOVA, (See table 5.4):

$$F = \frac{111.678}{12.396}$$

$$= 9.009$$

**Step 4: Interpret the Results:**

The critical value of F for this test statistic was identified in the F distribution for 1, and  $N-K-1 = 17-2-1=14$  degrees of freedom. With  $\alpha = .05$ , and  $F_{cv} = 4.60$ . Since the calculated F value ( $F = 9.009$ ), exceeded the critical value ( $F_{cv} = 4.60$ ), the null hypothesis that there would not be a significant difference between the scores on the vocabulary section, as measured by the *Nelson-Denny*, between the tutors who were in the experimental group and the tutors who were in the control group, was not retained.

**Table 5.4**

**Tests of Between-Subjects Effects**

Dependent Variable: Post Vocabulary  
Between-Subjects Effects

Dependent Variable: Post Vocabulary

Source	Type III Sum of Square	Degrees of freedom	Mean Square	F	Sig.	Eta Squared
Corrected Model	1852.572 <sup>b</sup>	2	926.286	74.724	.000	.914
Intercept	614.020	1	614.020	49.533	.000	.780
PREVOCAB	751.329	1	751.329	60.610	.000	.812
GROUP	111.678	1	111.678	9.009	.010	.392
Error	173.546	14	12.396			
Total	50845.000	17				
Corrected Total	2026.118	16				

a Computed using alpha = .05

b R Squared = .914 (Adjusted R Squared = .902)

Question 3:

A test of homogeneity-of-regression assumption was a prerequisite to conducting the ANCOVA. According to the underlying assumptions of the ANCOVA, the relationship between the regression lines within each of the groups must be linear. Additionally, the regression lines must also be assumed to be parallel. This homogeneity of regression was necessary in order to use the pooled within groups regression coefficient for adjusting the sample means. The researcher demonstrated this by using the Levene's Test of Equality of Error Variances (See table 5.5).

**Table 5.5**

**Levene's Test of Equality of Error Variances**

Dependent Variable: Post Comprehension

F	df1	df2	Sig.
.039	1	12	.847

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

With a level of .05 level of significance, the critical value of the F ratio for this test of homogeneity-of-regression assumption for 1 and 12 degrees of freedom was 4.75. Since the F value ( $F = .847$ ) did not exceed this critical value, the null hypothesis must be retained. According to Levene's Test of Equality of Error Variances, the researcher could conclude that there was no interaction between the covariate and the treatment.

**Step 1: State the Hypotheses:** The null hypothesis for ANCOVA was that there were no differences in the population means on the reading comprehension scores, as measured by the Gates MacGinitie, between the children who were tutored by the college students given little training and the college students who were given training in the areas of

metacognition, vocabulary, and comprehension. The alternate hypotheses was non-directional, in that there would be a significant difference in the scores, as measured by the *Gates MacGinitie Reading Test*, for the children in the experimental group than for the children in the control group.

The null and alternative hypotheses were:

$$H_0: \mu'_1 = \mu'_2$$

$$H_a: \mu'_1 < \mu'_2$$

Where:  $\mu'_1$  = control group

$\mu'_2$  = experimental group

**Step 2: Set the Criterion for rejecting  $H_0$ :**

The test statistic for this one-way ANCOVA was the F ratio defined as the ratio of  $MS'_B$  and  $MS'_w$ , both of which had been adjusted for the covariate, in that:

$$F = \frac{MS'_B}{MS'_w}$$

The sampling distribution for this F ratio was the F distribution with K-1 and N-K-1 degrees of freedom. For this design, there are K-1 = 2-1 = 1 degrees of freedom associated with  $MS'_B$  and N-K-1 = 14-2-1=11 degrees of freedom associated with  $MS'_w$ . Thus, with  $\alpha = .05$ , the critical value of F for 1 and 11 degrees of freedom was 4.84

**Step 3: Compute the Test Statistic:**

In ANCOVA, the test statistics was used to test the null hypothesis identified in Step1 for Question 2, in that:

$$H_0: \mu'_1 = \mu'_2$$

The test statistic was defined as:

$$F = \frac{MS'_B}{MS'_w}$$

Note the data in the Summary ANCOVA, (See table 5.6):

$$\begin{aligned} F &= \frac{10.732}{16.268} \\ &= .660 \end{aligned}$$

**Step 4: Interpret the Results:**

The critical value of F for this test statistic was identified in the F distribution for 1, and  $N-K-1 = 17-2-1=14$  degrees of freedom. With  $\alpha = .05$ , and  $F_{cv} = 4.84$ . Since the calculated F value ( $F = .660$ ) did not exceed the critical value ( $F_{cv} = 4.84$ ), the null hypothesis that there would be no difference between the scores on the comprehension section, as measured by the *Gates MacGinitie Reading Test*, between the children who were tutored by the tutors who were in the experimental group and the children who were tutored by the tutors who were in the control group, was retained.

**Table 5.6****Tests of Between-Subjects Effects**

Dependent Variable: Post Comprehension  
 Between-Subjects Effects

Dependent Variable: Post Comprehension

Source	Type III Sum of Square	Degrees of freedom	Mean Square	F	Sig.	Eta Squared
Corrected Model	487.976 <sup>b</sup>	2	243.988	14.998	.001	.732
Intercept	403.503	1	403.503	24.803	.000	.693
PRECOMP	316.476	1	316.476	19.453	.001	.639
GROUP	10.732	1	10.732	.660	.434	.057
Error	178.953	11	16.268			
Total	12499.000	14				
Corrected Total	666.929	13				

a Computed using alpha = .05

b R Squared = .732 (Adjusted R Squared = .683)

**Question 4:**

A test of homogeneity-of-regression assumption was a prerequisite to conducting the ANCOVA. According to the underlying assumptions of the ANCOVA, the relationship between the regression lines within each of the groups must be linear. Additionally, the regression lines must also be assumed to be parallel. This homogeneity of regression was necessary in order to use the pooled within groups regression coefficient for adjusting the sample means. The researcher demonstrated this by using the Levene's Test of Equality of Error Variances. (See table 5.7)



**Table 5.7****Levene's Test of Equality of Error Variances**

Dependent Variable: Post Vocabulary

F	df1	df2	Sig.
1.749	1	12	.211

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

With a level of .05 level of significance, the critical value of the F ratio for this test of homogeneity-of-regression assumption for 1 and 12 degrees of freedom was 4.75. Since the F value (F=.211) did not exceed this critical value, the null hypothesis must be retained. According to the table, the researcher concluded that there was no interaction between the covariate and the treatment.

**Step 1: State the Hypotheses:**

The null hypothesis for ANCOVA was that there were no differences in the population means on the reading vocabulary scores, as measured by the *Gates MacGinitie Reading Test*, between the children who were tutored by the college students in the control group and the college students who were in the experimental group and given more training in the areas of metacognition, vocabulary, and comprehension. The alternate hypothesis was non-directional, in that there would be a difference, as measured by the *Gates MacGinitie Reading Test*.

The null and alternative hypotheses were:

$$H_0: \mu'_1 = \mu'_2$$

$$H_a: \mu'_1 \neq \mu'_2$$

Where:  $\mu'_1$  = control group

$\mu'_2$  = experimental group

**Step 2: Set the Criterion for rejecting Ho:** The test statistic for this one-way ANCOVA was the F ratio defined as the ratio of  $MS'_B$  and  $MS'_w$ , both of which had been adjusted for the covariate, in that:

$$F = \frac{MS'_B}{MS'_w}$$

The sampling distribution for this F ratio was the F distribution with K-1 and N-K-1 degrees of freedom. For this design, there were K-1 = 2-1 = 1 degrees of freedom associated with  $MS'_B$  and N-K-1 = 14-2-1=11 degrees of freedom associated with  $MS'_w$ . Thus, with  $\alpha = .05$ , the critical value of F for 1 and 11 degrees of freedom was 4.84

**Step 3: Compute the Test Statistic:** In ANCOVA, the test statistics was used to test the null hypothesis identified in Step1 for Question 2, in that:

$$H_0: \mu'_1 = \mu'_2$$

The test statistic was defined as:

$$F = \frac{MS'_B}{MS'_w}$$

Note the data in the Summary ANCOVA, (See table 5.8):

$$\begin{aligned} F &= \frac{203.512}{163549} \\ &= 12.297 \end{aligned}$$

**Step 4: Interpret the Results:** The critical value of F for this test statistic was identified in the F distribution for 1, and N-K-1 = 17-2-1=14 degrees of freedom. With  $\alpha = .05$ , and  $F_{cv} = 4.84$ . Since the calculated F value ( $F = 12.297$ ) exceeded the critical value ( $F_{cv} = 4.84$ ), the null hypothesis that there was no difference between the scores on the comprehension section, as measured by the *Gates MacGinitie Reading Test*, between the

children who were tutored by the tutors who were in the control group and the tutors who were in the experimental group, was not retained

**Table 5.8**

**Tests of Between-Subjects Effects**

Dependent Variable: Post Comprehension  
Between-Subjects Effects

Dependent Variable: Post Comprehension

Source	Type III Sum of Square	Degrees of freedom	Mean Square	F	Sig.	Eta Squared
Corrected Model	1104.815 <sup>b</sup>	2	552.408	33.380	.000	.859
Intercept	92.002	1	92.002	5.559	.038	.336
PREVOCAB	446.530	1	446.530	26.982	.000	.710
GROUP	203.512	1	203.512	12.297	.005	.528
Error	182.042	11	16.549			
Total	9544.000	14				
Corrected Total	1286.857	13				

a Computed using alpha = .05

b R Squared = .859 (Adjusted R Squared = .833)

**Effect Sizes**

Hinkle et al. explains that the effect size was the difference between the value specified in the null hypothesis and the value specified in the alternative hypothesis, or the desired difference to be detected (p.322-323). This researcher looked at Eta Squared on each of the post-test to determine the proportion of variance for the dependent variable that can be attributed to the variance in the independent variable. In determining how much the training effected the post-test of the college students, one must once again look at table 5.3. From this table, the researcher determined that on the post-test for vocabulary, the effect size was .392, which could be restated as 39% of the improvement of the scores from the post-test on the vocabulary section of the *Nelson-Denny* could be

attributed to the training. Yet, looking at table 5.5, the college students only had an Eta Squared score of .047. This could be interpreted as the training having little effect at all on the comprehension aspect of the tutors' learning.

The children being tutored had a larger Eta Squared score on their post-test for vocabulary. This score was found in Table 5.7, in which the training had a .528. This could be interpreted as 52%, of the improvement from the pre-test to the post-test as measured by the *Gates MacGinitie Reading Test* could be attributed to the training. Yet, only .057, or 5.7%, of the improvement from the pre-test to the post-test for the comprehension portion of the *Gates MacGinitie Reading Test* could be attributed to the training of the tutors. In other words, the training did help to improve the vocabulary scores for both the tutors and the children, but did little to attribute to the comprehension scores of either group.

In discussing the results of the study, the researcher looked once more at the data collected. Although the differences between the control and the experimental groups on the comprehension portion of their pre- and post-test did not show a significant difference, it was interesting to note from the tables 5.9 and 5.10 that the trained group out-scored the untrained group on each portion of the test.

According to the data found in table 5.9, the researcher noted that the tutors in the experimental group of tutors had a mean score of 62.1250 on the post-vocabulary test, while the control group of tutors had a mean score of 46.00. From table 5.10, the researcher noted that the experimental group of tutors had a mean score of 55.500 on the post-comprehension test, while the control group of tutors had a mean score of 43.222.

The researcher interpreted this to mean that the experimental group of tutors scored better on both portions of the post-test, comprehension and vocabulary, than the control group of tutors, but the results of these scores did not prove to be as significant as the researcher had hoped.

**Table 5.9**

**Post Vocabulary Scores for College Students**

Group	Mean	Std. Deviation	N
Trained	62.1250	4.1897	8
Untrained	46.00	10.0125	9
Total	53.5882	11.2531	17

**Table 5.10**

**Post Comprehension Scores for College Students**

Group	Mean	Std. Deviation	N
Trained	55.5000	12.4556	8
Untrained	43.2222	18.3833	9
Total	49.0000	16.6358	17

Tables 5.11 and 5.12 show that the children in the experimental group outscored the children in the control group on both the comprehension and vocabulary post-tests. As shown in Table 5.11, the children in the experimental group had a mean score of 31.1429, while the children in the control group had a mean score of 17.4286 on the post-vocabulary test. The mean comprehension scores for the children in the experimental

group, according to table 5.12 were 32.5714, while the mean score for the control group of children was 25.5714. These scores demonstrate that the experimental group of children outscored their counterparts on both portions of the test.

**Table 5.11**

**Post Vocabulary Scores for Children**

Group	Mean	Std. Deviation	N
Trained	31.1429	7.3808	7
Untrained	17.4286	7.0912	7
Total	24.2857	9.9493	14

**Table 5.12**

**Post Comprehension Scores for Children**

Group	Mean	Std. Deviation	N
Trained	32.5714	6.8278	7
Untrained	25.5714	5.9960	7
Total	29.0714	7.1626	14

### Findings of the Study

This chapter presented the research hypotheses and the analysis of the data for each of the researchers five questions. Statistical analysis, using the ANCOVA, showed a significant difference for questions one and three. Both the college students and the

children in the experimental groups showed a significant improvement on their vocabulary scores. This allowed the researcher to reject the null hypothesis for Hypothesis 1, with a 95% confidence that the acceptance of the alternate hypothesis was accurate as follows:

**Alternate hypothesis 1:** The reading comprehension scores on the *Nelson-Denny* will be greater for the college students in the experimental, trained group, in the areas of metacognition, comprehension, and vocabulary than the college students who were in the control group and received minimal training.

Although the group means, as revealed in the tables above, showed a positive direction, favoring the extra training for the tutors, the analysis for Hypothesis 2 failed to show a significant difference. Therefore, Hypothesis 2 was not rejected.

**Null hypothesis 2:** No difference will be found in the reading vocabulary scores as measured by the *Nelson-Denny*, between the college students who were in the control group and given little training and the college students who were in the experimental group and given training in the areas of metacognition, comprehension, and vocabulary.

Since the children in the experimental groups showed a significant improvement on their vocabulary scores, this allowed the researcher to reject the null hypothesis for Hypothesis 3, with a 95% confidence that the acceptance of the alternate hypothesis was accurate as follows:

**Alternate hypothesis 3:** There will be greater improvement in the area of reading comprehension, as measured by the *Gates MacGinitie Reading Test*, for the children who were tutored by the college students with training, than for the children who were tutored

by the college students with minimal training in the areas of metacognition, comprehension, and vocabulary.

Once again the group means, as revealed in the tables above, showed a positive direction favoring the extra training for the tutors, in helping improve the comprehension of the children in the experimental group, yet the analysis for Hypothesis 4 failed to show a significant difference. Therefore, Hypothesis 4 was not rejected.

**Null hypothesis 4:** No difference will be found in reading vocabulary, as measured by the *Gates MacGinitie Reading Test*, for the children who are tutored by the college students with minimal training and the children who are tutored by the college students with training in the areas of metacognition, comprehension, and vocabulary.



## CHAPTER VI

### DISCUSSION OF RESULTS

#### Overview of the Study

Becoming a nation of readers has long been the goal of politicians and educators. Providing every child with the opportunity to grow and mature as a reader is a part of the everyday life of classroom teachers. However, many children are not successful at becoming good readers despite these efforts. Numerous classrooms have children who struggle with reading everyday. Children are struggling to make sense of the printed words. There have been many theories as to why this may happen, but the most important aspect of an educational program is to aid any child who may be in need of extra help in order to become a good reader. Many at-risk children are placed into classrooms with other at-risk children, all struggling with reading, and the same lessons are taught to every child in the classroom as if the lessons will somehow “cure” these children from what ails them. Unfortunately, many children who are tested, diagnosed, and placed in reading programs do not become better readers, but continue to remain in these reading programs for as long as the educational system will allow.

Are children who are considered to be poor or struggling readers taught differently in the regular classroom? Many researchers have found this to be so. Coles (1998) stated that many teachers who work with at-risk readers assumed that less time should be given

for responding, less time should be given for expressing of thoughts, whether verbal or written, and much more time should be spent teaching the basic skills of reading. At-risk children are usually give shorter portions of stories to read both silently and verbally, and are given less time for discussion of the readings. Yet, Clay (1998) stated that “children learn to be constructive, problem-solving doers and thinkers, each working towards more complex ways of responding. They initiate, construct, and actively consolidate their learning as they interact daily with their own special worlds” (p.3). This philosophy included at-risk children. They, too, can actively participate in their learning. This active participation in one’s own learning was facilitated in this research by tutoring. Yet, in order for tutoring to actually aid children in becoming good readers, the tutors, according to research, must be trained, be monitored, and be aided when there was a need (Clay, 1998; Pikulski, 1994; Topping, 1998; Walker & Morrow, 1999; Wasik, 1998). This study, therefore, was conducted to demonstrate and validate the need of training for tutors working with at-risk children in the area of reading. One-on-one tutoring of children has long been found to be successful (Bloom, 1981, 1984, Baumann & Ivey, 1997, Juel, 1991,1996, Morris et al, 1990), yet the importance of the need for training of the tutors cannot be ignored. One-on-one tutoring for at-risk children could facilitate an increase in vocabulary and comprehension skills because the information, skills, and strategies are individualized to each child’s needs and level of reading. Each child could be individually assessed and the skills and strategies could then be taught to the child based upon that child’s individual strengths and weaknesses. Teaching specific strategies could aid a child in internalizing the strategy, thus creating a new skill from which the child could draw

upon to facilitate comprehension. Yet, Raphael and Hiebert (1996) and Vygotsky (1978) stated that this learning is not constructed among individuals in an isolated society, rather, it is through the socio-cultural environment that learning is facilitated. Therefore, the environment for learning is one where conversation between the at-risk reader and the tutor should be risk-free. In this environment, the child becomes aware of an understanding that conversation was another way of facilitating learning. The conversations between the child and the tutor were those which aid the child in cognitive development through the discussions and questioning of what was being read and written, what was being understood by the child, or what was being determined as confusing. The child and tutor both understood the environment to be one in which the child was free to express thoughts or concerns. However, according to Vygotsky (1978) the conversations must aid the child in remaining in his/her individual zone of proximal development in order to facilitate the cognitive development of the child. Also, Topping (1998) stressed the importance of the tutor being in his/her ZPD. In order to maintain all of these components of good tutoring, the tutors must have training, monitoring, and aid.

The material used for the tutoring sessions has also been researched. Consensus seemed to follow that the materials must address word analysis, word development, comprehension, and writing. This study was concerned with the importance of literature as aids for teaching these components of an effective program. Therefore, the tutors had to be trained in the use of children's books to teach skills and strategies that would include the components of good tutoring. Raphael & Hiebert (1996) stressed that instruction should occur throughout the reading. These may be referred to as teachable

moments or mini-lessons, which may occur due to a question asked by the child or the tutor, or may actually be a planned lesson designed by the tutor. In order to teach through mini-lessons, however, the tutor must have been trained on identifying the purpose or the goal of the lesson. Therefore, lesson plans were used on a daily basis for this study.

This study was designed to determine if training college students to tutor children in specific strategies for comprehension and vocabulary would improve the comprehension and vocabulary skills of the children being tutored. This study was also designed to determine if training college students to tutor children in specific strategies for comprehension and vocabulary would improve the comprehension and vocabulary of the college tutors attending this training. Two groups of tutors who were trained and tested. One group, the control group, received minimum training, eleven hours, in working with at-risk readers. The control group received the same eleven hours of training as the control group, eight before they began working with the children and three more hours of training later in the study.. This training included developing a lesson plan, using a book that was easy for the child to read, planning using time management, and developing techniques for discipline. Each lesson plan incorporated a guided reading, with activities to help with comprehension and vocabulary; a writing activity, which should have been an extension of the guided reading; and the introduction of a new book.

The experimental group of college students received the same basic training as the control group, but also received an extra twenty hours of training in reading skills and strategies. This extra training took place each Wednesday for the next ten weeks of tutoring, and the strategies taught were put into the next lesson plan and were to be used

throughout the semester, when found to be appropriate. These strategies included activities to help with comprehension and vocabulary, as well as metacognition. Some of the strategies were comprehension and vocabulary activities, such as mapping, graphic organizers, read alouds, miscue analysis, word analysis, and reading/writing connections. In addition, the tutors received training in assessment techniques, including running records and retellings of children's books. The experimental group also attended training sessions in which research was discussed that explained the uses and importance of these strategies. They read and discussed articles on metacognition, comprehension, vocabulary, and assessment.

Both sets of tutors were assessed before and after the study. Two forms, Form G and Form H, of the *Nelson-Denny* test were used. One form was used for the beginning assessment and the second form was used at the end of the study.

The *Nelson-Denny* was chosen for assessing the tutors' growth or lack of growth in the areas of comprehension and vocabulary. The *Nelson-Denny* was composed of two subtests, the vocabulary section and the comprehension section.

The instrument for assessing the children both at the beginning and the end of the study was the Gates-MacGinitie Reading Test (MacGinitie & MacGinitie, 1989). This assessment instrument also had two forms. Forms K and L were used for this study. The instrument was used to test for comprehension and vocabulary abilities of children and was considered both reliable and valid in assessing these two areas.

## Overview of the Results

Statistical analysis of the data from this study, using ANCOVA, allowed the researcher to reject two of the original hypotheses and retain two of the original hypotheses. The fifth and final hypothesis was never analyzed due to the lack of response by the college tutors on the final survey. Analysis of covariance was used to analyze the data. The findings were as follows:

1. Null hypothesis 1 was retained, because there was no significant difference between the scores on the pre-test and the post-test for comprehension, as measured by the *Nelson-Denny* forms F and G, for the tutors in the control and experimental groups. Since the calculated F value ( $F = .685$ ), did not exceed the critical value ( $F_{cv} = 4.60$ ), the null hypothesis that there would be no difference between the scores on the vocabulary section, as measured by the *Nelson-Denny*, between the tutors who were in the experimental group and the tutors who were in the control group, was retained. The data showed that the training no significant effect on the tutors' comprehension as measured by the scores on the *Nelson-Denny*. Table 5.3, in page 106, showed that the college students only had an Eta Squared score of .047, which suggested that the training had little effect on the comprehension aspect of the tutors' reading.

There were five factors that could contribute to this finding. The first factor was the ceiling of the testing instrument. Many of the college students scored at the 14<sup>th</sup>, 15<sup>th</sup>, and 16<sup>th</sup> grade level on this test leaving little room for improvement. Second, the test was timed, which some students voiced as a concern, because they were not fast readers and were unable to finish the test. Third, some of the students were tired of testing when it came time to do the post-test, and because it was the end of the school semester and

students were concerned with finals and with leaving the university for Christmas vacation. Fourth, although several articles were read and discussed, the majority of the training and tutoring time was spent using children's books, which would have led to little improvement of comprehension at the college reading level. Fifth was the short duration of the study, eleven weeks. Perhaps more time for training and tutoring would have had a larger impact on the scores.

2. Null hypothesis 2 was not retained. Since the calculated F value ( $F = 9.009$ ) exceeds the critical value ( $F_{cv} = 4.60$ ), the null hypothesis that there was no difference between the scores on the vocabulary section, as measured by the *Nelson-Denny*, between the tutors who were in the experimental group and the tutors who were in the control group, was not retained. The data showed that the training of college tutors did have a greater effect on the vocabulary scores of the tutors in the experimental group than the tutors in the control group. By examining table 5.5, on page 110, the researcher could determine that the college students had an Eta Squared score of .392, which indicates that restated as 39% of the improvement of the scores from the posttest on the vocabulary section of the *Nelson-Denny* could be attributed to the training.

3. Null hypothesis 3 was retained, because there was no significant difference between the scores on the pre-test and the post-test for comprehension, as assessed by the *Gates MacGinitie Reading Test*, forms K and L, for the tutees in the control and experimental groups. The data showed that the training had little effect on the improvement of comprehension as measured by the scores on the *Gates MacGinitie Reading Test*. Since the calculated F value ( $F = .660$ ), did not exceed the critical value

( $F_{cv} = 4.84$ ), the null hypothesis that there would be no difference between the scores on the vocabulary section, as measured by the *Gates MacGinitie Reading Test.*, between the tutees who were in the experimental group and the tutees who were in the control group, was retained. By examining table 5.6, on page 112, the researcher could also determine that the tutees only had an Eta Squared score of .057. This was interpreted as the training having little effect on the comprehension aspect of the tutees' learning. There were several factors that could be attributed to this finding. Observations by the researcher determined that a majority of the tutoring time was spent on word analysis. Word walls, flash cards, and other forms of teaching strategies were being used on a daily basis, yet the comprehension aspect of the tutoring time was harder to teach and seemed to be given less time. The strategies taught during the training sessions were used, but were not re-taught or reinforced enough. It was interesting to note, though, that although the results were not significant, all but one of the children in the experimental group improved or stayed at the same level, while only two of the children in the control group improved their comprehension scores.

4. Null hypothesis 4 was not retained, because there was a significant difference between the scores on the pre-test and the post-test for vocabulary, as assessed by the *Gates MacGinitie Reading Test.*, forms K and L, for the children in the control and experimental groups. The data showed that the training had a significant effect on the improvement of vocabulary as measured by the scores on the *Gates MacGinitie Reading Test.* Since the calculated F value ( $F = 12.297$ ), exceeded the critical value ( $F_{cv} = 4.84$ ), the null hypothesis that there would be no difference between the scores on the



vocabulary section, as measured by the *Gates MacGinitie Reading Test*, between the children who were in the experimental group and the children who were in the control group, was not retained. By examining table 5.8, in Chapter V, the researcher could also determine that the children had an Eta Squared score of .528, which can be restated as 53% of the improvement of the scores from the posttest on the vocabulary section of the *Gates MacGinitie Reading Test* can be attributed to the training.

Finally, it was interesting to note that the children in the experimental group outscored the control group on both post-tests. On the vocabulary post-test, the children in the experimental group had a mean score of 31.1429, while the children in the control group had a mean score of 17.4286. On the comprehension post-test the children in the experimental group had a mean score of 32.5714, and the children in the control group had a mean score of 25.5714, thus demonstrating that the experimental group of children outscored their counterparts on both portions of the tests. The final note of interest was that some of the children in the experimental group, who improved on either the section of the vocabulary or the comprehension section of the *Gates MacGinitie Reading Test*, actually improved by three-fourths of a grade level to a full year, during this eleven week tutoring period. The children in the control group, however, stayed close to the same grade level on both the pre- and post-tests.

#### Implications of the Results

The findings of this study supported, in part, that tutoring can have a significant effect on the vocabulary and comprehension skills of at-risk children when the training

was effective. Implications of this study are discussed in terms of theory, research, and practice.

### Implications in Terms of Theory

Children learn at a very early age that there are different ways of behaving, of talking, and of responding to different situations. For example, children may not act or talk or respond in a classroom situation in the same way that they would at home. Children have different identities that they use to adjust to different situations. Gee (1998) stated that there are acquired and learned discourses. The acquired discourses, or the primary discourses, are acquired on a subconscious level through exposure to modeling. The learned discourse, or the secondary discourses, are learned on a conscious level through teaching and experiences that can cause a conscious reflection. The society in which a child lives and is taught creates these different discourses in all of us. Wilkinson (1999) added that print can be considered a secondary discourse, and requires discussion, explanation, analysis, and the development of meta-knowledge. Wilkinson interpreted this as meaning that explicit teaching of reading skills and strategies is necessary and appropriate. This has been reinforced by research using one-on-one tutoring (Bauman & Ivey, 1997; Clay, 1998; Taylor et al., 1997; Wasik, 1998). Wilkinson (1999) added that explicit teaching of skills and strategies must become a part of any teaching pedagogy

when there are children who come from diverse cultures and whose primary discourses are significantly different that the discourse of the school.

However, the teaching of explicit skills and strategies does not mean that skills and strategies must be broken down into tiny pieces to be typed onto worksheets for the at-risk children to ponder and casually mark answers. Instead, this explicit teaching can be done through the use of good literature. Raphael and Hiebert (1996) reported that language was used to negotiate meaning and that all voices should have a role in this negotiation. However, yet this could not be done if a child is simply filling in blanks on worksheets about skills and strategies that have been isolated into short phrases or sentences with no meaning to discuss. There needs to be a time to reflect and discuss. Therefore, part of the instruction should focus on readings of literature so that dialogue and analysis can happen. In this particular study, however, not enough time was spent on this particular aspect of explicit teaching. Although the children read daily, and some of the children and tutors actually read children's novels, the explicit teaching from this literature seemed to focus a great deal on the vocabulary aspect of the lessons, and not enough time was spent on the comprehension aspect. Although the children were always eager to read and be read to, and they worked diligently on their lessons, they seemed to have little time at the end of the lessons to reflect and discuss the readings. The children in the experimental group, did show some improvement, but lack of time and lack of enough explicit teaching of the strategies and skills may have hindered the ability of the children to show a significant improvement when compared to the control group.

The tutors also demonstrated some improvement in the area of comprehension. Although the improvement was not enough to demonstrate a significant difference between the two groups of college students, there was improvement. Why was there not more of an improvement in the area of comprehension for the tutors or the children? When discussing comprehension, one is not talking about a simple skill to be taught. Comprehension is a multidimensional thinking process. This process includes the interaction the reader has with a text. The prior knowledge of each individual reader has to be taken into consideration. Comprehending a text requires the coordination of a number of interrelated sources or information. This information may come from the reader, the tutor, the text, the peers, and must all be taken in by the reader in order to be processed into some kind of understanding of what is being read. There are critical connections between what was already known by the reader and what was new knowledge. This connection between the information may result in a completely individualized understanding of the text. Therefore, the teaching of this strategy could become very complex and would take a great deal of time. Although there were strategies, scaffolding, and modeling used in the tutoring sessions, the amount of time to learn these strategies and improve in the area of comprehension varies from person to person. Comprehension could not be taught in the same way as vocabulary. Strategies for teaching comprehension, for this study, was to be embedded in the literature. This meant that a great deal of time was spent in the reading of the literature. Once more, the amount of time for this study was determined to be a factor for the less than significant

improvement for the tutors and the children. However, the encouraging portion of this study was that improvement in the area of comprehension was happening.

The improvement of the vocabulary for both the tutors and the children might be explained in that vocabulary is a strategy that is more easily taught. The children were often placed in a tutoring situation where discussion of the literature or a character was open to several children reading the same book. The tutors worked diligently with new strategies to aid the children in improving their vocabulary and the conversations between the children and the tutors were on-going. There was seldom any time that was not spent in reading, discussing, or conversing between the children and the tutors. The *Nelson-Denny* made use of synonyms to assess improvement in the vocabulary of the college students. The significant improvement in this area might be explained in that the use of synonyms was often used when the tutors were working with the children. Often the tutors would have to explain what certain words found in the literature meant, or give synonyms for words to be added to the word wall. While working with the child, the tutor would sometimes re-explain a comment by the use of synonyms. The students in the experimental were also being introduced to new words in their own reading of the research articles and through the discussions of the articles were using some of their new-found words. The interaction of the tutors in the experimental group, whether discussing the articles, the lesson plans, the new concept and strategies, or the children, added to their use, practice and introduction of new words. The combination of all of these experiences added to the chances of the experimental group of both the children and the tutors improving on their vocabulary assessment.

### Implications for Research

The limitations of this study in terms of the subjects and size of the population and the generalizability to other populations, the materials used, the time allotted, the training, suggest topics for further research.

1. Utilize a similar research design using a larger sample for both the tutors and the tutees.
2. Utilize a similar research design allotting more than eleven weeks for the study.
3. Utilize a similar research design using a test with more sensitivity to improvement.

Because the college students scored so well on the pre-test, there was not enough sensitivity to their improvement on the post-test.

4. Utilize a similar research design across cultural and economic lines.
5. Utilize a similar research design allotting more explicit teaching of comprehension skills and strategies.

### Implications for Practice

There are several implications for practice that are suggested by the finding in this study. One such implication would include the rationale for tutoring at-risk children to aid them in becoming more successful at reading skills and strategies. Another implication would include the rationale that tutoring at-risk children can improve their vocabulary skills. The third implication for practice is the rationale that using literature to tutor at-risk children can be a successful tool, and finally, the training tutors receive while working with at-risk children can not only benefit the children, but the tutors.

Although all the results from this study did not show a significant difference in the effectiveness of training college students to tutor at-risk students, the children and the tutors who participated in this study clearly benefited. Some of the children and tutors in both the experimental and the control groups showed improvement in the areas of reading comprehension and vocabulary skills and strategies. Most of the children in the experimental group improved in both areas. The implications from these findings would seem to indicate a well-planned, well-designed, well-supervised tutoring program could benefit both the tutors and the tutees. Wasik (1998) reported that tutors could never replace a certified teacher, but the service and the environment they provided for learning could be effective if the tutoring programs were planned carefully. In order for the program to be successful, the program must be well-developed and provide a well-structured program for the children, while utilizing high quality training and supervision. Wasik (1998) maintained that supervision of a tutoring program must include the reading specialist, or the tutors were left on their own to flounder for ideas and solutions. Therefore, the effectiveness of the training was based upon the guidance, skills, and knowledge of the supervisor. Many studies have supported the importance of the training of tutors (Clay, 1985; Juel, 1995,1996; Taylor et al, 1997; Wasik, 1998). The present study supported these findings. This research, along with the aforementioned research, should indicate the need to incorporate an effective training program, with supervision by a reading specialist, for all tutoring programs.

Numerous studies have reached the conclusion that children who are considered at-risk can benefit from one-on-one tutoring programs (Bloom, 1981,1984, Clay, 1985;

Juel, 1996). Bloom (1984) claimed that one-on-one tutoring to be one of the most effective forms of instruction. The importance of the tutor training was claimed to be one of the most important components of any tutoring program. Clay (1993) and Taylor et al. (1997) stated that the earlier this intervention, the one-on-one tutoring, the more successful it seemed to be. Pikulski (1994) added that many schools try to remedy the problem many children have with reading instead of looking for ways to prevent the reading problem to begin with. Tutoring children who are considered to be at-risk of having a problem with children can be an effective way of helping to prevent a problem in later years.

Although neither group of children showed a significant improvement in their comprehension skills and strategies, there was an indication that the children benefited from the tutoring sessions. Vygotsky (1978) wrote that children needed to be pushed to effectively develop their cognition. In order to do this, an environment of trust and freedom must be established. The children and the tutors must have a rapport with each other and the supervisor in such a way that open discussion of problems, thoughts, and suggestions can be expressed. The children and tutors in this study formed a bond of understanding with each other and the supervisor. The tutors understood the supervisor was open to discussion and questions. Discussions, with an open floor forum, were accepted as a way of allowing all thoughts and identities to be acknowledged. This in turn, led to the bonds the children and the tutors formed with each other during the tutoring sessions. This type of environment allowed the children to talk and discuss their reflections and thoughts freely. Yet, the situation of losing control of the lesson was not a



problem for the tutors or the supervisors. Respect for each other and each other's opinions was observed in all the tutoring and training sessions.

Next, the teaching of reading skills and strategies, using children's literature, is an effective tool for improving comprehension and vocabulary. Although the study did not show a significant increase in the comprehension of either the tutors or the children, the researcher did observe the importance of using children's literature in the tutoring lessons. Many of the children were eager to begin reading where they had stopped the day before. Also, many of the children were interested in aiding the tutors in determining what books were to be used for the following lessons. The children were eager to participate in the read alouds when asked to predict or join in the reading for repetitive words or phrases. Children would sometimes bring library books to share with their tutors. The tutors spent time reading many new or unfamiliar books before deciding what to use for the read alouds of the lessons, and they frequently questioned the supervisor for advice on books to use, readability, or interest. Raphael and Hiebert (1996) stressed that language was fundamental to problem-solving and learning, and the use of literature provided the fundamentals for this type of environment. Language, Vygotsky (1978) added, is the medium of thought and the medium of instruction, in that it is the tool the children need to explain their thoughts and the tool the tutors need to instruct. The use of good literature in the tutoring lessons provides the words that present the thoughts and questions of the children and aids the tutors in explaining and discussing the children's thoughts and questions.

Finally, the results from this study indicated a need to continue the training and supervision for the tutors. Although the researcher did not find the improvement she hoped to find, there were indications that with more time, the results could have been even more significant. The children were improving. The tutors, on the other hand, would have benefited from more reading and discussions of articles of research in the areas of comprehension, early childhood, vocabulary, language cognitive development, and metacognition. The tutors often commented during the training sessions how much they were learning. Perhaps with more time, they would have shown this improvement as measured by the assessments.

### Summary

This study measured the effectiveness of training college students to tutor at-risk children in an American Reads program. Two groups of college students and children were pre-tested and post-tested to determine the effectiveness of this training. The control group of tutors received minimal training in the areas of comprehension, vocabulary, time-management, assessment, and discipline. The experimental group of tutors received the minimal training the control group received, along with weekly training sessions in strategies to help improve comprehension, vocabulary, and metacognition. The experimental group of tutors also read and discussed articles that related to comprehension and vocabulary. They also were allowed time to plan and discuss lessons for the following week. The specialist trained the tutors and supervised the tutoring sessions. The tutoring was located in a small town in the northern part of the

southwestern region of the United States. The subsidized apartment complex is near the university the tutors attended. The training sessions took place at the university, while the tutoring was at the apartment complex. Two apartments were utilized. In one apartment the control group would meet, and the experimental group met in the other apartment.

Two sets of tests were used. The *Nelson-Denny*, forms F and G, was the measurement tool for the tutors. The *Gates MacGinitie Reading Test*, forms K and L, was the measurement tool for the children. The intervention or treatment in this study was the extra training the experimental group of tutors received. The study was completed after eleven weeks.

The statistical analysis for the data was the ANCOVA. The data was analyzed to determine if the extra training received by the experimental group of tutors could help to improve, to a greater degree than those in the control group, the reading scores as measured by the assessment tools for not only the tutors receiving the training, but the children being tutored by the tutors. The analysis revealed that the training did improve, to a greater degree, the vocabulary scores of the experimental group of tutors and children than those in the control group. The analysis did not support, however, that the training aided in the improvement of the comprehension scores for a significant difference, for the experimental group. However, additional information, such as the mean scores, did show a greater improvement in comprehension for the experimental group than for the control group of both tutors and children.

Implications for theory suggest that training is important for effective tutoring, and this adds to the theory of Wasik (1998) and Clay (1985) that training must be a part

of every tutoring program. The implications also suggest that the zone of proximal development for both the tutors and the children, as earlier reported by Topping and Vygotsky, is an important aspect of any tutoring program. Suggestions for research were detailed in this final chapter as well as implications for practice. Suggested are the importance of planning, training, and supervision in tutoring programs.

The present study was conducted to offer validation to the importance of effective training in not only the America Reads program, but any reading tutoring program. This study was not conducted to suggest that tutoring take the place of the child's reading program at school, but to work in conjunction with what the child is already doing.

APPENDIX A  
BOOK LISTS AND TEACHING IDEAS

## BOOK LISTS

Crawley, S., & Merritt, K. (1996). Remediating reading difficulties. (3<sup>rd</sup> ed.), Boston, MA: McGraw Hill.

Johns, J., Lenski, S., & Elish-Piper, L. (1999). Early literacy assessments & teaching strategies. Kendal Hunt Publishing Company.

Swearingen, R., & Allen, D. (1997). Classroom assessment of reading processes. Boston: Houghton Mifflin.

## TEACHING IDEAS

Crowell., C. (1990). Improving your vocabulary skills. New York, NY: Educational Design, Inc.

Garrity, L., (1991). Your enrichment guide to 88 read-aloud children's classics. Scott, Foresman, and Co.

Hermann, B. (1994). (edt). The volunteer tutor's toolbox. Newark D: International Reading Association.

Pinnell G., & Fountas, I.(1998). Word matters. Portsmouth, NH: Heinemann.

Tompkins, G., (1998). 50 Literacy Strategies: Step by Step. Udder Saddle River, NJ: Merrill.

APPENDIX B  
COLLEGE STUDENT CONSENT LETTER

LETTER OF CONSENT

Janet Coleman

September, 1999

Dear UNT student:

I am a doctorate student in the field of reading from the University of North Texas. I will be conducting a research study at the Phoenix Apartment complex in Denton, TX. This study will be focusing on the training aspect of the America Reads tutors. I would like you to participate in this study. In order to do this, I will need you to sign this consent, in which you are agreeing to not only tutor the children in reading, but also participate in the training sessions and take a pretest and post test in reading. The pretest will take be administered at the beginning of the study and the posttest will be administered in December.

I am not only interested in seeing if the children will improve in their reading skills and strategies, but if the tutors will also improve. Your name will not be published in any report. If you are willing to participate in this study, please sign and return this form to me.

Respectfully,

Janet Coleman  
Reading doctorate candidate  
University of North Texas

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I, \_\_\_\_\_, agree to participate in the training and tutoring research.

Signed \_\_\_\_\_ Date: \_\_\_\_\_



APPENDIX C  
PARENT AND CHILD CONSENT LETTERS

## LETTER OF CONSENT

Janet Coleman

September, 1999

Dear Parents/guardians:

I am a doctorate student at the University of North Texas, in the field of reading.. I will be conducting a research study on the effects of training for tutors. I will be training and supervising college students who will be tutoring children in reading. This research study will take place at the Phoenix Apartment Complex, during the America Reads tutoring sessions, and will last approximately eleven weeks.

I would like for your child to participate in this study. Your child will have a pretest and posttest administered during the months of September and December. The results will tell me if the tutors who have been trained have had an impact on the reading skills and strategies of your child. This research may be beneficial to future training of tutors.

No names of the children or tutors will be given in any report, nor will the scores be reported to the schools. I am hoping that not only will the tutors help your child become a better reader, but you will also see a greater interest for reading.

Please sign the permission form below so that your child may participate in the research study. Thank you for all your cooperation.

If you would like to reach me to further discuss this program and research, you may leave a message for me at the University of North Texas Reading Clinic at 940-595-2065.

Sincerely,

Janet Coleman  
Reading Doctorate candidate  
University of North Texas

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects (940-565-3940).

## LETTER OF CONSENT

Janet Coleman

August, 1999

Dear Student:

I am a student at the University of North Texas. I am interested in studying the effects of how well tutors can help in reading. I will be training and helping the tutors who will be working with a child each day. This research will take place in the Phoenix Apartment Complex after school on Monday-Thursday, from 3:45-4:45, and will last for ten weeks.

I would like for you to be a part of this study. If you should decide to participate in this study, you will take a test in September and another one in December to help me decide if the training tutors had was effective in helping not only children, but themselves with reading skills and strategies. The results from this test will not be sent to your school and your name will not be used in any kind of report. I am hoping that not only will you become a better reader because of this training, but that you will also have a greater interest in reading.

If you are willing to be a part of this study, please sign the consent form below and return it to me. Thank you for agreeing to help me with this study.

Sincerely,

Janet Coleman  
Reading Doctorate candidate  
University of North Texas

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects (940-565-3940).

---

I agree to be a part of the tutoring study.

Signed \_\_\_\_\_ Date: \_\_\_\_\_

I agree to allow my child, \_\_\_\_\_ to participate in the tutoring training research.

Signed \_\_\_\_\_ Date: \_\_\_\_\_

APPENDIX D  
CORRELATION OF CHILDREN AND TUTORS

## Correlations for children

Correlations

		Pre Test Vocabulary	Post Vocabulary	Post Comprehension	Pre Comprehension score
Pre Test Vocabulary	Pearson Correlation	1.000	.837**	.918**	.893**
	Sig. (2-tailed)	.	.000	.000	.000
	N	14	14	14	14
Post Vocabulary	Pearson Correlation	.837**	1.000	.873**	.763**
	Sig. (2-tailed)	.000	.	.000	.001
	N	14	14	14	14
Post Comprehension	Pearson Correlation	.918**	.873**	1.000	.846**
	Sig. (2-tailed)	.000	.000	.	.000
	N	14	14	14	14
Pre Comprehension score	Pearson Correlation	.893**	.763**	.846**	1.000
	Sig. (2-tailed)	.000	.001	.000	.
	N	14	14	14	14

\*\* Correlation is significant at the 0.01 level (2-tailed).

## Correlations for college students

Correlations

		Pre Test Vocabulary	Post Vocabulary	Post Comprehension	Pre Comprehension score
Pre Test Vocabulary	Pearson Correlation	1.000	.927**	.841**	.723**
	Sig. (2-tailed)	.	.000	.000	.001
	N	17	17	17	17
Post Vocabulary	Pearson Correlation	.927**	1.000	.767**	.655**
	Sig. (2-tailed)	.000	.	.000	.004
	N	17	17	17	17
Post Comprehension	Pearson Correlation	.841**	.767**	1.000	.891**
	Sig. (2-tailed)	.000	.000	.	.000
	N	17	17	17	17
Pre Comprehension score	Pearson Correlation	.723**	.655**	.891**	1.000
	Sig. (2-tailed)	.001	.004	.000	.
	N	17	17	17	17

\*\* Correlation is significant at the 0.01 level (2-tailed).

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internal validity of this research design, due to the fact that the tutors for the control and experimental group were not selected randomly. The tutors and the children were randomly assigned to two groups. The control group of tutors received minimal training (11 hours) and the experimental group received the same minimal training with extra (21 hours) weekly training added. The study began in October 1999 and ended in December 1999. The tutoring sessions were 1 ½ hours long, three days a week. The training for the experimental group was for 1 ½ to 2 hours weekly.

The results from this study found no significant difference between the control and experimental groups on comprehension, as measured by the assessment instruments. The results from this study did find, however, a significant difference between the control and the experimental groups on vocabulary, as measured by the assessment instruments.

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