THE IMPACT OF BRIEF INDIVIDUALIZED
INSTRUCTIONAL COMPONENTS IN A READING CLINIC
GEARED FOR PRE-SERVICE TEACHERS

by

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ABSTRACT

Four reading intervention strategies that are research validated and have demonstrated the likelihood to improve students’ oral reading fluency and comprehension are: repeated readings, phonics instruction, vocabulary preview/review, and guided reading. Brief experimental analyses of oral reading fluency were conducted with seven elementary students who are experiencing difficulties in learning to read. A reading clinic model served as fieldwork experience in which pre-service teachers learned how to apply a sequential application of specific reading interventions. Following a baseline condition, instructional treatments were combined with prior conditions until there was improvement in oral reading fluency in the instructional passages. The purpose of this study was to evaluate the critical features for a quality reading clinic. Pre-service teachers determined what components of the reading clinic were beneficial and most effective in their preparation to teach reading. The results of an open-ended questionnaire and a survey given to the pre-service teachers are an important basis for interpreting the findings.
DEDICATION

This study is dedicated to my family ~ with loving memory to Eugene and Merry Shepard, my father and mother. Thank you for loving me, and please continue to watch over me; and for my daughters, Sarah Blaney and Melissa Williams—whom I love.

I also dedicate this study to all prospective teachers and practicing teachers and to those who care about literacy development and want to help and understand children who struggle in learning to read. I have learned that students who experience difficulties in learning to read walk along the literacy path at their own unique pace, and I know all children hold promise in becoming skillful readers. My students have taught me that the most important ingredient in ensuring reading success and in maintaining motivation to read is in their achieving some degree of success in what they do. Children have taught me that they need positive encouragement and the sense that they can succeed on the reading continuum. Children and adults who are dyslexic hold a special place in my heart, and it is my deepest hope that this study has not only increased our knowledge of effective practices for teacher candidates but also impacted decisions for shaping high-quality teacher preparation programs. This study has opened my eyes to the extraordinary challenge of teaching reading. It was my honor and privilege to be invited to help pilot Humboldt State University’s first Reading Clinic in 2005 under the professional
direction and guidance of the Education Department’s finest educators – David Ellerd, Peggy Kirkpatrick, and my colleague and dear friend, Laura Madjedi.
ACKNOWLEDGMENTS

Whatever success I have experienced has come in partnership with others.

First, my lifelong appreciation and sincere thanks to Ann Diver-Stamnes, my friend and mentor, for committing to this endeavor with me, offering essential, consistent help and encouragement, and with meticulous care masterfully editing my writing.

Many thanks to David Ellerd, for granting my request to serve as a mentoring-teacher for the reading clinic and for offering his valuable experience and opinions in teaching me to how to effectively conduct research using a quantitative lens.

Sincere appreciation and thanks to my valued and special friend, Peggy Kirkpatrick, for mentoring me through several educational pursuits and for providing the initial inspiration to consider the piloted reading clinic at Humboldt State University as a research topic.

Thanks to Eric Van Duzer, who taught the Educational Research class and patiently guided my thoughts in understanding the research process and through many trials and triumphs encouraged me to keep striving.

I am indebted to Laura Madjedi, my devoted friend and colleague for inviting me to co-teach in the reading clinic. This research would not have been possible without her professionalism, efficiency, guidance, and enduring patience with me as I made my way through this journey.
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CHAPTER ONE
INTRODUCTION

Children today are expected to display literacy skills far beyond those measured in the past. As society becomes increasingly reliant on knowledge and information, what it means to be literate is changing rapidly. The futures of today’s students depend on how well they can comprehend and thoughtfully use a wide variety of texts. Currently, profound changes are taking place in the nature of how reading and writing are taught (Hock & Deshler, 2003). The present literate society of communication through technology and multiple media evokes a need to support all children in constructing meaning from these challenging texts (National Reading Panel, 2000).

Students who have difficulties in learning to read and write are present in virtually every elementary classroom. Teachers report that their greatest challenge is working with struggling readers and that as many as one student out of four is reading more than one year below grade level (Baumann, Duffy-Hester, & Ro, 2001). Highly trained teachers, implementing carefully and conscientiously planned instruction, may be the best intervention for children who demonstrate problems learning to read (Snow, Burns, & Griffin, 1998). Classroom teachers bear the primary responsibility for helping struggling readers.

The National Reading Council (2000) conducted extensive research to assess the status of research-based knowledge, including the effectiveness of various
approaches to teaching children to read. This panel adopted the following topics for intensive study: Alphabetics, Fluency, Comprehension, Teacher Education and Reading Instruction, Computer Technology and Reading Instruction, Oral Reading Fluency and Phonological Awareness. The panel was charged with providing a summarized report that would present the panel’s conclusions for best practices that are relevant to the critical skills, environments, and early developmental interactions that are instrumental in the acquisition of beginning reading skills.

The National Reading Council’s (2000) meta-analysis found fluency to be one of the many critical factors necessary for reading comprehension, and yet despite its importance, fluency was often neglected in the classroom.

Fluent readers are characterized by the ability to read orally with speed, accuracy, and proper expression (National Reading Panel, 2000). Research in oral reading fluency has gained tremendous momentum. Today, fluency is regarded as one of the key skills of effective readers (Hasbrouck, Ihnot, & Rogers, 1999; National Reading Panel Report, 2000). The ability to obtain meaning from print depends so strongly on the development of word recognition accuracy and reading fluency that both word recognition and reading fluency should be regularly assessed in the classroom (Snow, Burns, & Griffin, 1998). Learning to read fluently is difficult because many components of the reading process must be coordinated seemingly all at the same time.
The human mind has only limited ability to process information, and the need to process all the component tasks of reading is especially difficult for beginning readers (Farstrup & Samuels, 2002). Three basic processes are involved in reading: decoding, comprehension, and attention. Decoding is the ability to pronounce the words printed on the page. Comprehension is a process in which meaning is constructed using the information on the printed page, and to decode and comprehend text, attention is required (National Reading Panel, 2000). The problem facing the beginning reader is that at any given moment, a limited amount of processing space or attention is available for decoding and comprehension, and each task by itself occupies a considerable amount of the available limited processing space. After extended reading practice, the amount of attention required for the decoding task decreases. When a student is able to recognize words with ease, the bulk of attentional resources is available for comprehension. The primary purpose for reading is to make meaning from text. Comprehension is a critically important factor in the development of children’s reading skills to be able to obtain an education and to also meet the ever increasing literacy demands in today’s global society. The preparation of teachers to better equip students to develop and apply reading comprehension strategies to enhance understanding is intimately linked to students’ achievement in this area.

The challenge for teachers is to figure out how to work with struggling readers in a manner that addresses their needs in learning to read, within the context of the rich instruction provided by small-group instruction, normally available only
to strong readers. The general principle is to use the same continuum with struggling readers (including teacher read-alouds, sustained silent reading, shared reading, guided reading, guided discussion, and literature discussion groups) and to supplement these strategies with intensive instruction on the specific skills students need to succeed. To that end, the current research was guided by the question: What is the impact of a reading clinic for students with special needs aged 5 to 9 on the preparation of pre-service Special Education teachers in learning how to work with students experiencing reading difficulties? Qualitative and quantitative research methods were used to explore this question.

The purpose of the graduate reading clinic was to provide a situated, authentic learning experience for Special Education pre-service teachers and to facilitate support for students who were struggling in reading. A reading clinic was developed to teach pre-service teachers four specific research-based interventions and to provide effective teaching practices to achieve targeted student outcomes.

Available data suggest that these four reading interventions are effective for improving oral reading fluency: phonics instruction, vocabulary preview/review, repeated readings, and guided reading (Farstrup & Samuels, 2002). Little is known about teacher’s actual practices and the extent to which literacy course objectives carry over into their classrooms. Therefore, the purpose of this study was to assess the effectiveness of the reading clinic model in teaching pre-service teachers to utilize specific and effective literacy teaching practices in working with children with special needs.
CHAPTER TWO
LITERATURE REVIEW

Introduction

Twentieth century technology demands that students be adept in multiple literacies. Currently, profound changes are taking place in the nature of how reading and writing are taught (Hock & Deshler, 2003). The present literate society of communication through technology and multiple medias evokes a need to support all children in constructing meaning from a wide variety of challenging texts (Alfassi, 1998; Allington, 2006; Hock, & Deshler, 2003; Lederer, 2000; National Reading Panel, 2000). Based on an extensive review from a body of research, the National Reading Panel (2000) warned against any prescriptive approach to teaching reading and pointed out the importance of quality teacher education on learning outcomes.

Reading is a complex set of skills and requires effort, linguistic achievement, and incremental skill development. Teaching reading in the Twenty-first century is a daunting task. “Teaching reading IS rocket science; it requires considerable knowledge and skill, acquired over several years through focused study and supervised practice” (Moats, 1999). Teachers are viewed largely as inadequately trained; fewer than 10 percent of U.S. elementary teachers are sufficiently prepared to teach children how to read (Allington, 2006). Teachers must develop substantial knowledge and competencies in a wide variety of reading strategies. They must
know how best to teach and model the strategies and to learn to intuitively know which strategies are most effective for different students.

Teacher education programs need to strengthen pre-service education by instructing teachers how to use a personalized approach to teaching and learning (Allington, 2006; International Reading Association, 2007; National Reading Panel, 2000). Teachers should be able to assess and monitor the literacy needs of the individual students and develop a comprehensive plan for intensive intervention (Allington, 2006; International Reading Association, 2007; Lipson & Wixson, 1997; National Reading Panel, 2000). Some children learn to read with relative ease while others struggle when offered typical classroom instruction. Every child is different and teaching and learning programs need to be responsive to this by tailoring classroom programs to meet individual needs (Farstrup & Samuels, 2003; Lipson & Wixson, 1997; National Reading Panel, 2000). Children who are experiencing difficulties in learning to read will need greater access to expert, intensive, and more personalized teaching if they are to progress in the continuum of literacy skills (Allington, 2006; Farstrup & Samuels, 2002).

One assumption underlying early literacy is that once children learn to read, they will be able to use reading to learn for the rest of their lives (Massey, 2004). Word recognition and decoding do not guarantee comprehension. The explicit development of reading strategies that enable students to think and learn with texts is paramount to their ability to access increasingly difficult texts (Allington, 2006; Hock & Deshler, 2003; National Reading Panel, 2000). New technological
contexts in literacy challenge teachers to strategically and thoughtfully guide
students’ learning within information environments that are richer and more
complex than traditional print media (Farstrup & Samuels, 2002; National Reading
Panel, 2000).

This review will define literacy terms and then explore the historical context of
reading instruction models. It will also examine the strengths and short-comings of
these various approaches for teaching reading. Former reading instructional models
are foundational to our current literacy pre-service education practices. This
historical overview will form the basis for determining well-defined standards of
practice and proven teaching strategies. The final sections of this literature review
will identify evidence-based reading strategies used to facilitate effective reading
instruction and provide a brief overview of elementary teaching standards for
Education Specialist credential programs. Examination of these standards and the
ways in which they can be applied to field-work experiences for pre-service teachers
will form the basis for the research question: What were the effects of the reading
clinic model in teaching pre-service teachers to support the literacy needs of
struggling readers?

*Literacy Development*

Literacy has been defined as one’s ability to achieve a level of competence or
skills in reading and writing essential for everyday life and work situations (Hock &
Deshler, 2003). Literacy is not a single skill but rather a set of ordered skills that can
be used to accomplish a variety of reading and writing tasks (Hock & Deshler 2003).
Basic reading skills begin in the primary grades. Students’ ability to comprehend content area texts and express their understanding in writing is core to learning in every major subject area and essential to their continued progress in literacy development (Sulzer, Wolfson, & Rabenburg, 2002). Comprehension is defined as the process of constructing meaning for a given text, and it is the main purpose of reading (Gunning, 2003; Lipson & Wixon 1997; National Reading Panel, 2000). Students who read well in early elementary often struggle to read and comprehend after fourth grade when content area reading becomes increasingly difficult (Mastropieri, Scruggs, & Graetz, 2003; Vacca, 2002; Vaughn, Klingner, & Bryant, 2001). The National Reading Panel’s (2000) evidence-based assessments confirm this notion: “Preparation of teachers to better equip students to develop and apply reading comprehension strategies to enhance understanding is intimately linked to students’ achievement in this area” (National Reading Panel, 2000, p. 13).

Comprehension instruction is geared toward teaching students multiple strategies that will allow them to develop self-regulating behaviors to foster, monitor, regulate, and maintain comprehension. For students to become mindful, motivated strategy users, they need to know what strategy to use and under what conditions the strategy is applicable and most effective (Alfassi, 1998; Rhoder, 2002).

Over the past decade, research efforts have concentrated on understanding the cognitive processes required to learn how to read and how to teach reading and the related strategy skills required for comprehension. A convincing body of research supports the role of strategic learning in students’ literacy development (Mastropieri,
et.al., 2003; National Reading Panel, 2000; Vacca, 2002). Some children find it difficult to read because they rely too heavily on one type of strategy, or they do not use strategies at all (Farstrup & Samuels, 2002). In a study that examined pre-service elementary education teacher’s knowledge and beliefs about children who are struggling learning to read, pre-service candidates identified the need for teachers to teach children multiple, effective reading strategies that are personalized and adaptive to fit their needs (Nierstheimer, Hopkins, & Dillon, 2000). Learning to read is not innate. It is a skill that is acquired through systematic, thoughtfully-planned direct instruction.

In teacher education programs, pre-service teachers generally acquire their knowledge through coursework in theory and methods and through supervised teaching fieldwork experiences. “Research provides little consistent guidance about what the content of teacher education or professional development programs should be” (National Reading Panel, 2000). Variations among the few studies available raise questions about what might be the optimal combination of pre-service education in strategy instruction (National Reading Panel, 2000; Farnstrup & Samuels, 2002).

Many studies exist that focus on the effect of teacher preparation and the effect on student achievement (Allington, 2006; National Education Association, 2006; National Reading Panel, 2000). Discussions for quality teacher preparation programs have been around for a long time and have heightened at the turn of the 21st Century (International Reading Association, 2007; National Reading Panel, 2000). Most recently, the No Child Left Behind Act of January 8, 2001, re-
emphasized the importance of teachers being properly trained and highly qualified in their subject area and especially in the area of teaching reading. State standards suggest the growing importance of teacher education on learning outcomes. Compelling evidence exists to substantiate the importance of highly qualified teachers (California Commission on Teacher Credentialing, 1996; Darling-Hammond, 2000; Farstrup & Samuels, 2002; International Reading Association, 2007; National Reading Panel, 2000; Vogt & Shearer, 2003).

Another legislative measure, Response to Intervention (RTI) was set forth in the Individuals with Disabilities Act (IDEA) of 2004. Its purpose is to reduce the number of learners referred to special education programs by providing intensive and effective instruction before children begin to fail. “It has been estimated that as many as 40% of students in special education programs are there because they struggle with reading” (Farstrup, 2007, p.17). During the first half of the twentieth century, educators explored a variety of approaches for teaching reading.

The next section will provide a brief historical overview of some the approaches and methods that have been used for teaching reading. Cultural, political, historical, and social contexts have influenced reading instruction models. These trends in teaching reading have served as a foundation for literacy models provided in teacher education programs in the twentieth century. Personal beliefs about reading and writing instruction are foundational for one’s philosophy in instruction and are formed by instructional techniques learned in pre-service teacher education.

A Historical Synopsis of Reading Methods
Educators explored a variety of approaches for teaching reading during the first half of the Twentieth Century, including phonics. At the time, the debate was not so much related to the teaching of phonics, the study of speech sounds related to reading, as it was to consider how and when to teach this method (Gunning, 2003; Vogt & Shearer 2003). Two methods of phonics instruction were available: synthetic phonics instruction and analytic phonics instruction. Synthetic phonics is when students learn individual sounds and blend them into whole words (Gunning, 2003; Vogt & Shearer, 2003). This model has also been described as a bottom-up approach (Gunning, 2003). Analytic phonics is referred to as a look-say approach or whole-word approach (Vogt & Shearer, 2003). It is a top-down approach to teaching reading (Gunning, 2003). The second half of the Twentieth Century introduced theories in comprehension—the essence of reading.

The second half of the Twentieth Century and beyond.

In the second half of the Twentieth Century, during World War II, the need for content area reading and pedagogy aimed at teaching students how to read to learn became apparent when educators and the public discovered that soldiers were unable to read well enough to comprehend training manuals and other related texts (Vogt & Shearer, 2003). During this time, phonics was taught in many schools, and the debate continued as to which approach was best—synthetic phonics or analytic whole language (Vogt & Shearer, 2003).

Two different philosophical approaches to teaching reading exist in the continuum of reading instruction (Gunning, 2003). On one end of the continuum are
those who support a sub-skills or bottom-up approach as in explicit phonics instruction, and on the other end are those who advocate a holistic or top-down approach known as whole language (Gunning, 2003; Lipson & Wixson, 1997). Some prefer to borrow from both ends of the continuum and teach skills directly and systematically (Gunning, 2003; Lipson & Wixson, 1997).

In the bottom-up approach or phonics method for teaching reading, students first learn the names and shapes of the letters of the alphabet—or sound/symbol letter relationships (Gunning, 2003). Then explicit, direct learning is applied to children as they learn the consonant sounds, followed by more simple and then more complex vowel correspondences (Gunning, 2003; Taberski, 2000). The theory behind the bottom-up approach is that students will learn easier by breaking complex tasks into their component skills (Gunning, 2003). Literacy instruction proceeds from simple to complex across the domains of reading, writing, listening, and speaking (Gunning, 2003). Research has enhanced our understanding of the process of reading and even those who highly favor phonics recognize the importance of teaching higher-level strategies that will foster enhanced comprehension (Allington, 2006; Gunning, 2003; National Reading Panel, 2000; Taberski, 2000).

In the top-down or whole language model, sub-skills are not taught (Gunning, 2003). Teaching reading is viewed holistically, and the emphasis is on the reader rather than the text (Gunning, 2003; Vogt & Shearer, 2003). Students start at the top and work downward (Gunning, 2003). Teaching sub-skills may fragment the process and make learning to read more difficult and abstract (Goodman, 1986).
In the 1960s, as teachers leaned heavily toward phonics and decoding instruction, they began to discover their students were not developing comprehension skills (Vogt & Shearer, 2003). Among the skills students need to gain comprehension strategies are finding the main idea and supporting details, sequencing, drawing conclusions, making generalizations, comparing and contrasting, and identifying cause-and-effect relationships (Clymer, 1968). Basal readers became the primary instructional materials during the 1960s and 1970s (Lipson & Wixon, 1997; Vogt & Shearer, 2003). Basal reading programs were a collection of students’ texts and workbooks, teacher manuals, and supplementary materials for developmental reading and used in the elementary and middle school grades (Harris & Hodges, 1995). The majority of instructional materials were leveled for three reading groups: below grade level, at grade level, and above grade level, and nearly all instruction took place within these three ability-leveled groups (Vogt & Shearer, 2003).

In the early 1980s, teachers encouraged readers to use their background knowledge and knowledge of language to predict and infer the content of print. In this model, students use three-cueing systems: semantic, syntactic, and graphophonic (Goodman, 1986; Lipson & Wixon, 1997). Readers access semantic cues from past experiences and construct meaning by accessing background knowledge and bringing it into what they are reading (Goodman, 1986; Lipson & Wixon, 1997). Syntactic cues are derived from what readers know about how the structure of language works (Gunning, 2003; Lipson & Wixon, 1997). Graphophonics cues refer
to the ability to sound out words and recognize them holistically (Goodman, 1986; Lipson & Wixon, 1997). In listening to a child read aloud, the teacher is able to observe which cueing system the child is incorporating (Gunning, 2003). Good readers use all three cueing systems to predict the content of the text, confirm or revise their predictions, and reread if necessary (Gunning, 2003; Vogt & Shearer, 2003). Readers may use mostly context and as little letter information or phonics as possible (Goodman, 1986).

During the next two decades, theorists and researchers from a variety of disciplines such as psychology, linguistics, and education examined how readers make connections with the text and how they construct meaning (Gunning, 2003; Vogt & Shearer, 2003). Linguistics and psychology were influencing instructional approaches (Vogt & Shearer, 2003). Researchers began to examine a more holistic interest in the reader (Vogt & Shearer, 2003). The theoretical perspective of whole language was regenerated (Gunning, 2003; Lipson & Wixon, 1997; Strickland, 1995). The difference between this instructional approach and the former whole language methodology was that this grass roots professional movement was being proposed by a majority of classroom teachers (Vogt & Shearer, 2003). Unadapted texts, stories, and books were the primary curriculum; these texts were not controlled for vocabulary difficulty or readability (Gunning, 2003; Vogt & Shearer, 2003). The emphasis on teaching specific skills in phonics, decoding, and comprehension decreased for approximately 10 years in the United States (Vogt & Shearer, 2003). This shift in pedagogy was supported by the 1985 publication of Becoming a Nation
of Readers (Anderson, Hiebert, Scott, & Wilkinson, 1985). By the end of the 1990s, reading approaches and instruction materials were once again evaluated for their effectiveness for children exhibiting low reading performance (Vogt & Shearer, 2003).

The First Grade Studies (Bond & Dykstra, 1967a; reprinted in Reading Research Quarterly, 1997) was research designed to answer the phonics and whole-language debate once and for all. The conclusion to this study suggested that no one method can be deemed more effective in all situations such that it should be considered the best method for teaching reading and that the teacher is the most important element in the instructional situation (Vogt & Shearer, 2003). Recent cognitive and social perspectives have resulted in more integration of reading and writing in educational theory and practice (Gunning, 2003; Lipson & Wixon, 1997). Reading and writing development go hand and hand; they are connected skills (Gunning, 2003; Lipson & Wixon, 1997). This theory forms the basis of a model described as the Interactive View (Gunning, 2003; Lipson & Wixon, 1997).

The Interactionist approach combines both philosophies of teaching phonics and whole language (Gunning, 2003). In this theoretical model, skills are taught directly and systematically, especially in the beginning, but teachers avoid overdoing it so that the process of learning to read does not become fragmented (Gunning, 2003). Students practice the holistic nature of reading and writing by reading whole books and writing for authentic purposes (Gunning, 2003; Lipson & Wixon, 1997). The next sections of this review will explain in greater depth the Interactive model to
teach reading and examine the characteristics of proficient readers and the strategies they use for effective comprehension.

An interactive view of reading and writing.

In the last thirty years, our understanding of how students learn and our approach to studying reading and writing have been changed rather dramatically because researchers and educators have been prompted to consider reading and writing together, rather than separately (Gunning, 2003; Lipson & Wixon, 1997) An interactive view of reading and writing is defined as an blend of cognitive information processing and the various elements of skilled performance and the factors that influence reading and writing (Gunning, 2003; Lipson & Wixon, 1997). The interactive perspective rests on several assumptions: (1) the purpose of reading and writing are to construct meaning, (2) comprehension is a result of complex, thinking interactions between the reader and text and (3) an interactive view of reading and writing establishes the framework for thinking about the nature of reading and writing (Gunning, 2003; Lipson & Wixon 1997). Reading and writing development is continuous (Gunning, 2003; Lipson & Wixon, 1997). An emphasis of integrating reading, writing, listening, and speaking with content areas requires systematic instruction where reading and writing play complementary roles (Gunning, 2003).

Reading and writing are created through the cognitive information processing abilities of individuals and the context of the reading and/or writing event (Gunning 2003; Lipson & Wixon, 1997). Reading and writing abilities are not stable and static
constructs. Each individual may have several reading abilities and several writing abilities depending on the demands of a given task. For example, writing an informal, friendly letter to someone does not require the same cognitive demands as writing a research paper. Reading and writing are dynamic interactions or variable processes in which the reader adapts to the specific demands of each particular reading/writing experience (Gunning, 2003; Lipson & Wixon, 1997).

Despite current thinking that suggests that reading and writing are two facets of the same process and that they emerge simultaneously in terms of literacy development, it is still much more common for reading and writing to be taught in separate blocks of time and as completely separate and unrelated activities (Gunning, 2003; Lipson & Wixon, 1997). Meaning is created in the mind of the reader/writer through the interplay between cognitive processing abilities of individuals and the context of the reading and/or writing task (Gunning, 2003; Lipson & Wixon, 1997). Literacy development requires explicit and systematic instruction along a continuum that moves students from learning to read to reading to learn (Hashey & Connors, 2003; National Reading Panel, 2002; Vacca, 2002). Ninety-five percent of children can learn to read; however, this means that all teachers need to consider the individual differences among students and the ways to best meet the needs of an increasingly diverse student population (Allington, 2006).

The challenge for teachers is to figure out how to work with struggling readers in a manner that addresses their individual needs in learning to read, within the context of the rich instruction provided by small-group instruction normally
available only to strong readers (Farstrup & Samuels, 2002). The general principal is to use the same continuum with struggling readers (including teacher read-alouds, sustained silent reading, shared reading, guided reading, guided discussion, and literature discussion groups), but to supplement these strategies with intensive instruction on the specific skills students need to succeed (Cunningham & Allington, 2003; National Reading Panel, 2000).

Skilled comprehension requires the use of a variety of strategies (Gunning, 2003; National Reading Panel, 2000). In general, evidence suggests that teaching a combination of reading comprehension techniques is most effective (Allington, 2006; National Reading Panel, 2000). Explicit literacy instructional practices help to shape the comprehension strategies students need to think deeply about texts (Gunning, 2003).

Since the inception of American schools, educators have debated the best approaches to teaching children to read. Early in United States history, analytic and synthetic phonics approaches were adopted with on-going debates as to the efficacy of each (Vogt & Shearer, 2003). Basal reading series became the primary reading curriculum in the country for many years, and teachers grouped children for instruction according to their skill ability and reading level. Now general agreement exists that a more holistic and integrated method of teaching reading and writing is most effective (Gunning, 2003; Lipson & Wixon, 1997). Reading is a complex process that requires integration and thoughtful application of a variety of strategies. Becoming a self-regulated reader involves the application of conscious processing
during reading (Pressley, Brown, El-Dinary & Afflerback, 1995). This comprehension-monitoring strategy that emanated from cognitive psychology is called metacognitive strategy (Pressley, et al., 1995). The next section will introduce the metacognitive process of comprehension monitoring and examine other prominent reading strategies that have been validated by research to improve reading comprehension.

Readers’ Skills and Strategies

Metacognition refers to the learner’s awareness of the thinking processes while engaged in a reading task (Palinscar, 1982). Metacognition has two components: what readers know about the task of reading, and how readers regulate and monitor on-going processes during reading (Palinscar, 1982). These two facets of metacognition are closely related and have resulted in research to investigate the profile of the efficient reader in order to gain understanding of the processes involved in successful comprehension (Palinscar, 1982; Rhoder, 2002).

Competent readers demand meaning from text, recognize the interactive nature of reading, and are able to monitor and regulate their reading according to the efficient use of strategies when reading becomes difficult (Palinscar, 1982; Rhoder, 2002). Competent readers monitor how successfully meaning is being achieved, and when they recognize a failure in their own comprehension, they attempt to restore meaning (Lipson & Wixon, 1997). Less proficient readers view reading as a means of primarily correctly sounding out words (decoding) and not as a task of constructing meaning from text (Massey, 2004; McCray, Vaughn, & Neal, 2001).
They often not only lack the multiple reading strategies required to construct meaning, but also the selection and implementation of appropriate times to implement a specific strategy when comprehension breaks down (Slater & Horstman, 2002). One way a proficient, active reader constructs meaning is by using strategies.

A strategy can be viewed as a deliberate and planned activity or procedure designed to achieve a specific goal (Gunning, 2003). It is a skill by which learners manage their own thinking behavior (Palincsar, 1982). To enhance reading comprehension, all readers need to continue to build skills throughout elementary and secondary school years.

Thus, conscious processing during reading requires a planned, coordinated use of a variety of strategies and shifts in strategies during reading (Pressley, Brown, El-Dinary, & Afflerbach, 1995). For example, proficient readers re-read sections of text or change tactics by slower reading to understand content (Pressley, et al., 1995). Conscious monitoring is actively evaluating whether one understands and remembers the text being processed (Pressley et al, 1995). Comprehension strategy instruction needs to be taught to all children (Pressley, et al., 1995) “The processes stimulated by comprehension strategies instruction should be encouraged in all students, for many normally achieving students go through school without learning to use the comprehension processes that are habitual with very good readers” (Pressley, Brown, El-Dinary, & Afflerbach, 1995, p 216). Students need multiple opportunities to acquire essential metacognitive knowledge; they need to develop skill in knowing
when, where, and how to use strategic cognitive processes (Pressley, Brown, El-Dinary, & Afflerbach, 1995). Strategies should be taught and integrated into the curriculum to promote reading achievement (Pressley, et al.).

Fluent readers are characterized by the ability to read orally with speed, accuracy, and proper expression (National Reading Panel, 2000). Research in oral reading fluency has gained tremendous momentum. The National Research Panel (2000) has identified oral reading fluency and phonological awareness as fundamental skills of proficient early readers. Today, fluency is regarded as one of the key skills of effective readers (Hasbrouck, Ihnot, & Rogers, 1999; National Reading Panel, 2000). The ability to obtain meaning from print depends so strongly on the development of word recognition accuracy and reading fluency that both of the latter should be regularly assessed in the classroom (Snow, Burns, & Griffin, 1998). Learning to read fluently is difficult because many components of the reading process must be coordinated at the same time (Lipson & Wixon, 1997).

The human mind has only limited ability to process information, and the need to process all the component tasks of reading is especially difficult for beginning readers (Farstrup & Samuels, 2002). Whenever we read, three basic processes are involved: decoding, comprehension, and attention (Gunning, 2003; Lipson & Wixon, 1997). Decoding is the ability to pronounce the words printed on the page (Gunning, 2003). Comprehension is a process in which meaning is constructed using the information on the printed page, and to decode and comprehend text, attention is required (National Reading Panel, 2000). The problem facing the beginning reader is
that at any given moment, a limited amount of processing space or attention is available for decoding and comprehension, and each task by itself occupies a considerable amount of the limited processing space available (Lipson & Wixon, 1997). After extended reading practice, the amount of attention required for the decoding task decreases substantially (Lipson & Wixon, 1997). When a student is able to recognize words with ease, the bulk of attentional resources are available for comprehension (Lipson & Wixon, 1997). The next section focuses on teacher education and legislative adoptions that influence professional programs.

**Literacy and Teacher Education**

Reading has been an area of concern and marked by controversy in United States education, especially during the past decade (Allington, 2006). In response to this need, Congress mandated that a national panel, composed of individuals that included leading scientists in reading research, representatives of colleges of education, reading teachers, educational administrators, and parents, be formed to critically examine a selection of prioritized topics in reading research literature (National Reading Panel, 2000). Arguments about phonics, whole language, and best practices in teaching children to read have been ongoing (Allington, 2006). This report was a result of substantial research and meta-analysis of studies related to literacy and has had profound impact on literacy research agenda and subsequent influence on the No Child Left Behind (NCLB) legislation of 2001 (Allington, 2006; Farstrup & Samuels, 2002; National Reading Panel; Vogt & Shearer, 2003). Both research results and teaching practice indicate that children profit from instruction in
reading that is explicit, systematic, and sequential (Brady & Moats, 1997; National Reading Panel, 2000). Legislative endorsements, class size reductions, and the development of standards for reading have emphasized the need for and difficulty in obtaining qualified teachers (Allington, 2006; Brady & Moats, 1997; Darling-Hammond, 2000; National Reading Panel, 2000). Pre-service teachers themselves need to receive systematic training in the stages of literacy development and understand the conceptual requirements of becoming a proficient reader (Allington, 2006; International Dyslexia Association, 1997).

Although nearly three decades of systematic research has converged on clear indications about what children need to know in order to become good readers, this domain of knowledge has not yet filtered through to most Schools of Education. State Departments of Education should be urged to mandate sufficient training for certification requirements and to demand that University training programs update and modify their offerings to provide adequate teacher preparation. (Brady & Moats, 1997, p. 18)

The question that remains to be answered from empirical studies is what the content of teacher education or professional development programs should be (Darling-Hammond, 2000; National Reading Panel, 2000). How can research be used to improve teacher education in specific ways? A small number of studies concluded that pre-service teachers not only need extended, on-going support but also that teachers need to be maintained through strong and on-going professional development (Darling-Hammond, 2000; National Reading Panel, 2000)
Furthermore, Darling-Hammond (2000) suggests, “Even very intelligent people who are enthusiastic about teaching find that they cannot easily succeed without preparation, especially if they are assigned to work with children who most need skillful teaching (p. 158).” Substantial evidence indicates that teachers who receive solid, intense preparation; who receive systematic, developed knowledge; and who are able to make strong connections between theory and practice are most effective with students and least likely to leave teaching because they did not feel well equipped (Darling-Hammond, 2000).

The remaining sections of this literature review will investigate several methods by which to better prepare pre-service teachers to meet the needs of students who experience difficulty in learning to read. This review will also address a specific section of the California Standards for the Teacher Profession for Education Specialist candidates in relationship to acquiring skills to teach reading to elementary students.

*Designing Research-Based Instructional Programs*

According to current theories of literacy instruction, in order to achieve comprehension all students need intensive, focused, sustained and explicit instruction to help them reach the goal of reading to learn (Carter, 1997; Hock & Deshler, 2003; National Reading Panel, 2000). All students, both elementary and secondary, benefit from strategy instruction (Mastropieri, Scruggs, & Graetz, 2003; National Panel of Reading, 2002; Rhoder 2002). The complete reading program can be viewed as a balanced diet. Beginning readers require different amounts of specific types of
reading activities than more proficient readers. Ratios vary with individual needs and with development (National Education Association, 2006). The National Education Association (2006) official policy reinforces the importance of high-quality pre-service education:

There is no one way to teach reading that is effective for all students. The teacher is the key to successful reading. Teachers should receive a sound pre-service education as well as ongoing, relevant professional development in order to implement complete reading programs that address the full spectrum of reading skills and diverse student needs. (National Education Association, 2006, p. 1)

Although research has consistently implied concern for high quality and appropriate teacher education, the issues that remain to be resolved include determining the optimal combination of pre-service and in-service experience, appropriate length of interventions on pre-service performance, and best ways to assess the effectiveness of teacher education (National Reading Panel, 2000). Little research exists on what constitutes success in preparing pre-service teachers to cope with the needs of students who are struggling in learning to read (National Reading Panel, 2000).

A Combination of Reading Strategies.

This section will define and explain evidence-based reading strategies that have been determined to be effective instructional approaches and methods most
beneficial for students of varying abilities (Cunningham & Allington, 2003; Gunning, 2003; National Reading Panel, 2000).

Assessment.

Assessment can be defined as the process of gathering and evaluating data to make decisions about how children are performing and progressing (Cunningham & Allington, 2003). Assessment provides three essential aspects of student progress, and instructional decisions are made based on analyzing student outcomes (Cunningham & Allington, 2003; Gunning, 2003). Assessment is useful information for the following: (1) to determine student reading level; (2) to identify reading behaviors such as fluency (words are recognized accurately, quickly, and with ease) accuracy in reading (correct word recognition), and comprehension ability (meaning derived from the text); and (3) to evaluate good reading behaviors and to document student progress (Cunningham & Allington, 2003). Reading level is not static. To the extent possible, an approximate reading level is assessed for each student (Cunningham & Allington, 2003). Teachers need to know the general reading level for each child to serve as a base-line to document on-going progress (Cunningham & Allington, 2003). Teachers are able to determine strengths and weaknesses in the reading process when students read aloud (Cunningham & Allington, 2003). A word-list is used as a quick assessment tool to determine approximate reading level (Cunningham & Allington, 2003). Results from this assessment are used as a starting place for graded passages students will read (Cunningham & Allington, 2003). A word-list can be defined as a list that contains a series of ten to twenty words at each
grade level (Cunningham & Allington, 2003; Gunning, 2003). The teacher and the student each have a copy of the word list. Students read the words from their copy of the list and the teacher marks each response as being correct or incorrect. After assessing with the word-list, the teacher will place students in the approximate grade-leveled passage for continuing the assessment process.

An Informal Reading Inventory (IRI) is used to assess the reading levels of students and their reading behaviors (Gunning, 2003). An Informal Reading Inventory is a set of graded passages. These passages are specified as pre-primer (early first grade), primer (middle first grade), first grade, second grade and so on (Cunningham & Allington, 2003; Gunning, 2003). In this model, students read the passage out loud, generally at a level that their teachers believe they can handle. As the students read, teachers mark the reading with notes in some manner that errors can be counted. After the passage is read, the students may either re-tell the story, or teachers may ask specific questions to determine how much the students comprehend. The record of the students’ oral reading will guide their teachers in determining what level of oral reading accuracy and comprehension is adequate. Most experts recommend that children have an oral reading accuracy level of 95 percent and demonstrate comprehension of 75 percent of the main ideas in the passage (Cunningham & Allington, 2003; Gunning, 2003). Instructional level is considered the highest level students can read with 95 percent word accuracy and 75 percent comprehension. The students continue to read at the instructional level until word identification falls below 95 percent or comprehension falls below 75 percent
(Cunningham & Allington, 2006). Assessment provides direction and information in choosing materials for guided reading and in deciding how much support different readers will need with various reading materials.

**Phonics instruction.**

The National Reading Panel (2000) examined scientific evidence for ingredients of effective reading programs. Their findings show that teaching phonics explicitly and systematically in a set of pre-specified associations between letters and sounds provides foundational knowledge and produces substantial reading growth among younger students and disabled readers. Children apply this knowledge to read and write. Formal reading instruction in the United States generally begins in the 1st grade—this is the most important grade for phonics instruction (Cunningham & Allington, 2006; National Reading Panel, 2000). The goal of phonics instruction is to help children acquire knowledge and use of letter-sound relationship (alphabetic system) to read and spell words. The National Reading Panel (2000) review concluded that synthetic phonics programs produce stronger growth in reading and that no particular delivery system differed significantly from the others (National Reading Panel, 2000). Systematic instruction is effective whether it is delivered through one-to-one tutoring, small group, or whole class (Cunningham & Allington, 2003; Gunning, 2003; National Reading Panel, 2000). The goals of phonics instruction are to provide children with essential skills necessary for decoding words and to ensure that they can apply this knowledge in reading and writing activities (Cunningham & Allington, 2003; Gunning, 2003; National Reading Panel, 2000).
Comprehension: Vocabulary instruction.

Empirical evidence suggests a variety of vocabulary instruction methods should be taught directly and that repetition and multiple exposures to vocabulary items influence comprehension more than any other factor (Allington, 2006; Bromley, 2007; Cunningham & Allington, 2003; Eldredge, Quinn, & Butterfield, 1999; National Reading Panel, 2000). Vocabulary can be acquired indirectly through incidental, implicit learning as students acquire meaning in context (National Reading Panel, 2000; Winters, 2001). Pre-instruction of vocabulary during reading lessons can have significant effects on learning outcomes because the introduction of words used in the story guarantees there will be fewer unfamiliar concepts in the material to be read (Bromley, 2007; Cunningham & Allington, 2003; Lipson & Wixon, 1997; National Reading Panel, 2000). Multiple exposures to word meanings and the context in which the word is learned equip students to comprehend concepts in content areas (Allington, 2006) Some grade-leveled stories include a targeted vocabulary list of words along with a definition to focus on a clear understanding of the meaning of new terms (Winters, 2001). When students are able to store new information by connecting it to their existing schema, or a network of organized information, they have a better chance of retaining the new word (Bromley, 2007). Graphic organizers are used to summarize new information in a simpler language and to direct students to illustrations, examples, and non-examples of key terms (Allington, 2006; Gunning, 2003; Winters, 2001). A graphic organizer is defined as a visual and graphic display used to represent key concepts and depicts the
relationships among facts, terms, and/or ideas within a learning task (Gunning, 2003). Vocabulary instruction is most effective when teachers elicit students’ prior knowledge and related experiences before introducing a new word (Bromley, 2007; Gunning, 2003). When context clues do not provide sufficient help to unlocking the meaning of words, younger students greatly benefit from making connections in their minds through illustrating a new word, writing a paraphrased definition, and creating a sentence in their own words (Allington, 2006; Bromley, 2007). Teaching students that words have multiple meanings will help to clarify the definition of words in specific contexts.

Repeated reading.

Fluency is a critical component of skilled reading and leads to effective comprehension (National Reading Panel, 2000). Three components of fluency are rate (recognizing and reading words effortlessly), accuracy (recognizing words automatically), and intonation (refers to stress, duration, pitch, and reading with expression) (National Reading Panel, 2000). Fluency does not ensure comprehension, but comprehension is difficult without fluency (National Reading Panel, 2000). When students make gains in reading fluency, they are able to apply their energies into comprehension rather than constantly stopping to decode and figure out unknown words (Allington, 2006; Hoffman & Isaacs, 1991; National Reading Panel, 2000).

Children need abundant practice at their independent reading level to learn to read fluently (Gunning, 2003; Hoffman & Isaacs, 1991; National Reading Panel,
One approach for developing fluency is to have students read passages orally multiple times while receiving guidance and feedback from teachers, parents, or peers (Gunning, 2003). Repeated reading has been found to be effective in improving a variety of reading skills (Hoffman & Isaacs, 1999; National Reading Panel, 2000). The following general procedures may be useful when using this fluency-supportive activity: (a) the teacher introduces the text by reading aloud to model fluent, expressive reading; (b) the teacher engages students in brief discussions about the text to clarify unfamiliar concepts and to allow opportunities for students to reveal personal connections to the text; (c) the teacher guides the student in repeated practice of the passage with a peer. Repeated reading and guided oral reading provide students with practice that substantially improves reading word recognition, fluency, and comprehension (Gunning, 2003; Hoffman & Isaacs, 1991; National Reading Panel, 2000).

**Guided oral reading.**

Activating prior knowledge, pre-viewing vocabulary words, pre-reading and post-reading questions about a passage are all systematic but unified approaches designed to foster comprehension (Gunning, 2003; National Reading Panel, 2000). Guided oral reading is a framework in which the teacher provides the assistance or guidance students need in order to successfully read a selection (Gunning, 2003). Guided reading is an effective instructional format that teachers may use with individuals or groups of students who are approximately at the same reading level (Cunningham & Allington, 2003; Gunning, 2003).
After determining students’ independent reading level, guided oral reading is used to help children learn how to successfully apply independent reading strategies (Cunningham & Allington, 2003; Gunning, 2003). The amount of support and scaffolding is individualized according to students’ abilities and the complexity of the passage being read (Gunning, 2003). Guided reading might consist of going through the text and highlighting unknown concepts, previewing difficult words, asking questions about the topic of the passage to activate a student’s background knowledge, and previewing comprehension questions prior to reading the story (Gunning, 2003). Comprehension strategies are procedures that guide students through a selection as they attempt to read and write (Lipson & Wixon, 1997). Skilled reading requires coordination and the adaptable use of a variety of strategies (National Reading Panel, 2000). Comprehension instruction needs to be directed toward helping students learn how to apply more than one strategy during the course of reading (National Reading Panel, 2000). This will enhance their skills in becoming independent, self-regulated, thinking readers (National Reading Panel, 2000).

The next section will outline a brief history of the California Commission on Teacher Credentialing and define terms associated with pre-service teacher preparation programs.

*Teacher Preparation in California*

In 1998, Gray Davis was elected governor for the state of California. Davis’ intention was to make education a high priority (Bond, 2005). Governor Gray Davis
proposed four measures that focused on student achievement, teacher quality, and school accountability (Bond, 2005). The California Assistance and Review Program (PAR) was designed to strengthen staff development and assessment for veteran teachers. Results of the peer review program were to be used in annual teacher evaluations (Bond, 2005). Another measure established Elementary School Intensive Reading Programs (Bond, 2005). After school, Saturday, and summer session intensive reading programs were created for students in grades K-4 who needed remediation to strengthen and enhance their reading skills (Bond, 2005). A third measure was directed toward public school performance and accountability. Schools are ranked by academic performance and rewarded if they meet performance goals and provide assistance for the lowest performing schools (Bond, 2005). The final measure, a High School Exit Exam, was established to determine whether secondary students had mastered specified skills in reading, writing, and mathematics (Bond, 2005).

When Governor Gray Davis assumed office in early 1999, Assembly Republican Leader Rod Pacheco established an Education Reform Task built upon three pillars: Accountability, Teacher Competency and School Safety (Bond 2005). Pacheco strongly believed that teachers should be qualified to teach (Bond, 2005). The Republican plan was based upon general principals to implement teacher accountability: Teachers are the most important component of a good public education system. Teachers must be trained, but more importantly, they must be
able to translate that training into effective teaching. Any proposal must hold teachers accountable for student progress in testing. Test scores are the only real measurement of student progress. The Republicans proposed that teachers should be tested in the subject matter they teach and concluded that teachers cannot be expected to teach children if they do not know the assigned subject matter. All four of Governor Davis' education measures became law (Bond, 2005).

California's special education programs, in which approximately 650,000 developmentally and learning disabled students are enrolled, cost the state on average $5,500 more per child than on general education (Bond, 2005).

What isn't so well understood is how many students have been unnecessarily shunted off to special education: nearly 40 percent are there not because they were born with major learning difficulties but for the simple and unforgivable reason that the schools have failed to teach them to read. (Bond, p. 10)

Special education students are three times more likely than their general education peers to have uncredentialed teachers (Bond, 2005). Their teachers are no more likely than general education teachers to have special training in reading instruction (Bond, 2005).

Bond also reports that a spokeswoman offered recommendations on behalf of the Commission designed to build on the efforts by Governor Davis and the Legislature to target resources to districts with low-performing schools. Specific recommendations were outlined to provide incentives to attract and retain qualified teachers (Bond, 2005). Districts desiring to participate are required to develop a
comprehensive multi-year plan that addresses school safety and teacher qualifications (with special emphasis on the qualifications of teachers assigned to teach reading) with the intent to increase student performance for low-performing schools (Bond, 2005). Additional incentives were created by providing funding to increase the number of reading certificate holders, teachers who are prepared to diagnose and assist struggling readers (Bond, 2005). Targeted funding for colleges and universities is designated to develop and implement teacher preparation programs designed especially to attract, prepare and retain teachers for urban schools (Bond, 2005).

Governor Davis and the Legislature built a foundation they had created during his first year in office (Bond, 2005). A public opinion survey of public attitudes in California toward teaching, educational opportunity, and school reform found that Californians overwhelmingly recognized the value of fully prepared teachers (Bond, 2005). The Teacher Preparation Program Indicator (TPPI), as envisioned by Davis and the Commission, was to bring new, objective data to the State education accreditation process, and provide the Commission, policy makers, institutional reviewers, credential candidates and the public with specific objective data about teacher preparation program available in California (Bond, 2005). Bond’s (2005) investigation of California’s current accountability system for teacher preparation programs suggests that proposed data collection, based on state and federal laws, could be used to provide annual reports. A Teaching Performance Assessment, based upon state standards and expectations, is designed to measure the
ability of each pre-service candidate to teach in a classroom in accordance to the State Board adopted K-12 content standards (Bond, 2005). Another state assessment, Reading Instruction Competence Assessment, measures each candidate’s ability to teach reading (Bond, 2005). On-line surveys of program graduates and their employees are designed to gain knowledge of the effectiveness of preparation in areas such as reading instruction, subject matter, and classroom management (Bond, 2005).

Institutions offering teacher preparation programs could use the data to evaluate and strengthen their programs (Bond, 2005). Despite the need for elementary school classroom teachers to know how to teach struggling and non-struggling readers effectively, many elementary school teachers view teaching students with a wide range of reading levels as one of the greatest challenges that they face (Duffy, 2001). The question that appears to have received little attention from the reading research community is: How should we teach pre-service teachers to teach reading? Substantial evidence exists that highly qualified reading teachers are needed in every school. A growing body of research shows that professional training and quality of teaching are significantly and positively correlated with students’ reading achievement (Darling-Hammond, 2000; National Reading Panel, 2000).

A pre-service teacher is one who is in an education program at a college or university, preparing for the professional-level teaching position. A reading clinic or reading practicum may be defined as an instructional environment where pre-service
teachers develop competencies to assess reading and design instruction for students who experience difficulties in learning to read (Mayor, 2005).

Teachers can be taught to teach comprehension strategies effectively; quality instruction increases proficiency and leads to improved performance on the part of their students’ awareness and application of the strategies (National Reading Panel, 2000). Teacher education programs need to emphasize the teaching of reading comprehension at the pre-service level; instruction needs to be extensive with respect to teaching teachers how to teach comprehension strategies (National Reading Panel, 2000).

A concern is to determine which components of successful teacher preparation programs are the effective ones and what characteristics of the teacher preparation itself (its focus, its intensity, its timing) affect the success of a teacher preparation program (National Reading Panel, 2000).

The California Commission on Teacher (CCTC) credentialing specifies standards of quality and effectiveness for Education Specialist Credential Programs (California Commission on Teacher Credentialing, 1996). The Special Education Advisory Panel (CCTC, 1996) created common standards that apply to planning and implementing curriculum and instruction. The rationale for these standards is that in order for teachers to be able to maximize the learning experience for children with mild/moderate/severe disabilities, they need to acquire the knowledge and skills to plan and provide effective instruction that meets the individual needs of these students across a variety of settings (CCTC, 1996). The CCTC (1996) outlined
factors that are applicable for teaching reading to elementary students. Candidates are required to demonstrate skill in developing and facilitating individualized educational plans (I.E.P) based on comprehensive assessment information (CCTC, 1996). Candidates should be able to apply a variety of effective and research validated teaching practices that achieve targeted student outcomes (CCTC, 1996). Candidates must demonstrate ability to implement, modify, and monitor instructional programs for individual students across a range of instructional settings (CCTC, 1996). The candidate is required to demonstrate knowledge of curriculum adaptations, instructional strategies, and critical presentation skills appropriate to the core curriculum (CCTC, 1996). Candidates are required to demonstrate skill in differentiating the core curriculum in response to the individual student’s needs and characteristics (CCTC, 1996).

These factors are designed to promote quality instruction for all students as teachers develop competencies in these standards. It is desirable for each candidate to utilize assessment data to collaboratively develop Individualized Educational Goals (IEP), objectives, adaptations and instructional plans (CCTC, 1996). The standards are designed in accordance to the unique needs of each student; they are implemented and adjusted systematically to promote maximum learning and generalization (CCTC, 1996).

Conclusion

Current research demonstrates that a need exists for determining what components are effective instructional models for teacher education. This review of
the literature revealed that students at all grade levels benefit from explicit, metacognitive strategy instruction. Beginning teachers must develop a thorough understanding of reading processes that include linguistics and language development. Teachers must also be prepared to use a variety of instructional strategies that are individualized to increase the reading proficiency of all students.

More experimental research may be useful to determine what should be the future of teacher education in reading. It is clear that effective teacher education programs should design their components of fieldwork experiences and curriculum based on strong theoretical findings from research on how students become successful readers. This study will investigate the question: What was the effect of the reading clinic model in teaching pre-service teachers to support the literary needs of struggling readers?
CHAPTER THREE

METHODOLOGY

This chapter is a description of the participants and the learning environment created to mentor pre-service teachers in the application of hierarchically-ordered reading strategies for individualized instruction to children struggling in reading. Included in this section are the assessment protocol and remedial curriculum that were implemented during the reading clinic. Systematic reading strategies increased in complexity and were applied according to the developmental literacy needs of the students. Pre-service teachers completed a survey to document the effectiveness of a reading clinic in preparing them to develop competencies to assess reading and implement specific strategies designed to meet the needs of students experiencing difficulties in reading.

Participants

Two groups of pre-service teachers participated in this study. Pre-service teachers were able to choose which option of practicum experience would be most effective to meet their learning objectives for curriculum support and instruction in reading. Seven pre-service teachers enrolled in the reading clinic, and twelve pre-service teachers completed their fieldwork experience at a school-based site. The duration of each fieldwork placement was 18 hours. All pre-services teachers gained hands-on experience in teaching reading strategies to children who struggled in reading. School-based practicums had master teachers that mentored pre-service teachers. A master teacher can be defined as an experienced classroom teacher who
works with pre-service teachers enrolled in a university credential program. Master teachers played a central role in professional support to advance knowledge and practice for pre-service teachers.

Pre-service teachers who completed their fieldwork hours at school-based settings were integrated into pre-existing literacy programs. The master teacher provided reading curricula for small group or one-on-one instruction. Several observation and debriefing opportunities allowed pre-service teachers time to gain supportive practice and competence in the curriculum and in the application of the reading strategies. School-based teachers provided practical guidance and constructive feedback in direct instruction models as the pre-service teacher prepared to lead small reading groups and apply reading strategies within the natural classroom setting. In the direct instruction model, the teacher’s manual was scripted. Prompts were provided for the teacher in what to say to the students, and students respond accordingly. Master teachers evaluated pre-service teachers according to how well they were able to apply good teaching practices as outlined by the evaluation expectations used in the university’s credential program for Special Education teacher candidates. The Program Leader of the Special Education credential program was the primary administrator who ensured pre-service teachers were acquiring the skills needed for assessment, reading instruction, and curriculum development to meet the needs of a diverse population of students. The university supplied a standardized form for master teachers to use to evaluate pre-service teachers’ progress during fieldwork training. Master teachers conducted formal
observations, completed the evaluation forms, and debriefed with pre-service teachers to provide feedback in areas of strength as well as those in need of improvement. The evaluation form was turned into the Education Department and placed into the pre-service teacher’s permanent records until all coursework and fieldwork experiences had been satisfactorily completed to earn graduation status from the credential program. (See Appendix A to view a copy of the evaluation form.)

Seven Special Education pre-service teachers were required to participate in 18-hours of a graduate-level reading clinic to gain competencies in assessment and the application of sequentially-ordered reading interventions emphasized in the clinic. The following table outlines teacher characteristics of prior coursework and experiences (personal experiences, community involvement, and employment) in teaching children. Characteristics of the pre-service teachers are displayed on Table 3.1.

**TABLE 3.1**

**Characteristics of Participants**

<table>
<thead>
<tr>
<th>Pre-service Teacher</th>
<th>Prior experiences teaching children</th>
<th>Previous Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher’s assistant, parent, grandparent</td>
<td>Children’s literature class</td>
</tr>
<tr>
<td>2</td>
<td>Reading at Home program; preschool class</td>
<td>Language Arts class</td>
</tr>
<tr>
<td>3</td>
<td>Literacy Project (aimed at adults)</td>
<td>None</td>
</tr>
<tr>
<td>4</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
All pre-service teachers had participated in a graduate-level English Language Skills and Reading methods course prior to attending the reading clinic. Pre-service teachers reported the following learning objectives for participation in the reading clinic: implementing and acquiring strategies to teach reading, learning new curriculum for reading, and gaining hands-on experiences that help children through the reading process.

Participants were seven elementary students who had been referred by their teacher for reading problems based on standardized testing results and curriculum-based assessments. All seven students were in general education classrooms. Teachers reported that the students were having difficulty in learning to read, and they were seeking recommendations for reading interventions. Two students had received no additional special help in reading. One student met for one-half hour each day with the Resource teacher for reading intervention, and four students participated in Reading Recovery while in first grade.

The seven students who participated in this study were described using the following pseudonyms: Tyler, Connor, Caleb, Aaron, Thyme, Kaelyn, and Amanda. Teachers were asked to complete a university Support Clinic Teacher’s Reading Referral Information sheet for students they recommended for the reading clinic.
this sheet, teachers reported the students’ current reading level and areas of strength or need for the following reading abilities: word identification, comprehension, and fluency. Teachers also noted if the students were receiving special help in reading and provided information on the nature of instruction and any additional support the students received. In addition, teachers recorded areas of strength and need in students’ attitudes involved in the reading processes. The teachers included any additional information they felt would assist in individualizing remediation for the participant.

Tyler (7 years 3 months), Connor (7 years 3 months), and Kaelyn (7 years 10 months) were all in the second grade and were being instructed at a first-grade reading level. Caleb (8 years 1 month) and Amanda (6 years 3 months) were both in the second grade and being instructed at the pre-primer reading level. Aaron (8 years 3 months) was in the second grade and was being instructed at a first grade reading level. Thyme (9 years 2 months) was in the third grade and was being instructed at a second grade reading level.

Setting

The seven-week graduate level reading clinic was implemented during Saturday morning hours in the fall at the university’s Child Development Lab. The large, carpeted room contained several small tables and chairs, various toys for preschool children, geometrically-shaped building blocks, paper, and writing implements (colored markers, crayons, and colored pencils, etc.). A smaller separate room and office contained a large assortment of children’s books and a desk for
administrative tasks achieved during the Child Development Lab’s regular weekday hours of service. The primary room was re-arranged each day according to the needs of the reading clinic. Digital photographs were taken of the room’s contents to ensure that items were returned to their original place at the conclusion of each day. The furniture was moved to maximize quiet and private working spaces for pre-service teachers and their individual students. Pre-service teachers worked primarily with one student to maintain consistency and to be able to observe any progress over time. If a teacher candidate was absent, another candidate worked with the two students for that given Saturday and kept assessment records for both students. A large, soundproof observation booth overlooked the entire working spaces of the Child Development Lab. The observation booth contained several listening monitors designed to allow the university administrators and Education graduate students to hear the conversations in reading processes as they occurred.

Parents of the children were also invited to sit in the observation booth to listen and gain understanding of the reading clinic routines and observe the implementation of reading strategies. Under the supervision of two Special Education administrators, two Education graduate students served as the instructors for the reading clinic.

One graduate student had taught reading for 5 years, and the other had 10 years of teaching experience. The reading clinic was conducted on a schedule of varied Saturday dates from 10:00 to 12:00. Training sessions for the pre-service teaching candidates were conducted in the Education Department facility. All
participants received training in pre/post testing implementing the
Ekwall/Shanker Reading Inventory (Ekwall & Shanker, 1999) and in applying the
four sequentially-ordered reading interventions.

Assessment Protocol

The reading clinic instructors adopted the continuous assessment or
authentic-performance assessment model; it was geared for individual student needs.
In this model, the teacher regularly observes students during a variety of natural
literacy events and collects portfolios of work to determine students’ progress along
a developmental continuum. Goals for oral reading fluency were based on
Hasbrouck and Tindal’s (2005) standard of oral reading fluency. Each grade level
has a definite standard of attainment to be reached during a school year. The chart
has been adopted as a universal standard of oral reading achievement, and pre-
service teachers utilized this information to set oral reading goals for students during
the reading clinic.

Pre and post-testing instrument.

The fourth edition of the Ekwall/Shanker Reading Inventory (Ekwall &
Shanker, 1999) was used as a quick screening tool to assess the case-study students’
reading abilities. These tests measure oral and silent reading ability, listening
comprehension, phonemic awareness (letter-sound relationships, deletion and
manipulation of sounds), concepts about print (writing is comprised of titles; we read
from left to right on a page; stories have beginnings, middle, and endings, etc.),
letter knowledge, basic sight vocabulary, reading comprehension, and reading
interests. The Ekwall/Shanker Reading Inventory was used as a brief assessment of the students’ reading level to determine where to place them in the instructional Read Naturally (Hasbrouck, Ihnot, & Rogers, 1999) passage.

*Instructional passages.*

Passages were drawn from the Read Naturally series (Hasbrouck, Ihnot, & Rogers, 1999). The Read Naturally (RN) strategy to improve oral reading fluency combines the three empirically supported techniques: reading from a model (teacher reads story out loud to the student while the student follows along); repeated readings (student practices reading the story to the teacher two to three times to increase familiarity with vocabulary, content, and increase fluency); and progress-monitoring (teacher determines the words per minute read by the student, and the student graphs the results). Correct words per minute were the standard used to measure fluency and were recorded with a stop watch. Students recorded their fluency rates for one-minute timing on a graph with blue colored pencils to signify an unpracticed reading of the Read Naturally story. Red pencils were used to differentiate between timed readings and were recorded on the graph to measure any changes in reading fluency obtained after practice or repeated readings.

Student binders consisted of three sections. The first section contained pre-testing assessments that were given to each student including the Ekwall/Shanker Reading Inventory, Likes and Dislikes, (Furney, Carlson, Yuan, & Cravedi-Cheng, 1993) which is an inventory of student interests, and the Emerging Literacy Survey
A high frequency list containing 100 words was provided to measure reading fluency of words most often used in reading.

Section two of the binder contained a Multiple Meaning Four Square Vocabulary (Stahl & Kapinus, 2001) graphic organizer for the students to define words from their stories and to use the word in a sentence. Section three contained a reading sheet to record current reading progress for each story and number of words accurately read in one minute. Also included were a Read Naturally (1999) recording graph and Read Naturally stories that were distributed to participants according to the students’ independent reading levels.

Oral reading fluency.

To begin implementation of Read Naturally, students’ oral reading fluency levels were assessed using the Ekwall/Shanker Reading Inventory (1999). Results were used to place students in an appropriate level at the point at which they were reading 40 to 60 correct words per minute in primary grades and up to 60 to 80 or 80 to 100 correct words per minute in upper grades. The pre-service teacher helped each student to set a reasonable fluency goal (approximately 80 to 90 correct words per minute) for primary students or older students reading at a primary level, and from 90 to 120 correct words per minute for upper grade students.

Once students were placed in materials with an appropriate level of difficulty, and a reading fluency goal was set, the instructional program began. Passages ranged in length from approximately 50 words at mid-first grade level to 350 words at 6th grade.
Reading Interventions

One of the instructional components of the reading interventions involved an initial reading of a student-selected passage from their targeted level. Pre-service teachers used a timer set to one minute to assess their case-study student’s skill on the passage. As the student read, the pre-service teacher analyzed the miscues to determine strategies the student uses to decode words. A running record allowed pre-service teachers to record a child’s reading behavior as the student reads. Errors were tallied during the reading whenever a child did one of the following: omit a word, inserted a word, or had to be told the word by the person administering the assessment. The running record was used for oral reading purposes only.

Additionally, running records served as an assessment device in which students’ oral reading errors were noted and classified to determine whether the material was on the appropriate level of difficulty and to obtain information about the word-recognition processes students were using. Pre-service teachers administered running records individually, and a standardized format was used in which students’ errors and corrections were recorded on a photocopy of the text that the student was using. Running records provided indirect evidence of comprehension. Observation of how a student read a text—including phrasing, expression, and use of a variety of cues, checking to be sure all sources of information fit to determine when attempts did not make sense—provided evidence of comprehension. To simplify the administration of running records, these Informal Reading Inventory (Gunning, 2003) marking systems were used to record miscues
on photocopies of the selection. Table 3.2 provides the criteria for recording miscues during an informal running record observation.

**Table 3.2**

**Running Record Symbols**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Text</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words read correctly are marked with a check mark.</td>
<td>Janice kicked the ball.</td>
<td>✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Substitutions are written above the line.</td>
<td>A barn owl hooted.</td>
<td>✓ big ✓ ✓ ✓ barn</td>
</tr>
<tr>
<td>Self-corrections are marked SC.</td>
<td>A barn owl hooted.</td>
<td>✓ big\SC ✓ ✓</td>
</tr>
<tr>
<td>A dash is used to indicate no response.</td>
<td>I saw her yesterday.</td>
<td>✓ ✓ ✓ —</td>
</tr>
<tr>
<td>A dash is used to indicate an insertion of a word.</td>
<td>We saw a big dog.</td>
<td>✓ ✓ ✓ bad ✓</td>
</tr>
<tr>
<td>A T is used to indicate that a child has been told a word.</td>
<td>Her cat ran away yesterday.</td>
<td>✓ ✓ ✓ T</td>
</tr>
<tr>
<td>The letter A indicated that a child has asked for help.</td>
<td>A large moose appeared.</td>
<td>✓ ✓ ✓ A</td>
</tr>
<tr>
<td>When students become confused by a misreading, it is suggested that they try that again (coded TTA). brackets are put around the misread section which is counted as one error, and the student reads it again for a new score.</td>
<td>The deer leaped over the fence.</td>
<td>✓ ✓ landed ✓ ✓ field leaped fence TTA</td>
</tr>
</tbody>
</table>
A repetition is indicated with an R. Not counted as an error, repetitions are often an attempt to puzzle out difficult items. The point to which the student returns in the repetition is indicated with an arrow.

The deep leaped over the fence.

\[ \sqrt{\sqrt{\text{landed/SC} \quad \sqrt{\sqrt{\text{field/SC}}} \quad R}} \]

Repeated readings.

In Step Two, students practiced reading the same passage three to four times along with pre-service teachers. The key here was that students did not just listen to the model but actually read along, giving full attention to the text. The readings were done in a sub-vocal or soft voice. It was helpful to encourage students to use their fingers or a marker to point to the text being read. When students felt comfortable with the text, having read along with the pre-service teacher several times, they began Step Three in which they read the text independently, again at a sub-vocal level. The timer was set for one minute, and the students read the text several times until they reached their predetermined goal level. They kept practicing the passage until the pre-service teachers were able to meet with them for this checkout because this maximized their engaged practice time which has been shown to be a key to improved skills in low-performing students.

In Step Four, the pre-service teachers timed the students’ reading of the practiced passage. This was the only instructional step that required the direct involvement of the pre-service teachers with individual students. In this step, the students again read the passage for one minute, and this time the pre-service teacher kept track of the errors. At the end of one minute, the total number of errors was
subtracted from the total number of words read. The students passed if three criteria were met: (a) the correct words per minute score met or exceeded the predetermined goal, (b) three or fewer errors were made, and (c) the students read the passage with correct phrasing and attention to punctuation. When students passed a story, they moved on to another passage at the same level; if the goal was not met, they continued practicing this same story. After passing, the students graphed their new scores onto their graphs on the same bar with their original, unpracticed score, using a different colored pencil or marker. This graph gave tangible evidence to the students that they were improving and that it was their own efforts that made the difference.

If the students’ first unpracticed readings were occasionally meeting or approaching the same goal, the pre-service teacher and the students on an individual basis decided whether the students should move up to the next level of difficulty with the same goal or stay in the current level and raise the passage goal a bit higher. At any time that students were having difficulty reading at the goal level after the practice readings, they could be moved to an easier level, or they could make an adjustment to their current words per minute goal. An additional comprehension activity was added to this process in which the students answered five questions about the content of the story after reading it.

*Word identification and decoding cuing systems.*

As the students were reading aloud, the pre-service teachers had a chance to look at the mis-readings that were made and determined what word identification
strategies they would use. A correct word was defined as a word that was pronounced correctly in fewer than 3 seconds.

Successful self-correction was an excellent indicator that the reader was effectively using all three cueing systems: meaning (semantic), sounding-like language (syntactic), and letter-sound knowledge (graphophonic). The instructional level was the level of a book or story in which the child correctly identified at least 90 to 95% of the words and had adequate comprehension of what was read. Passages in which the student’s word-identification accuracy was in the 90 to 95% range, and comprehension was at least 70 to 80% were considered to be at the instructional level of the child.

The aim of the phonics instruction was to help students construct meaning from print. If they used phonics to decipher a word but ended up with a non-word, they were encouraged to try again. Even when they constructed a real word, they were asked to cross check it by seeing if it made sense in the sentence they were reading.

The following strategy was implemented when children had difficulty decoding words:

1. Look at the letters from left to right.
2. Think about the sounds of the letters.
3. Blend the sounds to read the word.
4. Ask yourself: Is it a word I know?
5. Does this word make sense in what I am reading?
Vocabulary preview/review.

The aim of the vocabulary strategy was to preview difficult words before students read. The key to this intervention was that students created their own definitions. The students thought deeply and broadly about the information and went beyond the definition or definition plus a picture, image, or example to create connections in their minds beyond simple definitions.

Pre-service teachers provided multiple exposures to difficult words and linked new information to prior knowledge to help tie the word to the students’ worldview and experiences. Additional practice with challenging words included having students create their own definitions and use the newly learned vocabulary word in a sentence. Pre-service teachers were then able to assess if the students understood the meaning of the word.

Guided oral reading.

The final reading intervention that pre-service teachers incorporated was guided oral reading. This strategy utilized all previous, sequentially-ordered reading interventions. Following are the steps that the pre-service teachers implemented:

1. Use the Read Naturally stories.
2. Introduce the story with a short preview, setting the purpose for the reading. Activate the student’s prior knowledge about the subject.
3. Preview the vocabulary words and the comprehension questions at the end of the story.
4. Teacher reads out loud to the student, stopping to summarize each paragraph and point out the vocabulary words in context.

5. Obtain an initial unpracticed reading score on the student. Have the student graph the result in blue on the bar graph.

6. Students practice reading their individualized story until they achieve their goals.

7. Answer the comprehension questions at the end of the story.

8. Complete another oral reading and have the students graph the result in red on the bar graph.

9. To pass a story, the student must make three or fewer errors, read with good expression, and answer the comprehension questions with at least 70-80 percent accuracy.

When students had practiced the passage and employed the strategies learned from the phonics instruction for difficult words, previewed/reviewed all newly learned vocabulary words, and were able to summarize paragraphs to demonstrate knowledge of the context, then the pre-service teacher timed their reading of the passage once again to obtain any progress made after a practiced reading. The students recorded their scores on the graph.

Assessment and Pre-Service Teachers

The pre-service teachers reported on the effectiveness of the reading clinic and their ability to learn these four hierarchically-ordered reading interventions: repeated readings, phonics instruction, vocabulary preview/review, and guided
The effects of treatment conditions on students’ reading were assessed by measuring the number of words correctly read per minute in instructional Read Naturally passages.

Seven pre-service teachers attended a required 18-hour reading clinic in which two graduate students in Education taught four research-based reading interventions. Treatment strategies included the following components: repeated reading (Rashotte & Torgesen, 1985), phonics instruction (Cunningham, 2000), vocabulary preview/review (Winters, 2001), and guided oral reading fluency instruction (Rivera, 2006). Pre-service teachers were taught the hierarchically-ordered reading interventions and implemented these components with their individual case-study students.

All pre-service teachers completed a survey that employed a Likert scale to record the effectiveness of their preparation for teaching reading. (See Appendix B for the complete survey).

Individual conditions contained one or more of these treatment components. The conditions were not intended to be equated for antecedent modeling or prompting, opportunities to respond, or feedback. Rather, as conditions were administered, if performance did not improve, the treatment was augmented by adding further components to subsequent treatment conditions. Baseline was first administered. The general sequence of treatment conditions was repeated reading, followed by repeated reading/phonics instruction (phonics instruction was added to repeated reading by having the pre-service teacher apply the phonics instruction for
words that were difficult for the student to decode). In other cases, treatment conditions were augmented by using vocabulary preview/review in addition to repeated reading and phonics instruction. Guided reading was the final instructional strategy implemented.

No instruction was provided in baseline. The participants first read the entire instructional Read Naturally passage. They then employed the repeated reading strategy until they felt comfortable with the passage and were ready for the first timing. Having students read the entire instructional passage in baseline controlled for opportunities to respond relative to the treatment conditions in which the participants read the instructional passage in its entirety at least once.

Two graduate students collected the data. Observations and data collection were conducted during each Saturday that the reading clinic was in session during baseline, training, interventions, and post-training. Data collection consisted of the graduate students completing observation forms to ensure the pre-service teachers were implementing the intervention strategies as outlined in the training sessions, and all observations were video recorded for reliability purposes.

Pre-service teachers were trained in two sessions prior to baseline collection. The four sequential application of reading interventions were derived from best practices from reading research as well as teacher experiences and teacher interviews. Observation forms that were specifically designed to detail standards that the pre-service teachers were to fulfill during the reading clinic were provided by the
Program Leader of the Special Education program. Training was given until
observers met 80% criteria reliability for two successive sessions.

Two observers independently scored the passages to assess inter-observer
agreement. The observers recorded pre-service teachers’ competencies in the
application of the four reading intervention components seven times over the course
of the reading practicum or during 100% of the sessions.

A point-by-point comparison was used to calculate the inter-observer
agreement. Inter-observer agreement was computed by dividing the number of
agreements (the degree to which the graduate students recorded that the pre-service
teachers had correctly implemented the sequentially-ordered reading inventions) by
the total number of observations (which represented all possible agreements and
disagreements). Agreements across baseline were 90 to 100%. Training and post-
training agreement scores were 100%.

The survey included five open-ended questions to obtain background
information on the following: previous or concurrent coursework completed prior to
the reading clinic, teaching experiences in teaching children to read, learning
objectives in attending the reading clinic, and ways in which the reading practicum
met their learning objectives. The remainder of the survey included 17 questions
designed for the pre-service teachers to report the extent to which the reading clinic
prepared them to teach reading. They also evaluated the effectiveness of the reading
clinic in preparing them to sequentially apply the components taught during the
clinic.
An independent-samples t test was conducted to evaluate the hypothesis that pre-service teachers would effectively learn more and gain competencies in assessment and in the application of sequentially ordered reading interventions in a reading clinic than in a traditional school-based setting.

The t test evaluated the difference between the means of two independent groups, pre-service teachers who attended a Saturday reading clinic as outlined above and those who attended a school-based reading practicum. The data set was derived from a seventeen question survey given to participants of both the clinic and practicum. The t test evaluated whether the mean value of the test variable for one group differed significantly from the mean value of the test variable for the second group.

The independent observers also assessed treatment integrity during 100% of the treatment assessment conditions. Using a checklist that described the instruction-assessment sequence for each treatment condition, the observers recorded whether the pre-service teacher completed the step. The average correct implementation of experimental conditions was 96%.

The next chapter will explain the results of the survey completed by both groups of pre-service teachers—those who received their preparation at the reading clinic and those who attended fieldwork experience at school-based sites. The survey was designed to record the impact of a university reading clinic geared for pre-service teachers and to evaluate the effectiveness of the reading clinic model for developing well defined standards to teach reading.
CHAPTER FOUR

RESULTS

Introduction

This chapter describes the outcome and analysis of pre-service teachers’ experiences during supervised practice sessions in a reading clinic as compared to traditional school-based field-work experiences. This study evaluated the features of the reading clinic that were most valued by participating pre-service teachers. The primary purpose for the reading clinic was to help individual students approach reading and language tasks of various kinds with confidence by teaching them appropriate strategies for the demands of a given situation. The second purpose was to provide pre-service teachers with high-quality fieldwork experiences in which to learn using on-going assessment methods, diagnosing reading difficulties, and adapting curriculum to meet individual needs of students with disabilities. At the conclusion of the seven-week fieldwork experiences, pre-service teachers were asked to evaluate the quality of their preparation to teach reading by responding to a 17-item questionnaire.

Survey Results

The survey for the preparation programs was based on course objectives and California Standards for the Teaching Profession (CSTP, 1997). Seven pre-service teachers were enrolled in the reading clinic; twelve pre-service teachers completed their fieldwork requirements at various school-based sites. Participants’ responses to
the questions listed in Table 4.1 below showed a difference in favor of the reading clinic model in meeting pre-service teachers’ learning objectives. These training features were statistically significant which means that the null hypothesis can be rejected that there was no difference between the Saturday reading clinic and the school-site practicum.

Table 4.1 presents statistical outcomes in comparing the reading clinic fieldwork experiences to the school-based traditional classroom practicum. Survey questions were designed to elicit which components of the training offered a high-quality reading fieldwork experience that best met the instructional needs in preparing pre-service teachers. These questions demonstrated significant differences according to pre-service teachers’ reports for preparedness to teach reading. Eight of the seventeen areas demonstrated an overall effectiveness of the clinic for preparing pre-service teachers. The remaining nine areas resulted in minimal statistical difference for overall effectiveness between the reading clinic model and school-based practicum. Evaluative results are displayed for all 17 questions in Appendix C.
### TABLE 4.1

Statistical Outcomes in Comparing the Reading Clinic Model Fieldwork Experiences to the School-Based Traditional Classroom Practicum

<table>
<thead>
<tr>
<th>Question</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-test for Equality of Means</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5  Learning about student interests &amp; motivations, and how to teach them accordingly</td>
<td>2.883</td>
<td>16.972</td>
<td>.010</td>
<td>.70238</td>
</tr>
<tr>
<td>Q6  Getting students involved in engaging activities and sustaining on-task behavior</td>
<td>2.218</td>
<td>16.987</td>
<td>.040</td>
<td>.52381</td>
</tr>
<tr>
<td>Q7  Monitoring student progress by using ongoing assessment methods</td>
<td>1.834</td>
<td>17.000</td>
<td>.084</td>
<td>.44048</td>
</tr>
<tr>
<td>Q8  Assisting individual students in areas of their instructional needs in reading</td>
<td>2.067</td>
<td>13.707</td>
<td>.058</td>
<td>.42857</td>
</tr>
<tr>
<td>Q11 Maintaining positive rapport with students and fostering their excitement and motivation to learn</td>
<td>2.419</td>
<td>15.554</td>
<td>.028</td>
<td>.41667</td>
</tr>
<tr>
<td>Q12 Thinking about problems that occur in teaching and trying out various solutions</td>
<td>2.033</td>
<td>16.911</td>
<td>.058</td>
<td>.53571</td>
</tr>
<tr>
<td>Q15 Using positive behavior support skills</td>
<td>3.031</td>
<td>12.836</td>
<td>.010</td>
<td>.76190</td>
</tr>
<tr>
<td>Q16 Adjusting teaching strategies so all students have chances to understand and to learn.</td>
<td>2.062</td>
<td>15.301</td>
<td>.057</td>
<td>.51786</td>
</tr>
</tbody>
</table>

Note: Equal variances not assumed

P = < 0.05

Pre-service teachers reported they valued their preparation in learning about

their students’ interests and motivations or teaching children according to their
unique learning styles. They reported greater value in the reading clinic model than that of the school-based practicum for developing positive interactions with their students and applying this knowledge to individualize, adapt, and modify instruction accordingly. They also reported an increase in their ability to get students involved in engaging activities and to sustain on-task behavior resulted in positive outcomes. Transition activities that followed direct reading instruction included singing, reading aloud to students, students drawing and coloring pictures to re-tell stories, and snack time with finger foods.

Participants reported that in attending the reading clinic model, they were adequately and effectively prepared in their developing competencies to implement ongoing, multiple assessment procedures. Their preparation in assessment methods provided knowledge of how to develop, organize, adapt, and sequence the curriculum to increase student understanding. They also stated that they had learned how to effectively assist students in specific areas of instructional need based upon continual assessment of student progress. They believed the reading clinic model effectively prepared them to plan instruction that draws on students’ backgrounds, prior knowledge, and interests. They noted that they valued learning how to modify and adjust instructional plans according to student engagement and achievement.

The reading clinic model provided meaningful experiences that helped the pre-service teachers to maintain positive rapport with students and to foster their excitement and motivation in learning to read. They felt they were effectively prepared to use a variety of instructional strategies and resources that respond to
students’ diverse needs. They valued their preparation to teach reading by understanding how to facilitate challenging learning experiences for all students in environments that promote autonomy, interaction, and choice.

Participants reported that they learned to respond effectively to problems that arise in the course of instruction and to try out various solutions to resolve issues. They learned to understand and respond to inappropriate behaviors in a fair and equitable way by establishing a climate of fairness and respect. Those who participated in the reading clinic model showed greater gains than those who participated in the school-based practicum in their beliefs that they had received high quality preparation in learning to implement positive behavior support strategies to facilitate effective learning. Pre-service teachers believed the reading clinic model effectively prepared them to establish and consistently maintain standards for behavior that reflected their students’ developmental and personal needs.

Participants reported that they valued the clinic model in learning to assess students’ interests and abilities using multiple assessment procedures. They believed that the reading clinic model effectively taught them to adjust teaching strategies so all students have chances to understand and learn. They reported that they were given specific guidance in evaluating different reading strategies and that they learned how to determine which approach would be most effective in a given situation.

In assessing the effectiveness of the school-based preparation, participants believed that they were able to meet the instructional needs of all students which
included students with learning disabilities. They reported that their school-based fieldwork experiences taught them to use what they know about physical, social, and emotional development to plan instruction and make appropriate adaptations to meet all students’ unique needs. A valued feature of both the reading clinic and school-based site fieldwork experience was learning to use class time effectively by relying on daily routines and planned transitions. Pre-service teachers reported they learned to create physical environments that engaged all students in both the reading clinic model and school-based practicum, and they were able to support students to internalize classroom routines and procedures to become self-directed learners.

Participants from both the clinic and school site-based preparation settings believed that their mentor teachers taught them how to effectively use instructional time and to efficiently help students move from one instructional activity to the next. They indicated that their ability to use an effective mix of teaching strategies and instructional activities was equally effective (non-positive results) at both the reading clinic and school-based practicum. They asserted that their preparation in learning to use research validated teaching strategies geared for special education students was effective in both teacher preparation models. Results indicated that pre-service teachers learned how to develop and use a repertoire of instructional strategies that are well suited to teaching reading. Pre-service teachers in both the reading clinic model and in the school-based practicum reported that they learned to adjust their teaching strategies so all students had chances to understand and learn.
Another component that displayed minimal difference in mean scores was in participants’ ability to teach reading language arts according to California Standards in reading. Pre-service teachers in both settings believed that the knowledge they acquired was effective in their preparation for teaching reading. All sites provided pre-service teachers with opportunities to work extensively with a struggling reader. Results indicate that pre-service teachers were successful in assessing their students’ literacy development and were able to implement the appropriate strategies to meet their students’ individual literacy needs. Data demonstrate that 100 percent of the students who participated in the reading clinic model progressed in their reading levels by the conclusion of the program. Appendix D displays student participants’ pre-and post test assessment results.

Summary

The format of instruction varied with each school-based site compared to the instruction and curriculum implemented in the reading clinic model; however, instructional goals were similar: to provide pre-service teachers with opportunities to assess the literacy needs of a struggling reader and to plan appropriate instruction to meet the individual needs of a struggling reader. Two models, the reading clinic and school-site based practicum, provided opportunities for pre-service teachers to learn to administer formal and informal assessments. Pre-service teachers learned to use the assessment results to inform and guide their instruction with their children.

The findings of this study indicate that pre-service teachers valued what they had learned about teaching reading, and analysis of the survey featured distinct
components unique to the reading clinic model that pre-service teachers believed were effective in their preparation to teach reading for all students. An analysis of these results is presented in the next chapter.
CHAPTER 5

ANALYSIS

Introduction

This study focused on assessing the efficacy of a reading clinic model in teaching pre-service teachers to utilize specific and effective literacy teaching practices in working with children with special needs. The 17-item survey that pre-service teachers completed targeted specific components of both the reading clinic model and school-based practicum that they believed effectively prepared them to teach reading.

The survey questions were drawn from the California Standards for the Teaching Profession (CSTP, 1997). The Standards emphasize a common vision of excellence in teaching and provide a developmental view of teaching, giving particular attention to the early years of each teacher’s career. Teachers enter the credential program with varied backgrounds, levels of experience, and expertise. The Standards are based on current research and represent a developmental, holistic view of best teaching practice (CSTP, 1997). The Standards are organized around six interrelated categories of teaching practice with the intent to promote reflection and professional development (CSTP, 1997). In the next section, I present each of the four themes and frame the descriptions of the themes, reflecting the tone of the pre-service teachers’ response to survey questions used to assess the effectiveness of the reading clinic model for teaching reading.
Analysis of Four Themes Revealed in Results

Four themes emerged from analysis of this study that align with California Standards for the Teaching Profession (CSTP, 1997, p. 23) in assessing the effectiveness of the reading clinic model for pre-service teachers: 1) Standard for creating and maintaining effective environments for student learning; 2) Standard for engaging and supporting all students in learning; 3) Standard for assessing student learning; and 4) Standard for planning instruction and designing learning experiences for all students. Results indicate a strong and central focus pointing to the notion of the importance of creating a positive and psychologically safe learning environment. Learning is a social process. A major theme in Vygotsky’s theory (1978/1987) is that the social interactions between adults and children lay the foundation for young children’s development and learning.

One key component that pre-service teachers reported was effective in the reading clinic model was learning to discover each student’s uniqueness and apply this knowledge to guide instructional decision-making. Analysis of results provided some unanticipated positive effects of the reading clinic model in regard to what pre-service teachers highly valued in their preparation to teach reading. I approached this study with the perspective that pre-service teachers’ beliefs about what was effective in the reading clinic model were a result of their learning the art of teaching reading and gaining competencies in specific reading strategies found to be most effective for struggling readers. I did not anticipate the quality of affective teaching as a primary component that pre-service teachers would value. Pre-service teachers
believed they learned how to intentionally create positive interactions with all students. This insight supports the notion that meaningful connections with students positively influence pre-service teachers toward creating an effective literacy program. This study contributes significant findings about the importance of pre-service teachers learning how to meet the basic needs of children and placing priority in developing relationship and understanding their students. This finding suggests that teachers value being prepared in professional practices and attitudes that support children’s physical and psychological needs first and prior to their learning to develop competencies in effective literacy strategies. Pre-service teachers’ report of valuing their ability to create a safe, stable, and secure learning community for children aligns with Abraham Maslow’s (1954) theory of the Hierarchy of Human Needs. Maslow, an American psychologist, developed a ladder of human needs beginning with the most basic needs of food, water, shelter on the first rung of the ladder, to safety, security, stability, or psychological or social needs on the second rung, and belonging, love, and acceptance completes the fourth rung, leading to the fifth rung of self-actualization or the need to fulfill oneself and to become all that one is capable of becoming. Children differ greatly in their backgrounds, needs, and interests. More compelling, however, was my realization that initial instruction for an effective teacher education preparation program begins with guiding prospective teachers in learning how to plan engaging activities that promote positive relationships with their students. The reading clinic model provided pre-service teachers opportunities to listen with great care not only to words that their students
said, but also to the messages behind the words—tones, gestures, and facial expressions—that convey the deeper messages. Implications suggest that learning to see deeply into the perspectives of children’s lives becomes central to the curriculum. This study suggests that excellence in teacher preparation programs begins with pre-service teachers learning to build and nurture relationships by developing meaningful connections with students. The present data are congruent with the theory of interpersonal intelligence introduced by Howard Gardner (1993) and supports the theory of emotional literacy: “Children’s emotional and social skills can be cultivated, and that doing so gives them decided advantages in their cognitive abilities, in their personal adjustment, and in their resiliency through life” (Goleman, 1995, p. 284). This finding suggests that teacher educators in excellent programs know more than the necessary principles and practices for successful reading instruction; they also model how to integrate elements of affective teaching into their lessons to complement cognitive teaching. Authenticity for each individual student encourages a learning community in which all students feel safe, accepted, and nurtured. Pre-service teachers believed they were able to develop positive interactions and learned about students’ interests and motivations. They infused this quality of meaningful connection to individualize, adapt, and modify curriculum according to student needs. In other words, the affective quality of interactions between pre-service teachers and their students was coded as highly valued in addition to the nature of learning how to teach reading. Results suggest that teacher education programs that include instruction in affective teaching as a particular
teaching approach enhance classroom management, encourage students’ personal
growth, support their mental health, and promote pro-social skills in a natural way.

A second theme, engaging and supporting all students in learning, was
evident in the results as well. Pre-service teachers valued their ability to get students
involved in engaging activities and to sustain on-task behavior. In addition, they
valued learning to integrate students’ interests with enriching activities that nurture
students and inspire them to learn. For example, pre-service teachers sat in the midst
of their students to sing songs, play word games, read stories, or, as in the fashion of
oral tradition, share personal stories that piqued young minds’ imaginations and
visualizations. Pre-service teachers not only observed how students responded
positively to this nurturing environment, but they also learned how to maintain a safe
learning climate in which all students were treated fairly and respectfully. This
finding points to the notion that pre-service teachers may vicariously glean effective
insights into best teaching practices as they observe and interact with their students
during situated, authentic fieldwork experiences.

A third theme identified in the results is that pre-service teachers reported the
reading clinic model was effective in their preparation to teach reading because they
learned to use a variety of assessments to determine what students know and are able
to do. This suggests that they valued learning to collect, select, and reflect upon
evidence of student learning. Pre-service teachers believed they learned to use a
range of assessment strategies to implement and monitor individualized student
learning goals. They reported that they learned how to interpret assessment data
critically and adjust curriculum and instruction according to individual student needs. This suggests that teacher preparation programs that include instruction in using a variety of assessment strategies, both formal and informal, help teachers to determine students’ weaknesses and strengths. This is critical for measuring student progress and provides pre-service teachers with essential feedback regarding their instructional approach.

The results suggested a fourth theme in which pre-service teachers believed that the reading clinic model provided effective preparation in planning instruction and in adjusting teaching strategies so that all students have chances to understand and learn. They believed they developed competency in evaluating and implementing different reading strategies. They reported that they were able to determine which reading strategy was most effective in a given situation. Pre-service teachers who master a sophisticated body of knowledge and develop competency in assessment methodology, as the present study highlights, are more effectively prepared to determine the materials and instructional strategies that foster reading and writing engagement for all students.

Summary

In summary, this study identified specific qualities of an effective teacher preparation program in the context of a reading clinic model. Results suggest that participation in the reading clinic model generally had positive influences on pre-service teachers’ preparation to teach reading. Specific qualities delineated from this study may provide the underpinnings for structuring a model of an exemplary
teacher preparation program to teach reading instruction to pre-service teachers. The next chapter will present conclusions, limitations of the study, and implications for future research.
CHAPTER SIX

CONCLUSIONS

The purpose of this study was to assess the effectiveness of the reading clinic model in teaching pre-service teachers to utilize a sequential application of reading interventions to improve students’ reading performance. The results of this study support and extend the findings in previous research showing that students improved in oral reading fluency with a systematic application of reading interventions conducted in the reading clinic model geared for pre-service teachers.

Course Design

Little is known about actual fieldwork experiences for pre-service teachers and the extent to which literacy coursework objectives transfer over into their classrooms. State legislators, accreditation agencies, and many state departments of education have focused on pre-service and in-service teacher candidate professional performance and K-12 student academic outcomes. Greater accountability in higher education was accelerated through the passage of the 2001 reauthorization of the Elementary and Secondary Education Act (1965). No Child Left Behind (NCBL) stressed the importance of having highly qualified teachers in the classroom. Teacher education programs have raised the bar on requirements for professional education in reading, including a greater emphasis on teacher knowledge, skills, and competencies in the teaching of reading. The challenge for institutions of higher education is to provide effective, hands-on supervised fieldwork experiences that
assure that pre-service teachers are indeed highly qualified to teach all students—including students who struggle in learning to read and write.

Pre-service teachers’ response to the survey instrument, a 17-item questionnaire, indicated that the reading clinic model for instruction was able to effectively meet learning objectives in specific areas of preparedness to teach reading. Critical features unique to the reading clinic model that pre-service teachers highly valued were learning to develop and maintain positive rapport with students, gaining understanding about students’ interests and motivations, and developing activities to sustain on-task behaviors. Pre-service teachers valued learning to create an affective environment to promote and encourage successful literacy skill development and placed this quality as a high priority for effective preparation in the reading clinic model. Additional qualities linked to the reading clinic model that pre-service teachers believed effectively prepared them to teach reading were learning to apply various teaching strategies to resolve problems, adapting curriculum to meet individual student needs, and implementing multiple assessment procedures to monitor student progress. Results of this study suggest that an explicit, holistic, and integrated approach to teach reading is essential for successful individualized instruction.

Today’s diverse reading classrooms host challenges and opportunities for beginning teachers to create a caring classroom environment that reaches all students by integrating children’s interests and motivations into classroom instruction. Beginning teachers need to see how skilled mentors adjust instruction to meet the
needs of students. Additionally, teachers in preparation must be able to apply their understanding of diagnostic tools to interpret data measuring student performance and to offer appropriate, differentiated instruction that adapts to individual student needs. It is my hope that the results of this study will be regarded as sufficiently promising to warrant long-term outcome studies in teacher preparation programs, specific to the reading clinic model, to teach reading and to evaluate how pre-service teachers’ preparation relate to their experiences and practices as they enter schools.

Limitations

Teacher educators consistently face the challenge of helping pre-service teachers link new knowledge learned through course work to instructional practice during field experiences. Excellent reading teacher preparation programs move teachers through systematically arrayed field experiences that are closely coordinated with their coursework and expose them to excellent models and mentors.

One limitation of this study was that I did not have knowledge of the content of the reading methodology classes that all pre-service teachers participated in prior to their fieldwork experience. This impacted this study because research has suggested positive effects when supervised, relevant, clinical experiences reinforce and build on knowledge gained through coursework in a reading methodology class. Careful planning and coordination of coursework and field experience provide practical experience in applying newly acquired knowledge and an optimal setting for explicit teaching and the gradual release of responsibility. In the reading clinic model, two mentor teachers taught specific, research validated literacy strategies that
are found to be effective for teaching reading especially for struggling readers. Excellent preparation programs sustain theoretical beliefs with extensive fieldwork experience; the basis for successful fieldwork is a close link with coursework.

Furthermore, pre-service teachers entered the credential program with different levels and kinds of prior knowledge, varying prior work or volunteer experiences, diverse knowledge in developing pedagogies, and a wide range of philosophies about the nature of teaching. These variables interacted and affected pre-service teachers’ approach to and expectation of their fieldwork experience. Additionally, all the surveys were susceptible to bias on part of the participants answering the survey due to the nature of self-reporting; pre-service teachers may have underestimated or overestimated their response to what they reflected as effective preparation for teaching reading. However, the content of the survey was sound and research validated for excellent teaching practices according to California Standards for Teaching Profession.

A related area of limitation to this study is that I had only a limited understanding of what mentoring teachers at each school-based site taught and how their fieldwork sessions were purposefully structured to provide authentic learning experiences for pre-service teachers. In this sense, I have no true comparison of what specific program components were effective at each school-based practicum. Additionally, I have no data comparing pre-service teachers’ effectiveness for teaching reading at each school-based practicum as demonstrated by students’ progress in literacy development. I have documented evidence of reading progress
for elementary students that participated in the reading clinic model. Thus, I was unable to compare this aspect of the two models.

All pre-service teachers were required to attend a workshop in which another mentor teacher and I taught specific assessment methodology and hierarchically-ordered reading strategies with the intention that this knowledge of instructional approaches would be implemented not only in the reading clinic model but also in the school-based practicum. However, for pre-service teachers participating in the school-based practicum, I did not have data that measured their developing competency in a variety of instructional approaches. Pre-service teachers in school-based practicum were integrated into pre-existing literacy programs. Pre-service teachers participating in the school-based practicum were evaluated by their mentor teachers according to observation forms that were specifically designed to detail standards that pre-service teachers are to fulfill. The evaluation forms were provided by the Program Leader of the Special Education Credential program. Information regarding pre-service teachers’ reports on specific qualities of the school-based practicum would have offered more information related to the effectiveness of the school-based model.

Finally, the sample size of this study was small which negatively affects any generalizations I could make in regard to implementation of these methodologies in other teacher education programs. The population in the study does not represent the diversity of teachers and students found in the state of California. Although results of the survey demonstrated that mentor teachers improved prospective teachers’
knowledge, there is no way of knowing whether this increased knowledge actually translates into effective teaching because this research did not report data on the teachers after their participation in the experimental program. The duration of the study was only seven weeks which may be insufficient evidence in knowing if observed results hold up over time; however, survey results highlighted specific components of this model that pre-service teachers highly valued as effective preparation to teach reading. These qualities may serve as a guide for additional research that evaluates these questions: (1) What effects do participation in and completion of an excellent reading teacher education program have on the experiences of teachers as they enter schools and (2) How does teachers’ preparation relate to their teaching practices?

Historically, university-based reading clinics in the United States emphasized one-to-one tutoring. One-to-one teaching experiences are often considered the most effective method of instruction because these experiences allow pre-service teachers to observe learning processes without being distracted by classroom management that is present while working in small group or whole class instruction. Questions have been raised about the relevance of one-on-one clinical experiences as an instruction model in the types of classrooms in which teachers will find themselves. Pre-service teachers who participated in the reading clinic model primarily implemented instructional procedures in one-to-one tutoring; this may limit pre-service teachers’ ability to transfer what they have learned during fieldwork experiences into classroom settings.
Conclusions

Answers to the general research questions were positive: What is the effect of the reading clinic model in teaching pre-service teachers to support the literacy needs of struggling readers, and what is the impact of the clinic model on the reading skills of struggling readers? Results from the survey data suggested that specific program characteristics unique to the reading clinic model were effective in preparing pre-service teachers for teaching reading. Pre-service teachers placed strong emphasis and valued being well prepared in learning teaching strategies to develop positive relationships with their students. They also valued learning to cultivate a caring classroom environment in which students feel respected, cared about, and safe. Pre-service teachers credited the reading clinic model with their awareness of the range of reading needs and the importance of individualizing instruction. Teachers also indicated that they were well prepared in adopting specific instructional strategies emphasized in the reading clinic model. Finally, results from the reading clinic model demonstrated positive effect in pre-service teachers’ developing competencies in formal and informal assessment and prescribing individualized instruction to support the literacy needs of struggling readers.

Implications for Future Research

This study identified features of the reading clinic model that lead to excellence in pre-service teachers’ preparation to teach reading. How teachers should be prepared is an on-going inquiry that the research community must continue to struggle with using the best methods possible. I see the need for creating continuity
in which mentoring teachers not only provide the explicit instruction in the required reading methodology classes but are also the teacher educators who provide excellent models and supervise in a relevant, reading clinic experience in which pre-service teachers receive on-going support, guidance, and feedback. Ideally, during the time that methodology classes are taught, pre-service teachers are provided the opportunity to practice and apply newly gained knowledge in the Saturday reading clinic fieldwork apprenticeship under the supervision of the same teacher educators. The consistency of faculty members teaching the reading methodology coursework and directly modeling the instructional format for pre-service teachers in the reading clinic model may increase and enhance beginning teachers’ ability to define positive effect and features of the approach under study more specifically and extensively. I believe excellent reading teacher preparation programs incorporate mentor teachers who not only provide explicit, best pedagogy but also intentionally create opportunities in which their students can try out new strategies, ask questions about their instruction, and receive focused feedback that is both critical and constructive. Regularly scheduled debriefing sessions elicit program strengths and weaknesses.

The most apparent feature of the experimental research reviewed is that there are significant gaps in knowledge about teacher education. High-quality teacher education research is expensive and time consuming, and it requires commitment and collaboration efforts from stakeholders to yield appropriate answers. Teacher education research involves relatively complex problems and requires sustained
efforts in which all these elements come together in a way that admits experimental research.

Results of this study delineated program qualities specific to the reading clinic model; these findings will be used to re-think the essential characteristics of strong reading clinic experiences as they relate to preparation programs that prepare prospective teachers to educate struggling readers. Additional research is needed to evaluate what effects do participation in and completion of an excellent reading teacher education program have on the experiences of teachers as they enter schools and whether their increased knowledge actually translates into sustained, effective teaching.

Summary

Upon completion of a seven-week fieldwork experience, pre-service teachers were asked to complete a 17-item survey designed to assess the effectiveness of the reading clinic model in educating teacher candidates in how to use a sequential application of reading interventions to improve students’ reading performance and to evaluate the effectiveness of this model to prepare pre-service teachers to teach reading to struggling readers. Four themes, specific to the reading clinic model, emerged from survey results that help to define essential qualities for excellent teacher preparation programs:

1) creating and maintaining effective environments for student learning, 2) engaging and supporting all students in learning, 3) assessing student learning, and 4) planning instruction and designing learning experiences for all students. These
qualities pre-service teachers’ believed as effective preparation for teaching reading
serve as a guide for enhancing current reading education programs. The results of
this study provide additional educational goals for positive change in pre-service
education. Although no single study can provide all the answers, it is my hope that
this contribution to the research assists in the process of continual inquiry into
defining the features of high-quality teacher preparation programs to equip and
produce competent prospective reading teachers and to minimize reading failure in
all but a small percentage of students.
APPENDIX A

PROGRESS EVALUATION FORM

Note: The form has been modified so that it conforms with thesis formatting requirements.
PROGRESS EVALUATION ON CLASSROOM ORGANIZATION & INSTRUCTION  
CLASSROOM VISIT – CLINICAL SUPERVISION  
California Standards for the Teaching Profession

**Standard 1- Engaging and Supporting All Students in Learning**

**Criteria – at a beginning teacher level the candidate can do most of the following:**

- Connect students’ prior knowledge, life experiences, and interests with learning goals.
- Use a variety of instructional strategies and resources to respond to students’ diverse needs.
- Facilitate learning experiences that promote autonomy, interaction and choice.
  - Engage students in problem solving, critical thinking, and other activities that make subject matter meaningful.
- Promote self-directed, reflective learning for all students.

**What did you observe?**

**Observation completed by:** ____________________________ **Date:** ____________________________

**Rating for this standard (check one):**

- 1 = needs improvement  
- 2 = met criteria  
- 3 = exceeded expectations

**Comments and suggestions:**


Standard 2-Creating and Maintaining Effective Environments for Student Learning

Criteria – at a beginning teacher level the candidate can do most of the following:

___ Create a physical environment that engages all students.
___ Establish a climate that promotes fairness and respect.
___ Promote social development and group responsibility.
___ Establish and maintain standards for students’ behavior.
___ Plan and implement classroom procedures and routines that support student learning.
___ Use instructional time effectively

What did you observe?

Observation completed by: ____________________________ Date: ________________

Rating for this standard (check one):
___ 1 = needs improvement   ___ 2 = met criteria   ___ 3 = exceeded expectations

Comments and suggestions:


Standard 3-Understanding and Organizing Subject Matter for Student Learning

Criteria – at a beginning teacher level the candidate can do most of the following:

___ Demonstrate knowledge of subject matter content and student development.
___ Organize curriculum to support student understanding of subject matter.
___ Interrelate ideas and information within and across subject matter areas.
___ Develop student understanding through instructional strategies that are appropriate to the subject matter.
___ Use materials, resources, and technologies to make subject matter accessible to students.
___ Demonstrate knowledge of subject matter content and student development.

What did you observe?

Observation completed by: ____________________________ Date: ________________

Rating for this standard (check one):
___ 1 = needs improvement   ___ 2 = met criteria   ___ 3 = exceeded expectations
Comments and suggestions:

Standard 4- Planning Instruction and Designing Learning Experiences for All Students

Criteria – at a beginning teacher level the candidate can do most of the following:

- Draw on and value students’ backgrounds, cultural heritage, interests, and developmental learning needs.
- Establish and articulate goals for student learning.
- Develop and sequence instructional activities and materials for student learning.
- Design long-term and short-term plans to foster student-driven transition to adult life outcomes.
- Modify instructional plans to adjust for student needs.

What did you observe?

Observation completed by: ____________________________ Date: ____________________________

Rating for this standard (check one):

___ 1 = needs improvement ___ 2 = met criteria ___ 3 = exceeded expectations

Comments and suggestions:

Standard 5 - Assessing Student Learning

Criteria – at a beginning teacher level the candidate can do most of the following:

- Establish and communicate learning goals for all students.
- Collect and use multiple sources of information to assess student learning.
- Involve and guide all students in assessing their own learning.
- Use the results of assessments to guide instruction.
- Communicate with students, families, and other agencies about student progress.

What did you observe?

Observation completed by: ____________________________ Date: ____________________________

Rating for this standard (check one):

___ 1 = needs improvement ___ 2 = met criteria ___ 3 = exceeded expectations
Comments and suggestions:

Standard 6 – Developing as a Professional Educator

Criteria – at a beginning teacher level the candidate can do most of the following:

___ Reflect on teaching practice and plan professional development.
___ Establish professional goals and pursue opportunities to grow professionally.
___ Work with families to improve professional practice.
___ Balance professional responsibilities and maintain motivation.
___ Describe current legal mandates set forth in IDEA and other laws.

What did you observe?

Observation completed by: ______________________   Date: ______________________

Rating for this standard (check one):

___ 1 = needs improvement   ___ 2 = met criteria   ___ 3 = exceeded expectations

Comments and suggestions:

Signature of individuals reviewing this report:

<table>
<thead>
<tr>
<th>Student</th>
<th>Mentor</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher:</td>
<td>Teacher:</td>
<td>Supervisor:</td>
</tr>
<tr>
<td>Date:</td>
<td>Date:</td>
<td>Date:</td>
</tr>
</tbody>
</table>
APPENDIX B

PRE-SERVICE TEACHER SURVEY

Note: The survey has been modified so that it conforms with thesis formatting requirements.
THE EFFECTIVENESS OF YOUR PREPARATION FOR TEACHING READING

<table>
<thead>
<tr>
<th>After My Reading Practicum, I Was …</th>
<th>well prepared to begin…</th>
<th>adequately prepared to begin…</th>
<th>somewhat prepared to begin…</th>
<th>not at all prepared to begin…</th>
<th>Cannot Answer An Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. …to use an effective mix of teaching strategies and instructional activities.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>2. …to teach reading-language arts according to CA Standards in reading.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>3. …to meet the instructional needs of all students.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>4. …to meet the instructional needs of students with learning disabilities.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>5. …to learn about my students’ interests &amp; motivations, and how to teach them accordingly.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>6. …to get students involved in engaging activities and to sustain on-task behavior.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>7. …to monitor student progress by using on-going assessment methods.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>8. …to assist individual students in areas of their instructional needs in reading.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>9. … to use class time efficiently by relying on daily routines and planned transitions.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>10. …to communicate effectively with the parents or guardians of my students.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>
### THE EFFECTIVENESS OF YOUR PREPARATION FOR TEACHING READING

After My Reading Practicum, I Was …

<table>
<thead>
<tr>
<th>Item</th>
<th>Well Prepared to Begin</th>
<th>Adequately Prepared to Begin</th>
<th>Somewhat Prepared to Begin</th>
<th>Not at All Prepared to Begin</th>
<th>Cannot Answer An Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. …to maintain positive rapport with students and to foster their excitement &amp; motivation.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>12. …to think about problems that occur in teaching and to try-out various solutions.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>13. …to use teaching strategies research-validated as effective for special ed. students.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>14. …to adapt curriculum to meet the needs of students with disabilities.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>15. …to use positive behavior support skills.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>16. …to adjust my teaching strategies so all students have chances to understand and learn.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>17. …to assess students' interests and abilities using multiple assessment procedures.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>
### APPENDIX C

**Pre-Service Teachers’ Reports of Preparedness to Teach Reading**

<table>
<thead>
<tr>
<th>Question</th>
<th>t-test for Equality of Means</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Ability to use an effective mix of teaching strategies and instructional activities</td>
<td></td>
<td>.000</td>
<td>15.789</td>
<td>1.000</td>
<td>.00000</td>
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<tr>
<td>Q2 Ability to teach reading-language arts according to CA Standards in reading</td>
<td></td>
<td>.067</td>
<td>14.753</td>
<td>.947</td>
<td>.02381</td>
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<tr>
<td>Q3 Ability to meet the instructional needs of all students</td>
<td></td>
<td>-.169</td>
<td>9.368</td>
<td>.869</td>
<td>.08333</td>
</tr>
<tr>
<td>Q4 Ability to meet instructional needs of students with learning disabilities</td>
<td></td>
<td>-.186</td>
<td>9.385</td>
<td>.856</td>
<td>-.05952</td>
</tr>
<tr>
<td>Q5 Learning about student interests &amp; motivations, and how to teach them accordingly</td>
<td></td>
<td>2.883</td>
<td>16.972</td>
<td>.010</td>
<td>.70238</td>
</tr>
<tr>
<td>Q6 Getting students involved in engaging activities and sustaining on-task behavior</td>
<td></td>
<td>2.218</td>
<td>16.987</td>
<td>.040</td>
<td>.52381</td>
</tr>
<tr>
<td>Q7 Monitoring student progress by using ongoing assessment methods</td>
<td></td>
<td>1.834</td>
<td>17.000</td>
<td>.084</td>
<td>.44048</td>
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<tr>
<td>Q8 Assisting individual students in areas of their instructional needs in reading</td>
<td></td>
<td>2.067</td>
<td>13.707</td>
<td>.058</td>
<td>.42857</td>
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<td>Q9 Able to use class time effectively by relying on daily routines and planned transitions</td>
<td></td>
<td>-.052</td>
<td>9.273</td>
<td>.960</td>
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<td>Q10 Ability to communicate effectively with the parents or guardians of my students</td>
<td></td>
<td>1.535</td>
<td>13.914</td>
<td>.147</td>
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<td>Q11 Maintaining positive rapport with students and fostering their excitement and motivation to learn.</td>
<td></td>
<td>2.419</td>
<td>15.554</td>
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<td>Question</td>
<td>Value1</td>
<td>Value2</td>
<td>Value3</td>
<td>Value4</td>
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<td>------------------------------------------------------------------------</td>
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<td>--------</td>
<td>--------</td>
<td>--------</td>
<td></td>
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<tr>
<td>Q12 Thinking about problems that occur in teaching and to try out various solutions</td>
<td>2.033</td>
<td>16.911</td>
<td>.058</td>
<td>.53571</td>
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<tr>
<td>Q13 Ability to use teaching strategies research-validated as effective for special education students</td>
<td>.348</td>
<td>16.989</td>
<td>.732</td>
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<td>Q14 Ability to adapt curriculum to meet the needs of students with disabilities</td>
<td>1.276</td>
<td>16.989</td>
<td>.219</td>
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<tr>
<td>Q15 Using positive behavior support skills.</td>
<td>3.031</td>
<td>12.836</td>
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<tr>
<td>Q16 Adjusting teaching strategies all students have chances to understand and to learn</td>
<td>2.062</td>
<td>15.301</td>
<td>.057</td>
<td>.51786</td>
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<td>Q17 Ability to assess students’ interests and abilities using multiple assessments.</td>
<td>.501</td>
<td>16.273</td>
<td>.622</td>
<td>.14286</td>
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</table>

Note: Equal variances not assumed  
\( P = < 0.05 \)
### APPENDIX D

Pre- and Post-Test Results for Elementary Student Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Test</th>
<th>Instrument</th>
<th>Reading Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kaelyn</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-15-05 Pre-test</td>
<td>Shanker/Eckwall</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Read Naturally</td>
<td></td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>12-10-05 Post-test</td>
<td>Shanker/Eckwall</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Read Naturally</td>
<td></td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td><strong>Tyler</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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REFERENCES


California Commission on Teacher Credentialing (December 1996). *Standards of Quality and Effectiveness for Education Specialist Credential Programs including university internship options and clinical rehabilitative services credential programs* Retrieved May 6, 2006 from [www.ctc.ca.gov/educator-prep/standards/speced](http://www.ctc.ca.gov/educator-prep/standards/speced)


Newark, DE: International Reading Association.


