DEPARTMENTALIZED VERSUS SELF-CONTAINED BALANCED

LITERACY INSTRUCTION: ITS EFFECT ON SECOND GRADE

COMPREHENSION LEVELS

A Dissertation Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education

by

Katina L. Thomas

May 2014

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Abstract

The initiatives in U.S. school reform constantly serve as a reflection of the
academic, political, and economical sentiment of the time. The College Entrance Exam
Board's decision in 1909 to establish a 40 to 60 minute class schedule that mirrored the
Carnegie unit's structure of efficiency and mass production remained the tradition until
1959, when J. Lloyd Trump introduced a flexible instructional schedule that allotted for
an 85 to 100 minute "block" of time for each subject. The government report, *A Nation
at Risk* (1983), found that 13% of seventeen year olds were functionally illiterate, and
that schools were not utilizing school time efficiently. By 2001, the No Child Left
Behind Act established a structured accountability system for schools; however, by 2013,
the National Center for Educational Statistics (2013) reported five year stagnation in
reading performance for fourth, eighth, and twelfth graders. The current outcomes have
caused administrators and educators to revisit current instructional and organizational
practices for more efficient and effective approaches to maximize learning opportunities
and increase school performance. This study examined the effects of implementing a
balanced literacy approach to reading in self-contained and departmentalized classrooms
in second grade classrooms.

In a review of the literature, little research has been conducted on self-contained
and departmentalized classroom settings in the elementary school prior to third grade.
Previous studies primarily focused on students in third grade and higher, and
concentrated on student performance on state-mandated tests in reading. No studies to

date have investigated self-contained and departmentalized comprehension levels prior to a grade level that has been designated for a state-mandated test. As a result, this study examined the following research questions: 1) What effect does receiving balanced literacy instruction in a self-contained or departmentalized classroom have on the reading comprehension of second graders as measured by district assessments, and 2) Are there gender differences in the observed reading comprehension of second graders with regard to a self-contained or departmentalized classroom? The research also qualitatively examines what effect teachers' experiences, perceptions, and opinions about self-contained and departmentalized instruction have on the implementation and academic outcomes of the instructional organization of the classroom.

This study examined second grade students from an urban school district in a metropolitan area in Texas. The sample was taken from three self-contained second grade classrooms (N = 61) and four departmentalized second grade classrooms (N = 86) from the same elementary campus. The departmentalized classrooms served as the quasi-experimental group and the self-contained classrooms served as the control group. Statistical tests were conducted to answer the first two research questions. Repeated measures were administered to compare beginning middle, and end of year comprehension levels within each group to determine significant progress. A 2 x 2 x 3 mixed ANOVA was used on the subpopulation (gender) to determine if any gender differences exist. Individual interviews of the second grade teachers that participated in the study were conducted to collect feedback regarding teachers' beliefs, opinions, and preparation for self-contained and departmentalized literacy instruction.

Results from separate analyses of the comprehension levels indicated that both the departmentalized and self-contained groups made significant progress from the beginning to the middle of the school year, and again at the end of school year. However, there was no significant difference in the rate of increase in self-contained and departmentalized groups. Significant progress was also made for each group within the gender subpopulation. When the departmentalized and self-contained groups were compared, there was not a significant difference between the comprehension levels of males and females at the end of the year. There was also no significant difference in the rate of increase in comprehension levels of departmentalized and self-contained males, and the rate of increase in comprehension levels of departmentalized and self-contained females at the end of the year. Feedback from teachers revealed that all of them supported the opportunity for more preparation and focus on one subject. However, self-contained teachers preferred the opportunities to teach one theme across all subjects, while departmentalized teachers preferred opportunities to engage in more cooperative learning activities during the literacy block. This study demonstrates that balanced literacy instruction is effective in increasing student comprehension levels from the beginning to the end of the school year in primary classrooms that implement both a departmentalized and self-contained schedule. It also demonstrates that departmentalized and self-contained balanced literacy can also increase student comprehension levels from the beginning to the end of the year within both gender groups.

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Chapter I

Introduction

Leaders in school reform have taken an interest in devising initiatives that can increase student achievement. The increase in reading expectations has caused elementary schools to diversify their approaches to teaching literacy and redesign their scheduling methods to maximize the instructional day. Elementary school years are the formative years in which students develop their attitudes toward school and toward learning (Chang, Munoz, & Koshewa, 2008). Consequently, there has been an increase in departmentalized classrooms in elementary schools in hopes of strengthening reading instruction and student comprehension. The basic literacy skills that children learn in elementary school are the building blocks on which academic, occupational, and social success depend (Spira, Bracken, & Fischel, 2005). A variety of instructional approaches have been implemented with hopes of establishing a firm literacy foundation and preventing the occurrence of developmental "stalls in growth" that have been observed during language and literacy acquisition. Since the passing of the No Child Left Behind (NCLB) Act of 2001, the integration of the balanced literacy framework that emerged during the 1990s has become a blueprint for developing beginning reading materials, programs and initiatives.

Conceptual Framework

In 1909, during the scientific management era that emphasized efficiency, mass production, and uniformity, the College Entrance Examination Board adopted the Carnegie unit, which mandated a total of 120 hours of classroom instruction to be delivered in 40- to 60-minute classes during an academic year of 36 to 40 weeks

(Hackmann, 2004). In elementary schools, the traditional schedule is commonly implemented within self-contained classrooms. The traditional self-contained schedule of instruction requires the teacher to conduct a lesson on each subject with the entire class, and if time allows, target more specific instruction in a small group setting while the remainder of the class engages in an independent task. A self-contained classroom, which is commonly the setting for elementary students and students with special needs, generally consists of one instructor who is a generalist and teaches every content area. Although in elementary school settings, there are often "specials" that are taught by teachers in a particular field such as music, art and physical education (Walker, 2009).

This establishment of a uniform schedule became the traditional structure until 1959, when J. Lloyd Trump's reorganization of the school day into flexible instructional time introduced schools to an alternative to the traditional 45 to 55 minute allotment for every subject on a daily basis. This schedule, known as block, refers to an extended classroom learning period, generally between 85 to 100 minutes (Jenkins et al., 2002). It purports to allow teachers to work in a more intensive, uninterrupted manner utilizing varying techniques to make subject more vital and more meaningful. The intent is to provide concentrated in-depth study of a subject area (Chang, Munoz, & Koshewa, 2008; Johannessen & Lorenz, 2001; Walker, 2009). A departmentalized classroom allows for a teacher to concentrate on teaching fewer academic subjects, with more time devoted to instruction each of those subjects. This is common in middle and high school, however it also occurs in some elementary schools. On the elementary level, instruction of those subjects are taught to one group of students during a portion of the day, and then repeated to a new group of students during another portion of the school day.

Within the balanced literacy block, a combination of decoding, reading, and writing skills are developed within a designated allotment of time. Although there are designed "blocks of time," balanced literacy is far more comprehensive in its commitment to ensuring that all aspects of reading, writing, listening, viewing, and speaking receive appropriate rather than equal emphasis within a literacy program. Balanced literacy uses a whole-part-whole approach (Hibbert & Iannaci, 2005). Within this approach, literacy begins with activities that involve the whole group of students, then progress to a variety of activities that occur in small groups that only involve part of the class, and finally ending with activities that require the whole group to reconvene. The balanced literacy approach is designed to foster the gradual release of responsibility from teachers to students, moving from structured modeling (e.g., through read-alouds and shared reading) to scaffolded support (e.g., through guided reading) to independence of individual work (Bitter et al., 2009). As such, most educators would suggest that literacy instruction should promote the interaction between the skill-based aspects of reading (e.g. phonemic awareness, alphabetic knowledge, letter-sound association) and the meaning-based aspects of reading (e.g. vocabulary, comprehension) (Bingham & Hall-Kenyon, 2013). This approach has been applied within a self-contained schedule as well as within a departmentalized schedule.

Need for the Study

Although the content development has been a primary focus for educators, recent research has begun to report the impact that scheduling has on a population of students that have grown to become more diverse and more technologically savvy. Minimal research exists that closely examines the effects of a self-contained instruction without

comparing its outcomes to the effects of departmentalization. Studies have examined the trends of scheduling on upper elementary and secondary students. A limited amount of research has been conducted regarding the impact that school organization has on primary age learners that are still establishing a foundation of reading skills. Although departmentalization and block scheduling has become a growing trend within elementary schools, little research has been conducted exploring the effects of scheduling programs on elementary students during their early years of instruction. Although it is common to observe a variety of scheduling methods throughout secondary schools, little research has extended its investigations beyond whether departmentalization, or block scheduling, and self-contained, also known as traditional scheduling, coexist to examine how it plays a role in the social and academic development of students in the primary grades.

Statement of the Problem

Elementary school principals must address at least three major issues related to scheduling: providing quality time for teaching and learning; dealing with class size; and providing varying learning time for students who learn at different rates (Canady, 2001). The amount of literacy skill development can have long lasting effects on a student's reading ability (Kurdek & Sinclair, 2001; Walsh, 2002). The Programme for International Student Assessment (PISA) reports that across 75 countries, the gender difference in reading, which favors girls, was three times larger than the gender difference in math (Stoet & Geary, 2013). Two out of every three students in U.S. schools have reading proficiencies below the level needed to adequately do grade level work (Allington, 2011). According to the National Center for Education Statistics (2013), The Nation's Report Card reported no significant gains in reading for students in the fourth grade between

2008 and 2012. The report also reveals that 65% of fourth-graders are performing at a basic or below basic level of literacy. In Texas, student retention decreased in every grade except for grade 2 in 2010-2011. Retention rates also increased from the previous year in Grades 2, 3, 9, 10, and 11 in 2011-2012 (Texas Education Agency, 2013). Increased expectations from governmental agencies for students to perform well on standardized tests has led schools to seek alternative solutions to the traditional classroom in hopes of raising achievement scores and establishing more opportunities for learning.

In 1965, the Educational Research Service reported that less than half of the 400 school systems surveyed used departmentalization (block scheduling) in the elementary schools (American Association of School Administrators, 1965, p.1). By 1983 the topic of schedule restructuring resurfaced when the publication of *A Nation at Risk* reported a belief that the schedule of instruction impacts the level of student achievement in core subjects. Rogers and Palardy's (2001) study of the examination of the horizontal organizational patterns and grouping strategies of classrooms in grades K-6 in six southeastern states suggests that the amount of self-contained classes dropped at each successive grade level from 92 percent in kindergarten to 30 percent in sixth grade. Departmentalization was originally developed to assist upper elementary students in grades 4-6 with the transition to middle school (Lamme, 1976). However, the introduction of departmentalization instruction has begun to occur as young as kindergarten (Chang, Munoz, & Koshewa, 2008). According to Alspaugh and Harting (1995) a decline in achievement during the transition year can be expected for all grade spans as schools convert from self-contained classrooms.

The level of reading achievement that children have attained by the end of second grade seems to be a more powerful predictor of reading achievement than reading attainment at the end of first grade (Spira, Bracken, & Fischel, 2005). The revision of literacy schedules in a grade, such as grade two, in which the learner begins progressing from beginning to transitional reading, can increase the likelihood of less time devoted to the mastery of specific literacy skills. Each minute of a school day is significant and can affect student success.

More effective strategies are needed to increase the comprehension levels of students nationally. Schools nationwide have seen again and again how a well-crafted schedule can result in more effective use of time, improved instructional climate and assist in establishing desired programs and instructional practices (Lewis, 1999). A literacy framework that includes well-developed, small group instruction coupled with effective, whole-group literacy teaching provides teachers with an opportunity to focus on their teaching rather than script their teaching (Fisher & Frey, 2007). According to Scott et al. (2009), activities that would meet children where they are should be authentic, motivational, focused and differentiated (i.e., strategies that teach specific skills in reading and writing that kids need and will serve them well).

Purpose of the Study

The purpose of this study is to analyze the reading comprehension data for second graders in an urban school who receive literacy instruction in self-contained and departmentalized classrooms. The present study is intended to measure the amount of growth in reading comprehension experienced by second graders from a school in a metropolitan area who received instruction in either a self-contained or departmentalized

classroom. The quantitative study will be conducted using data collected during the 2011-2012 school year from periodic benchmarks, grade reports, and district assessments developed to measure comprehension on second grade literacy skills. Each of the two groups of students received identical balanced literacy lessons with basal readers in the method of either self-contained instruction or departmentalized instruction. The study will also investigate the teachers' attitudes, beliefs, and preparation for teaching literacy in their respective schedules for any influence it may potentially have on the outcomes of student comprehension levels.

Research Questions and Hypotheses

The study will be guided by the following research questions:

Research Question 1: What effect does receiving balanced literacy instruction in a self-contained or departmentalized classroom have on the reading comprehension of second graders as measured by district assessments?

Research Question 2: Are there gender differences in the observed reading comprehension of second graders with regard to a self-contained or departmentalized classroom?

Ad hoc inquiry: In addition, the research will qualitatively examine the teachers' experiences, perceptions, and opinions about self-contained and departmentalized instruction in the implementation and academic outcomes of the instructional organization of the classroom.

All students that receive balanced literacy are expected to produce the same academic results. It is hypothesized that there will be no difference in reading growth between students that received departmentalized instruction and students that received

self-contained instruction. Because students from both genders will be receiving the

same balanced literacy program, it is hypothesized that there will be no difference in

achievement between the females receiving self-contained and departmentalized

instruction; however there will be a difference between males that received self-contained

and departmentalized instruction. Each of the second grade teachers will be using the

same literacy materials and lesson plans, however supplemental interviews will

investigate classroom implementation and instructional practices for teachers that taught

in a second grade self-contained classroom and a second grade departmentalized

classroom.

Definition of Terms

The following are the operational definitions used in the study:

Self-contained: An approach in which the teacher acts as a generalist, and carries

responsibility for the curriculum all day (McGrath & Rust, 2002). This is most common

in elementary schools, and in this case, the teacher is responsible for one set of students

that remains in the classroom all day for all academic subjects.

Departmentalization: A scheduling structure in which teachers teach in their subject area

of specialization and students move from one classroom to another for instruction (Del

Viscio & Muffs, 2007; Hackmann, 2004).

Balanced Literacy: Balanced reading instruction usually means a combination of whole

language and phonics approaches (Stoicheva, 1999). An eclectic, modifiable, research-

based approach to language arts instruction that is designed to address students' needs

and strengths through the teacher's principled provision of explicit instruction in

conjunction with predominantly uncontrived reading and writing experiences (Duffy,

2001). During balanced literacy instruction, a combination of activities (shared reading, read aloud, phonics, vocabulary, independent reading) is structured into a "block of time" to build literacy skills.

Comprehension: Understanding meaning by recognizing words and their meanings, activating relevant background knowledge, and generating inferences as information is integrated during the course of reading (Nation & Angell, 2006). Comprehension is viewed as much more complex process involving knowledge, experience, thinking, and teaching. It depends heavily on knowledge—both about the world at large and the worlds of language and print. Comprehension inherently involves inferential and evaluative thinking, not just literal reproduction of the author's words (Fielding & Pearson, 1994).

Basal Readers: It is an "eclectic approach" to reading that provides some instruction in phonics with some works of literature. Consistent with meaning approaches, Basal approaches usually stress meaning, use of context for intelligent guessing, and whole word recognition as the basis for instruction (Ashworth, 1999).

Developmental Reading Assessment: A teacher-administered assessment that identifies students' instructional level, along with their strengths and weaknesses in reading. Once teachers calculate and interpret scores, the data can purportedly be used to inform, and possibly individualize, instruction (McCarty & Christ, 2010).

Significance of the Study

This study is significant because it contributes to the effectiveness of balanced literacy instruction in different learning environments. It provides preliminary evidence of whether a balanced literacy approach is more beneficial in self-contained classrooms

or departmentalized classrooms prior to third grade. It also reveals if this literacy approach is more impactful in a self-contained or departmentalized second grade according to gender. There is no research regarding the effects of balanced literacy in self-contained and departmentalized classrooms in the second grade. There is also no research regarding how reading instruction in self-contained and departmentalized classrooms effect comprehension levels, so this will be newly documented information. Results from the study will provide understanding about whether the method of scheduling would be useful in the comprehension outcomes of literacy instruction in second grade. Additional results will also provide insight into whether teachers' preparation for literacy instruction within different scheduling methods, as well as their perceptions regarding their literacy schedule would be influential in the outcomes of student comprehension. Implications of this study can be generalized for other schools and districts to follow. Chapter 2 addresses the need for the study and reveals a gap in the literature regarding the effects of scheduling design on reading comprehension in lower elementary.

Chapter II

Review of the Literature

Introduction

The current study involves second graders receiving balanced literacy instruction in either a self-contained or departmentalized classroom setting. As previously mentioned, a self-contained classroom is an environment in which the teacher acts as a generalist and carries responsibility for the curriculum all day (McGrath & Rust, 2002). A departmentalized classroom is an environment in which teachers teach in their subject area of specialization and students move from one classroom to another for instruction (Del Viscio & Muffs, 2007; Hackmann, 2004). These learning environments were used to structure balanced literacy lessons that foster comprehension achievement within second grade classrooms. The review of the literature focused around factors that may impact results on student comprehension levels. Literature was reviewed regarding sociocultural learning, historical approaches to comprehension instruction, factors that influence comprehension instruction, balanced literacy, basal readers, and research regarding self-contained and departmentalized instruction.

Theoretical Framework: Sociocultural Learning Theory

Sociocultural theory, originated by researcher Lev Vygotsky and his collaborators in Russia in the 1920s and 1930s, is based on his belief that physical, technological, socio-economical, and intellectual environments and their complex interdependency determine the individual's possibilities (Van Der Veer, 2007). Their approaches are based on the concept that human activities take place in cultural contexts, are mediated by language and other symbol systems, and can be best understood when investigated in

their historical development (John-Steiner & Mahn, 1996). Sociocultural learning theories combine sociological and anthropological ideas with a branch of psychological theory that locates human learning in social interaction (Knapp, 2008; Penuel & Wertsch, 1995). Activities, tasks, functions, and understandings do not exist in isolation; they are part of broader systems of relations in which they have meaning. These systems of relations arise out of and are reproduced and developed within social communities, which are in part systems of relations among persons (Daniels, 1996). According to Van Der Veer (2007), Vygotsky argued that individual and environment should not be viewed as distinct, separate factors that can in some way be added up to explain the individual's development and behavior. Rather, we should conceive of individual and environment as factors that mutually shape each other in a spiral process of growth. The milieu of frameworks and approaches that are rooted in sociocultural theory share the concept that learning is viewed as an essentially social process situated within cultural, institutional, and historical contexts (Knapp, 2008).

Vygtosky believed that these approaches to learning should concentrate on the practice of social cooperation to form one's identity, establish a zone of proximal development (ZPD) for instruction, and develop language skills. As an aspect of social practice, learning involves the whole person; it implies not only a relation to specific activities, but a relation to social communities—it implies becoming a full participant, a member, a kind of person (Penuel & Wertsch, 1995; Van Der Veer, 2007). Vygotsky wrote that both levels in the child's development must be defined to know the relation between the child's process of development and the possibilities of instruction (Daniels, 1996). Defining the "zone" that a child is performing in instructionally, in addition to the

range of possible development is thought to serve as a blueprint for planning specific instruction. By applying the principle of cooperation for establishing the zone of proximal development, it becomes possible to study directly what determines most precisely the mental maturation that must be realized in the proximal and subsequent periods of the stages of development (Reiber, 1998).

At the core of Vygotskian sociocultural theory is the centrality of the human activities of language acquisition (Ajayi, 2005). A claim amongst sociocultural theorists is that the relationships between individuals form a basis for cognitive and linguistic mastery. This process, whether in the classroom or elsewhere, includes transmission, construction, transaction, and transformation in a continuing, complex interplay (John-Steiner & Mahn, 1996). Active social interaction that builds language acquisition is believed to link spoken and written language, and serve as a foundation for reading development.

The correlation between social and academic development. The outlook of children in the twenty-first century is a reflection of the changing dynamic of society around them. In the midst of sociocultural research is a narrow focus of how a child's social competence and cultural identity affects the instructional dynamics of learning. Educators and researchers have begun to concentrate on closing achievement gaps that have been reported to exist between the urban learner and his middle-class peers. One approach has been to focus on the student's social capital and the weight of impact it carries on academic success. Goddard (2003) suggests that social capital can be understood as a collective resource that can facilitate the academic success of students in a school. Schools that are observed as exhibiting high levels of social capital had higher

pass rates for their students on the high-stakes state-mandated assessments of

mathematics and writing (Goddard, 2003). Although there were high concentrations of

impoverished minority students, it is unclear whether socioeconomic status determines

the amount of social capital that is needed. Elias and Haynes (2008), suggest that urban

elementary students need social-emotional competence for adequate school performance

amongst high-risk students with academic gaps. Feeling socially competent and

supported within the school environment empowers the elementary student to experience

feelings of academic competence and confidence. Elias and Haynes (2008) report,

> Children's ability to regulate their emotions when frustrated,
> puzzled, or dejected, or beset with pervasive feeling of
> hopelessness or anger clearly will the energy they can
> devote to learning, even when presented with rigorous
> and empirically supported academic curricula (p. 476).

Social and academic competencies develop simultaneously in the learning environment,

and each competency affects the other. Being fully aware of classroom relationships can

influence students' instructional performance when engaging in cooperative activities and

academic projects. Cappella et al. (2012) suggests that urban elementary children in

classrooms that have more peer connections, have teachers who share students'

perspectives of peer relationships, and classrooms that have positive emotional climates

threads possess stronger social networking threads. The need to belong to a peer group or

to have a relationship with an adult at school is strong in students (Swaminathan, 2004).

Studies suggest that interpersonal relationships and networking amongst peers can

influence the level of academic success experienced by learners and vice versa. As

children develop and mature, their views on social acceptance regarding academic

achievement also change. Although the primary grade elementary students (K-2) are

socially cohesive yet academically competitive, as they get older they perceive the classroom environment as less socially cohesive, less difficult and less academically competitive (LaRocque, 2008). Welsh et al. (2001) found in a three year study of elementary children that academic competence consistently leads to social competency from first to second grade with a reciprocal pattern of influence emerging between social and academic competence from second to third grade. The social interactions that students engage in with peers and adults within school are often reflective of the interpersonal relationships and social circles outside of school.

The general desire for social acceptance by peer groups is emulated by the general desire for academic acceptance within the curriculum. The level of student engagement and success are often in response to their ability to relate to the existing curriculum. Student perceptions of existing curriculums have also been studied so that instructional adjustments can occur to increase academic engagement and address the needs of learners. A sense of academic acknowledgement and inclusion within the curriculum can create a sense of acceptance and ownership for students. Student empowerment links literacy with the power dynamics in our society, and it is the key to student engagement and success (Bambino, 2005).

Swaminathan (2004) found that students' affinity to school is based on what they perceive to be spaces where they can grow without physical and emotional fear, where they feel valued, respected, and have opportunities to build alliances both in school and outside within the community. Cleovoulou's (2008) study of five elementary classes reveal that student grouping, teacher language, tone and mode of questioning, content material and cultural and personal connectedness contribute to social inclusion.

Cleovoulou also found that teaching methods that do not permit students to actively engage in their learning and that exclude students' cultural knowledge and experiences are likely to result in student resistance and exclusion from classroom life.

Historical Development of Comprehension Instruction

The evolution of reading instruction has involved the intense research and gradual development of specific literacy components that are expected to cultivate a stronger reader with each new approach. One of the ultimate goals of reading is for all strategies to collectively lead to the mastery of comprehension.

In the late nineteenth century, psychologists began to study the processes of reading comprehension using experimental methods. However, by the early part of the twentieth century, the institution of standardized testing caused researchers to shift their focus from experimental psychology to human performance and skills (testing and teaching). According to Edward Thorndike's early twentieth century research on reading comprehension tests, comprehensions is similar to mathematical solving—taking the right elements from a situation and applying them in the right relationship with the right weight, force, and influence. As the education of reading evolved, so did the comprehension component. With the intensity of standardized assessment increasing, educators of the 1920s began debating the benefits of oral and silent reading when it involved assisting students. This topic impacted comprehension instruction for teachers until the National Society for School Educators (NSSE) officially promoted the utilization of both skills in reading instruction in their 1925 publication, *Yearbook*.

Throughout the latter half of the twentieth century and into the twenty-first century, comprehension has taken on a form of its own that leads researchers on a quest

for the best and most efficient methods to ensure quality comprehension instruction for all learners.

   1950s-1960s Comprehension: Behavior tasks. The Depression era of the 1930s and the war years of the 1940s left little financial support for reading comprehension research. However, by the late 1950s, a resurgence of reading studies began, most notably with Project Literacy at Cornell University. Its focus on letter recognition and letter-sound correspondence spawned new studies in comprehension. Research began a gradual shift from studying measurement to the information processing and behaviors that fostered learning. Lyman C. Hunt's (1957) test analysis of the Davis Reading Comprehension Tests revealed that the vocabulary questions did contribute to comprehension, therefore promoting the belief that vocabulary and word study needed to be studied to strengthen comprehension instruction.

   By the 1960s, the launch of the Russian spacecraft Sputnik caused more attention and financing to be funneled to mathematics and science education in U.S. schools, however reading continued evolving, most notably from a linguistic and language experience perspective. Researchers were also discovering that as reading approaches were changing, the assessments and benchmarks were remaining stagnant. Alshan's (1964) test analysis of the 2nd edition of the Davis Reading Tests yielded small amounts of reliability on its comprehension questions.

   Throughout the 1960s, behavior tasks also became a primary focus for developing comprehension. Smith (1965) declared that the definition of reading was composed of a combination of comprehension sub skills (such as sequencing, predicting, drawing conclusions, etc.) coupled with decoding skills. Bruner (1966) encouraged that during

the reading readiness stage, comprehension instruction should "wait." Instead he recommended the development of conceptual and perceptual vocabulary during the reading readiness stage by implementing activities, such as picture discussions, that fostered thinking processes that would contribute to later comprehension development. Chall's (1967) results from the extensive research of literacy components on the First Grade Studies project promoted a combination of sight word activities, vocabulary tasks, and phonics skills to build a foundation for developing comprehension. Davis (1968), creator of the F. B. Davis Reading Tests, concluded from a test analysis of his questions that once the basic mechanics of reading are taught, instruction should focus on inferencing, prediction, sequencing, vocabulary instruction, and author's mood, tone, and purpose to fully develop comprehension. As numerous commercial and government reading programs and initiatives emerged, Bloom (1968) also encouraged the incorporation of behavioral task modifications to stimulate mastery learning within programmed instruction for all learners. This recommendation was reflected in the diversifying of activities and creation of reading programs whose purpose was to target learners from different demographics.

1970s-2000s Comprehension: From product to process. The 1970s began another transition in reading comprehension instruction that shifted from emphasizing the finished product of reading mastery to emphasis on the reading process that led to comprehension. More attention was given to reading strategies that could be applied with multiple styles of text and less on isolated comprehension skills that would generate a recall of events from the reading. Research began to study the cognitive processing through the use of constructive means. Instruction also concentrated on accessing the

learner's prior knowledge and active use of working memory to build comprehension. Reading programs that fostered activities that centered on cognitive development continued throughout the remainder of the twentieth century.

Ransom (1974) recommended a "Spiraling Reading Curriculum" that included a spiraling taxonomy of reading skills that were taught with activities that would develop students'' listening, speaking, reading, and writing. Wittrock (1974) promoted what was referred to as Generative Processes. This involved using semantic clues to trigger prior knowledge and information in one's working memory to produce constructive meaning. Wittrock believed that individual constructive meaning was a measure of a reader's level of comprehension. Wittrock, Marks, and Doctorow (1978) found that the use of simple sight words, paragraph subtitles, and written summarization of each paragraph after reading was an example of the use of generative processes. These generative processes were found to activate meaning construction in middle school readers, which resulted in increased comprehension.

The 1980s extended its research of cognitive processes to an emphasis on metacognition, or the flexibility of a reader to adapt and incorporate a particular strategy to build meaning. As studies began examining the constructive processes, there was a narrow focus on the use of working memory to recall information. Oakhill's (1982) study of seven and eight year old readers yielded definitive outcomes. Oakhill revealed that after listening to stories, the students that were considered to be more skilled comprehenders used their working memory of sentences from the story to construct meaning for comprehension of the study.

Studies also began to recognize the impact that test language and author's purpose had on comprehension. In a comparative study of Polish readers and English readers, Danks and Kurcz (1984) discovered that when between-syntactic, semantic, and factual information was violated within text, that English readers used a diffused strategy of recalling the gist of a text to gain a broad understanding its context, while Polish readers relied primarily on prefixes and suffixes for meaning and understanding.

Throughout the 1990s, research and instruction continued to expand its cognitive and metacognitive focus to the learner's schemata, or prior knowledge, and its influence on comprehension. Instruction began to focus on the reader being able to read for understanding and connection to the text instead of mastery. The learner now became an additional source for understanding. Reading comprehension was viewed broadly as a generative process similar to writing in which readers built relations among parts of the texts, and between the texts and what they know, believe, and experience. Teachers also became facilitators responsible for fostering cognitive and metacognitive processes instead of commanders of strict and direct instruction.

Dole et al. (1991) considered a cognitive comprehension curriculum to be one that developed strategies for determining importance, predicting, inferring, sequencing, generating questions, and self-monitor comprehension, also known as metacognition. Fielding and Pearson (1994) recommended that an effective comprehension program was one that: (1) allowed students large amounts of time for reading, (2) incorporated peer and collaborative learning, and (3) allowed student discussions of texts with peers and with teachers. Comprehension-building activities began involving for student-centered tasks and engagement that would encourage more heterogeneous interpretations of texts

that were rooted in student background and prior knowledge. Crain-Thorenson's (1996) assessment of kindergartners and second grader's listening and comprehension revealed that phonemic confusion, rhyme, and alliteration did not affect their ability to recall the gist of a text that was read to them.

 Early 21st century comprehension: Process integration. The twenty-first century witnessed a natural metamorphosis that led to process integration. Researchers began to discover that instruction began integrating constructive, cognitive, and metacognitive processes with programs and interventions to be able to successfully develop reading comprehension. According to Mudzielwana (2013), teachers should organize their comprehension instruction by: (1) examining texts for rigor, level of questioning and vocabulary; (2) teach learners to set a purpose for reading, provide questions and connections to motivate learners, pre-teach key vocabulary concepts, relate texts to learners' lives; (3) deepen learners' understanding by modeling text reading; (4) provide multiple opportunities for learners to read and interact with text; and (5) allow for reflection on learners' responses to instruction to plan for deeper teaching opportunities.

 Educators have integrated processes into a variety of instructional approaches to stimulate learning and increase comprehension. Rubman and Waters (2000) found that third graders and sixth graders that constructed storyboards after reading texts were able to orally comprehend with more detail and score higher on recall tests than students who did not construct storyboards. Rapp and van den Broek (2005) encouraged an integrated approach, known as Dynamic Text Comprehension (DTC). With DTC, multiple theories for each component of comprehension were blended, and as the ongoing reading process

occurred, concepts during reading were activated as needed to integrate reader's background and text features to build understanding.

Student performance of specific literacy components were also being used to predict reading comprehension abilities to prevent struggling during reading development. Johnston, Barnes, and Desroschers (2008) stated that components, such as decoding, inferencing, and listening comprehension serve as predictors of text comprehension. Poor performance in these areas can denote struggles w/text comprehension. Scull (2010) observed that the integration of decoding and comprehension within the lessons of sixteen Reading Recovery teachers fostered a collaborative role between student and teacher to guide students to combine thought processes to enhance understanding and interpret meaning.

In the wake of technology integration, educators and researchers have begun to study the best comprehension practices that are needed to assist readers in the comprehension of texts from a variety of mediums that exist in cyberspace as well as in print. Woolley (2010) observed reading classrooms and recommended that successful comprehenders can integrate visual interpretations, or the use of images and visualizing of a story, with verbal techniques, or discussion that is based on text recall and prior knowledge. Coiro (2011) revealed through observations of literacy lessons taught using websites, that the implementation of a modeling/guided practice/reflection lesson design can assist students in the transferring of cognitive metacognitive processes used during think-alouds in written texts to online sources found on electronic devices and the world wide web. Reading programs and instructional frameworks have begun to include

technology components to increase opportunities for building comprehension between printed text and electronic sources.

Factors That Influence Comprehension Achievement

     Teacher beliefs and preparation. School climate and the perceptions that teachers and administrators have of students can impact the amount of academic progress. A number of teachers in poor-urban schools embody the belief that student underachievement is a result of circumstance outside the realm of educational control (e.g., lack of parental support, teen pregnancy, lack of technology, lack of funds, economic struggles of the home, school, and/or local community, lack of student ability) (Belfiore, et al., 2005). The reality is that children's literacy and language abilities cannot be determined by their economic status (Lazar, 2007). As the need for teachers and administrators continue to grow in schools as a result of teacher attrition and working conditions, educators must learn to look beyond any obstacles that students encounter because of their environment. Establishing and preserving a connection to urban students and their families requires far beyond the implementation of pedagogical techniques (Corbett, 2010). Lazar (2007) reports that pre-service teachers who took diversity-oriented teacher education courses and had positive field experiences in urban schools believed in children's literacy abilities and expressed more interest in teaching in urban schools. Consequently, the field prioritizes the perspective of teacher candidates who are uncomfortable with urban settings and diverse learners. Drawing from the experiences from familiar pre-service teachers has the power to contribute to a support system toward teacher candidates who are better prepared for the reality of working in urban settings, along with suburbs that are becoming more diverse (Hill, 2012). Han's (2010) survey of

teachers' perceptions of sociocultural influence on the social competence of kindergarteners show that White American teachers believe multicultural education promotes color-blind teaching, and that they possess varying degrees of awareness about the role of cultural differences in social competence ranging from a superficial understanding to acceptance. These same teachers also report varying degrees of cultural knowledge about different ethnic cultures, and most admit that information regarding culture is obtained from professional development. The study was limited to a small number of teachers, and no feedback was requested from teachers from other cultures to compare the amount of cultural knowledge and understanding. As teachers plan for individualized instruction that targets specific strategies, they should also be aware of environmental factors within the classroom that influence social and academic perceptions of students. Catsambis et al. (2012) finds that in addition to an early childhood program that places more girls in high ability groups than boys, they discover an overrepresentation of African-American and Hispanic students in the low reading groups, with the teachers rating these students as having low reading skills and less positive learning behaviors. As the culture is established within a classroom, teachers also have to be conscious of the cultural interactions and expectations outside of the classroom. In a study comparing urban and rural reading teachers, Ortlieb and Cheek (2008) find that, unlike rural reading teachers, urban reading teachers directly communicate with parents through conferences, phone calls, and notes; serve as the primary disciplinarian instead of the principal, incorporate individualized learning opportunities to assist strugglers; and often repeat reading lessons due to high student mobility.

In a truly balanced literacy program, *how* you teach is just as important as *what* you teach (Iaquinta, 2006). Balanced literacy has been widely accepted as a necessary framework in language arts instruction, however some teachers hold the belief that some components garner more support and attention than others. A study by Bingham and Hall-Kenyon (2013) reveals that 95% of teachers endorse a skills-based philosophy rooted in a balanced theoretical orientation regarding how children develop reading skills and how reading should be taught. Findings also reveal that kindergarten, first, and second grade teachers suggest that phonological awareness, concepts of print and the alphabetic principle skills are more important, while third to sixth-grade teachers see comprehension skills as more important. These variations in balanced literacy are a reflection of teachers' differing levels of support and their commitment to meeting the needs of their learners.

Schools have begun incorporating additional instructional support and professional development to equip teachers with strategies to reduce the number of obstacles that readers may encounter as a consequence for being disconnected to the literacy materials provided by publishers. Cooter (2000) suggests that the true benchmark for expertise in teaching is enabling urban children to continue to become more literate than ever before and at greater levels of proficiency. Literacy extends beyond the language arts lesson, and teachers from all subject areas have discovered a need to be properly equipped with an arsenal of literacy-based strategies to integrate within lessons that can improve literacy development and foster a deeper understanding of content. A closer examination of some literacy programs reveals a trend of implementing teacher education workshops and meetings about specific literacy practices before educating the

student. The continuous professional development for teachers and strategies for urban

literacy coaches are expected to empower teachers with the ability to stay abreast of the

constantly changing trends in literacy development that can improve their students'

acquisition of reading skills (Blachowicz et al., 2010). According to Kennedy and Shiel

(2010), a multifaceted, collaborative professional development intervention that uses a

range of strategies, tools, and methodologies and raises literacy standards can offer

teachers greater instructional self-efficacy and deeper knowledge about how to

implement a research-based, balanced literacy framework while also responding to the

needs of individual students and small groups. To discern the appropriate path for their

students, teachers must be knowledgeable about language and literacy issues, be adept at

seeking and critically evaluating information, and be able to relate these understanding to

their daily working knowledge of their students (Heydon et al., 2005). Collaboration

with teachers consistently, offering feedback, and debriefing with teachers about

assessments in a timely manner can foster modifications needed to address strugglers

(Walker-Dalhouse et al., 2010).

   Gender differences in reading development. As educators develop new

approaches to reading and amend current approaches to assist twenty-first century

learners, outcomes in past literacy programs have also highlighted noticeable differences

in reading development between males and females that have caused researchers to

further examine the origins of yet another uncompromising factor that promotes

individualized instruction. The National Assessment of Educational Progress (NAEP)

data reports a significant gender gap in reading achievement that consistently favors girls

across fourth, eighth, and twelfth grades between 1992 and 2003. The report continues to

recommend that only by further disaggregation of data by gender within schools and districts can there be a closer look at the problem in a meaningful way (Klecker, 2006). The learning differences between girls and boys extend across the globe throughout a variety of languages and instructional techniques. Significantly more boys can be found at the lower end (5th quartile) whereas girls are more frequently at the higher end (95th quartile) (Lundberg et al., 2012, Prado & Plourde, 2011). The United States and other countries that had females outscoring males between 30 and 50 points on standardized reading tests also had greater within-school gender differences that were related to higher academic pressure, more conducive student behavior, less conducive teacher behavior, a poor student-teacher relationship, and a less positive sense of belonging to school (Ma, 2008). By 2009 it was discovered that the bottom 5 percent of boys in reading skills scored 50 points lower than the bottom 5 percent of girls (Stoet & Geary, 2013).

Girls are recognized as employing cognitive strategies to make reading text more comprehensible and indulge in more leisure reading than boys as early as the primary years of schooling (Griva et al., 2012). Catsambis et al. (2012) find that although an equal percentage of girls and boys are placed in average groups, only 31% of boys are found in high reading groups, compared to 39.4% of girls. The areas of gender development that impact reading development are perceived by sociocognitive theorists to embody similar elements that support their beliefs. According to Bandura and Bussey (1999), the gender conceptions and role behavior are the products of a broad network of social influences operating both familially and in the many societal systems encountered in everyday life. They also promote the belief that socio-cognitively, gender development is promoted by modeling, enactive experience, direct tuition, and the way in

which the information conveyed is cognitively processed. By age six children are expected to be aware of their gender and begin to behave in expected gender roles. Gender expectation, also known as gender schema, is a result of interactions with the environment. Once the schema is developed, children are expected to behave in ways consistent with traditional gender roles (Bussey & Bandura, 1999). Many of the activities performed are a result of gender labeling and preferences that are fostered by parental and teacher influence.

Although statistics within the last forty years have established specific amounts of achievement differences, assessment instruments utilized in the 20th century that first reported the growing gap between male and female reading achievement have come under criticism for its questioning level of accuracy and validity. The more pronounced achievement gap in favor of girls for assessments conducted in the early 1970s and early 1990s are suspected to show a growing gap as a result of the variation in the scaling of the reading scores (Lietz, 2006). The lack of uniformity amongst reading scales has caused researchers to examine the results of assessments that report disproportionate amounts of reading difficulties between males and females. After a comparative analysis of students with a history of reading difficulties with students that did not have a history of reading difficulties, Hawke et al. (2009) discovered there was little difference between the average scores of males and females, however there was a significantly greater difference between the oral reading performance of males and females when assessing for reading difficulties.

Research regarding the effects of gender differences on reading achievement has yielded mixed outcomes as a result of the variety of assessments used and the specific

literacy skills examined. Although a number of theoretical explanations have been

proposed to account for gender differences in phonological awareness, auditory

processing, behavior, neurology, variability in cognitive ability, scores, and moderation,

there does not appear that any single explanation wholly accounts for gender differences

in reading ability, and that gender, as a variable, is not a strong or consistent predictor of

reading success (Limbrick et al., 2011). In recent years, researchers have closely

examined specific components of literacy development recommended by the National

Reading Panel for differences in acquisition, growth, and mastery. A closer study of the

phonological awareness of six year olds (Lundberg et. al, 2012) finds more boys with

very low initial scores and more girls with the top scores and more improvement between

testing periods. Logan and Johnston (2010) suggest the use of synthetic phonics for boys

because it is less reliant on skills acquired before school, there are different cognitive

skills being utilized compared to other approaches, and because there is a strong

emphasis on phonics rules, which is more attuned to boys' natural learning styles. Wang

et al. (2011) find that second grade girls have a better oral reading performance than boys

in reading achievement; however there are no statistically significant differences in the

amount of growth in reading rate between girls and boys. When explicit instruction is

implemented, growth occurs for both males and females. A study of explicit literacy

instruction by Prado and Plourde (2011) yield minimal difference in comprehension

growth between fourth grade girls and fourth grade boys, in spite of the fact that the girls'

scores began and remained higher than the boys. A measure of the phonemic awareness

and oral reading by Below et al. (2010) for indicators of basic early literacy skills reveal

small gender differences in kindergarten in the areas of initial sound, fluency, letter

identification, and nonsense word fluency; however girls scored significantly better in phoneme segmentation until first grade when both genders began making similar gains. The study also reveals that there are no significant differences in oral reading between first and third grades, however by fourth grade girls begin scoring significantly higher than boys. By fifth grade there are no significant differences in performance. Although trends are discovered, little research secures the occurrence of a consistent gap between genders. Studies reveal that although girls are statistically scoring higher in reading initially upon entering school, growth still occurs for both genders, and the gap fluctuates throughout early literacy development according to the development of literacy subskills.

There have been studies that have attempted to correlate gender literacy gaps, specifically for boys, to influential factors that can affect one's lifetime approach to literacy and amount of achievement. An analysis of fifth and sixth-grade reading preferences found that the higher a parents' education, the greater the child's attitude towards reading, while the lower the parents' occupational background, the more reading difficulties the child encountered (Griva et al., 2012). Studies also link the existing gender differences in literacy development to individual motivation, attitudes, and preferences as children progress through literacy education with little focus on individual learners' backgrounds and amount of prior knowledge. Much of the research conducted has yielded varying results in favor of both males and females being more motivated than their counterparts. Although girls between the ages of eight to twelve show higher levels of reading enjoyment and achievement than boys of the same age, there are minimal differences in self-efficacy by gender (Pajares, 2002; Smith et al., 2012). McGeown et al. (2012) finds no sex differences in reading skill and motivation for girls and boys aged

eight to eleven, however girls had significantly higher intrinsic reading motivation in the areas of reading efficacy and involvement. They continued to find that responses to motivational differences, which are better explained by gender identity, reveal that girls and boys identify with their stereotypical gender traits. By grades three to five, reading ability and interest has been found to be associated with self-perception. Boys' competency beliefs in reading and intrinsic motivation are more closely associated with their level of reading skill compared with girls (Logan & Johnston, 2009; Logan & Medford, 2011). Third-grade girls and boys who are average readers are equally self-confident about themselves as readers, however boys tend to value reading less (Marinak & Gambrell, 2010). Research correlating reading growth and success to the learner's internal factors and general characteristics of self-perception, motivation, and interest that are routinely observed in a specific gender yields mixed results that require further exploration. Research is limited regarding which literacy approaches and programs can result in varying levels of self-efficacy, motivation, and achievement according to gender.

Balanced Literacy

Although reading has been taught in schools for decades, the acknowledgement of a need to study how reading develops began as early as the 1950s. Over the last sixty years, research in the development process has shifted its focus from the mental process of the learner to the outcomes of instructional practices on the learner. Undoubtedly, the changing beliefs in reading development have produced a host of literacy approaches reflective of that era in reading research. Reading is invariably physiological, psychological, and sociological, suggesting the need for an integrated orientation (Alvermann et al., 2013). In 1967 the First-Grade Studies project's report that students

learn to read by a variety of materials, methods, and combination of approaches provided the opportunity for more complex learning frameworks that emphasized multiple methods for stimulating learners. By 1996, a balanced literacy approach emerged as one compromise to research that debated over the use of a pure phonics approach or a whole language approach to reading. According to Honig (1996), a balanced approach is one which combines the language and literature-rich activities associated with whole language with explicit teaching of the skills needed to decode words for all children. Since the No Child Left Behind Act of 2001, it has become an approach that has gained acceptance, and a milieu of framework variations are commonly used in schools in hopes of targeting a wide range of readers within one classroom. Stoicheva (1999) suggests that curriculum alignment is needed to link instructional content to clearly defined, research-based standards, and to leave creative space for teachers to search and find balance in their own classrooms. Studies focusing on the use of balanced literacy have become limited within the last decade, however institutions continue to tailor the literacy components into a balanced approach that they believe will meet the needs of their students.

Effects of a balanced literacy framework. Each element in a balanced approach should influence the other so that students can be immersed in the practice of reading (Rasinski & Padak, 2004). According to Rasinski and Padak (2004),

> "We call for literacy instruction to become comprehensive in its approach and implementation. To be comprehensive, literacy needs to be integrated within the literacy curriculum itself: literacy needs to be integrated within all facets of the classroom and school, literacy needs to be integrated with the home, and literacy needs to be integrated into the life of the community itself."

Balanced literacy components are believed to incorporate strategies that foster multiple levels of student engagement at all levels of literary competence. Integrating authentic reading and writing activities with explicit skills instruction can foster student engagement and develop literacy skills (Wharton-McDonald et al., 1997; Bitter et al., 2009). Balancing phonics-based approaches and whole-language approaches allows more opportunities for students of varying achievement levels to be met at their instructional level through the increased levels of student engagement. Wharton-McDonald et al. (1998) observed that the highest achieving first grade classrooms provide many opportunities for engagement in authentic reading and writing, cluster multiple goals into a single lesson, incorporate scaffolding strategies, foster self-regulation through literacy behaviors and classroom routines, possess equally high expectations for all levels of readers, and establish a clear purpose for literacy practices for all students. Balanced literacy programs can be effective in any grade with the careful organization of its complex combination of teacher-initiated and student-initiated activities. As students continue to take more responsibility for their learning, teachers transform themselves into facilitators rather than controllers of the curriculum. Ivey et al. (2000) discovered that the age-appropriate concoction of free reading activities, teacher selected texts, impromptu mini-lessons, and explicit instruction within a structured amount of time in the second grade and the sixth grade can customize a balance of literacy that strengthens the fusion of multiple approaches.

Balanced literacy approaches are often differentiated by teachers and interventionists to meet the needs of their struggling readers. Donat (2006) suggests that it seems reasonable to conclude that these approaches, each demonstrated as successful

for some children, may differentially impact students with different needs. A study of balanced literacy in an urban district by Frey et al. (2005) indicates that teacher-directed and student-centered instructional activities are being implemented and that independent student work occurs with higher-frequency than did teacher-directed activities. A more individualized combination of phonics and whole-language activities may be prescribed to target the needs of students that are either stagnant or struggling as readers. Balanced classrooms reveal both forms of instruction, teaching that is both complicated and coherent, as well as tailored to the needs of individual students (Pressley et al., 2002; Wharton-McDonald et al., 1998). In a study of the use of balanced literacy, literacy acceleration, and responsive teaching on struggling second graders, Duffy (2001) suggests that the use of multiple activities to teach balanced instruction addresses the needs of learners at individual levels, particularly low-performing students, in the areas of word identification, fluency, reading comprehension, and writing skills.

Basal readers. With the emergence of balanced literacy comes the question of how basal readers fit into the combination of multiple approaches. Materials and activities from basal series have become a foundation for the framework of balanced literacy instruction in elementary classrooms. Since 1990, the state of Texas as devoted billions of dollars to literacy education in elementary classrooms. Large sums of state funds have been devoted to the purchase of state-approved reading textbooks which are provided to all elementary teachers (Stephens, 2007). It is considered to be an eclectic approach to reading that combines instruction in phonics with works of literature. Consistent with meaning emphasis approaches, basal approaches usually stress meaning, use of context for intelligent guessing, and whole word recognition as the basis for

instruction (Ashworth, 1999). Pilonieta's (2010) analysis of first grade, third grade, and fifth grade basal reader series from five publishers discovers that two-thirds of the reading programs' instructional content was research-based strategies, one-third was non-research-based strategies, and approximately 15% of all strategies was dedicated to answering teachers' questions.

The inundation of pre-packaged programs that promote the use of basal readers has caused experts to closely examine the effectiveness of uniform texts on the authentic reader. Although basal reading programs continue to be used in schools, studies have reported results suggesting that student achievement is higher with alternative approaches. In a comparison of the Four Blocks Framework and a Basal Reader Approach, Popplewell and Doty (2001) found that second graders that participated in the Four Blocks method of interacting with multiple texts in a variety of activities scored significantly higher in retelling than second graders that participated in a basal approach that used one textbook that was accompanied by worksheets. Rather than reveal evidence of the individual outcomes and growth for individual readers, researchers have studied how particular reading programs have affected the general performance of subcategories of students at the conclusion of instruction. Studies that reveal higher achievement for students in alternative approaches are limited to the comparison of specific basal programs with alternative approaches that are applicable with a variety of materials.

Choosing a reading basal is now considered to be equivalent to selecting a reading curriculum. By including comprehension strategy instruction, publishers can offer students the tools to read, understand, and interact with text (Pilonieta, 2010). However, when teachers are required to use a specific program, it remains necessary to critically

reflect upon its relationship to comprehensive understandings of balanced literacy in order to address its instructional limitations. Although basal readers have been studied as a reading program or reading curriculum for its effectiveness in reading development, little focus has been on the effects of the specific literacy strategies that teachers incorporate when using the basal reader as one tool within the balanced literacy approach. Skillful teachers use their knowledge of literacy development and literacy processes to decide where to go next, independently of the commercial materials they use; when to intervene and when not to; when to draw children's attention to which features of text; and how to model and explain strategies in ways that children can make their own (Hibbert & Iannacci, 2005; Iaquinta, 2006).

Although some basal readers are developed using a balanced literacy framework, there have been differences in the effects that it has had on the achievement of learners at varying stages of reading development. Donat's (2006) study of the effects of Reading Their Way, a basal-reader based program that combines the use of phonics and whole language in ninety-minute blocks of Language Arts direct instruction, reveal that after one year of instruction, 68% of the lowest-performing kindergarteners and 63% of the lowest-performing first graders met or exceeded the expected reading benchmark. Basal readers have shown improvement in students that are academically at-risk but little research reveal an impact on the achievement of students that are already meeting reading expectations. Ashworth (1999) discovered that second-graders who were taught using the Direct Instruction method had achievement scores that were 5-13% higher than second graders who were taught using a Basal Reading program. In the upper elementary grades, when instructional materials are commonly linked to state standardized test

preparation, a content analysis (Stephens, 2007) of eight second through fifth grade basal

readers reveal that overall informational text occurred 52% of the time, narrative 34% of

the time, and other genres 14% of the time. The basal texts exposed students to a variety

of genres of texts, however it struggled to align with the inconsistent proportions of each

genre that is tested annually on state-mandated tests.

Research Studies on Self-Contained and Departmentalized Instruction

      Self-Contained Instruction. The self-contained classroom organization is

predicated on the assumption that an elementary school teacher is a Jack (or Jill)-of-all-

trades who is equally strong in all areas of the elementary curriculum (Chan & Jarman,

2004). As constructivism is encouraged to be implemented throughout instructional

methods, Hackmann (2004) argues that constructivist practices may be implemented

more easily in self-contained elementary classrooms or through the interdisciplinary

teaming approach commonly used in middle schools. Proponents of self-contained

instruction believe that one teacher delivering the curriculum to one group of students all

day builds a teacher-student relationship in which the teacher benefits from knowing a

student's strengths and weaknesses. Supporters also believe that it can create a sense of

community in a familiar environment for students. Advocates for a self-contained

organizational pattern argue that it promotes instruction which is child-centered rather

than subject-centered (McGrath & Rust, 2002). The Schools and Staffing Survey (SASS)

revealed evidence of the amount of time devoted to the core curriculum in self-contained

instruction:

> Findings from this report show that combined teacher instructional
> hours in first through fourth-grade English, mathematics, social
> studies, and science increased between the 1987-88 and 2003-04
> school years. This was due to individual increases in English
> and mathematics instruction. (Morton & Dalton, 2007, p.1).

Now that base teachers must plan their lessons around the schedules of pull-out programs, their responsibilities are compounded (Canady, 1988). This creates a time constraint and a lack of flexibility in instructional activities for teachers, which places the level of student mastery of a concept to be at risk. The structure of a school day is arranged according to a school's beliefs and the needs of its student population. All too often, teachers are forced to employ creative methods to address the needs of all of the diverse levels of learners within a self-contained classroom.

Departmentalized instruction. Departmentalization has become a growing practice in the restructuring of elementary schools. A historical study of content integration within classrooms by Cooke and Whitmore (1934) reports that educational experts and psychologists recommend that reading and language be combined in a departmentalized setting as they observed the most frequently taught subject in school to be reading. A number of elementary schools have adopted block scheduling to reduce instructional fragmentation, improve discipline, and provide regularly scheduled opportunity for learning enrichment (Lewis, 1999). A growing number of school district leaders are transitioning to a variation of a block schedule to maximize instruction and increase flexibility during lessons. Since 1959, the concept of block instruction has evolved into a variation of styles that are based on the idea of having larger blocks of time to allow for a more flexible and productive classroom environment, along with more opportunities for using varied and interactive teaching methods (Irmsher, 1996).

Classroom practice and performance. Findings suggest positive perceptions of block scheduling from experienced teachers, but little positive feedback is reported from beginning teachers. According to Santamaria and Thousand (2004), co-teaching offers a means for educators to move from feelings of isolation and alienation to feelings of community and collaboration, as teaching in isolation is replaced with teaching in partnerships. The existences of instructional collaboration amongst departmentalized elementary teachers are often established by themselves rather than administrative initiation (Hay & Kean, 2011). Conversely, Gullatt (2006) reports that teachers lack the professional development to accommodate students on a block schedule and that it does not benefit advanced level students. First year teachers on a block schedule feel unprepared by their teacher preparation programs for block schedule instruction and express issues adjusting instruction to extended class period formats, transitioning learning activities, and assessing student progress (Zepeda & Mayers, 2001).

Administrators assert that teachers have the opportunity to experiment with new teaching strategies and that student discipline improved (Zepeda & Mayer, 2006). Departmentalization is believed to expose teachers to alternative instructional approaches, whereas studies reveal inconsistent outcomes of its implementation. Jenkins et al. (2002) found that an analysis of survey responses regarding the instructional practices of traditional-teachers to block teachers reveal that block teachers have slightly higher levels of the use of lecture/direct instruction, small groups, and cooperative learning; however there are significantly higher uses of coaching/peer tutoring in block classrooms than traditional schedule classrooms. Del Viscio and Muffs (2007) discover that departmentalization in grades three through five result in an increase of instructional

time and continuity in instruction, a bond developed amongst teachers, and the use of standardized tests as diagnostic and assessment tools. Inconsistent findings regarding departmentalization in differing settings affirm the need for further investigation regarding the most effective methods of departmentalization.

School scheduling also has varying results on the attitudes and behaviors of students that are being directly affected. Research suggests that the age of students within self-contained and departmentalized environments can impact its effect on student attitudes towards school and their relationships with teachers. The "triangulated learning" program, a team approach to instruction that gives teachers the time and techniques to meet higher standards without stifling young children's desire to play and explore within multi-age classrooms, reports that student test scores are consistently higher than those of traditional students, their behavior is better, and parent enthusiasm is very high (Butzin, 2004). Results from a survey of departmentalized third, fourth, and fifth grade classrooms suggest that students who are departmentalized have lower levels of respect and trust for their teachers than students who are in self-contained classrooms (Chang, Munoz, and Koshewa, 2008). High school students within traditionally scheduled mathematics classes are found to experience decreases in attitude towards learning while students learning within a block scheduled mathematics class have more stable attitudes towards mathematics (Biesinger et al., 2008).

According to data collected by Rettig and Canady (2003), schools that have operated on the block schedule for five or more years have reported that school management problems have reduced because teachers make better use of technology and engage students in more active learning strategies. The positive changes in the climate of

schools on a block schedule stem in part from an increased ability to meet the needs of individual students (Queen & Gaskey, 1997). Research reports results supporting self-contained classrooms for students with behavioral or academic obstacles, however results are mixed in regards to the impact that departmentalized classrooms have on students that are average and high achievers, or without behavioral issues. Implementing block instruction can reduce the number of minor disciplinary infractions, increase student achievement and allow teachers more opportunities to incorporate multiple activities such as lecture, cooperative learning and review within one class period (Evans et al. 2002). Those students with pronounced behavior disorders benefit by experiencing academic gains within self-contained classrooms in elementary, however the amount of problem behaviors increase by the time they enter the secondary grades (Lane et al., 2008). Students within a block schedule of instruction that experience a variety of teaching methods have an increase in positive student-teacher relationships (Veal & Flinders, 2001). Average and high achievers highly support block schedules and feel they have good teacher relationships, while lower achievers have the least support for block scheduling and believe they have the worst teacher relationships (Marchant & Paulson, 2001).

Scheduling of instruction on student achievement produced findings that consistently support self-contained instruction in the elementary grades academically. Intensive block schedules may be particularly helpful to at-risk students, reducing both failure and dropout rates (Rice et al., 2002). According to Mowen and Mowen (2004) block schedules give even disorganized students a fighting chance to keep abreast of assignments and projects. Fourth, fifth, and sixth graders transitioning from a self-

contained schedule to a departmentalized schedule reveal uniformity amongst classes in reading habits, but the departmentalized classroom environment is found to have less influence on the amount of reading done than in a self-contained situation (Lamme, 1976). The transitional year of a departmentalization program can affect reading achievement by increasing chances for stagnation or regression (Harris, 1996). McGrath and Rust (2002) observe that fifth and sixth grade students receiving self-contained instruction score higher in Language and Science than their departmentalized counterparts, however there are no differences in Reading, Mathematics and Social Studies. Students within a traditional self-contained schedule have been found to score higher on immediate post-tests in Science then students within a departmentalized block schedule, but overall there are no differences in the long term retention of strategies (Randler et al., 2006). Standardized test scores of third, fourth, and fifth grade students in block and self-contained classrooms reveal no significant differences in reading and mathematics achievement (Hall-Turner et al., 2001; Ponder, 2008; Yearwood, 2011). Recent research reports inconsistent evidence of a difference in standardized achievement and inconclusive evidence of a difference in the overall retention of content between self-contained and departmentalized classrooms, however determining the amount of growth that occurs within the two schedules and its effects on learners in lower elementary requires further study.

Summary of the Literature

Chapter 2 presented a review of the literature on: approaches to comprehension instruction, factors that influence comprehension instruction, balanced literacy, basal readers, and research studies on self-contained and departmentalized instruction. The

review presented a gap in the literature that justified a need for this study. Previous studies have been conducted on self-contained and departmentalized instruction, however these studies mainly focused on students in third grade and higher. Although these classroom settings have been acknowledged in literature (Chang, Munoz, & Koshewa, 2008), research could not be found regarding self-contained and departmentalization in primary classrooms. To date, no rigorous research has been conducted on the effects in the primary grades of kindergarten through second grade. One study by Olson (2010) focused on the effects of gender-inclusive departmentalized classrooms on mathematics and reading achievement in fourth and fifth grade classrooms. This particular study concentrated primarily on the departmentalized setting without comparing it to a traditional self-contained classroom. Two of the studies (Patton, 2003; Williams, 2009) studied self-contained and departmentalized settings, however each focused on the mathematics achievement of fifth graders on state-mandated tests. A master thesis by Wilcox (1964) investigated the effects of departmentalized and self-contained instruction in fourth and fifth grade classrooms in which student achievement was determined by test scores at the end of the year. Hampton (2007) and Kent (2010) focused on fourth grade student achievement as well in dissertation studies, and each used state-mandated exams to examine reading, as well as mathematics and science scores.

There has been no evidence of research conducted on the effects of self-contained and departmentalized reading instruction in second grade. A research study by Ponder (2008) examined mathematics and science scores on state-mandated tests; however the participants were students in third and fourth grade classrooms. This study is similar in experimental design in which the departmentalized teachers are teaching two subjects to

two classes. Although this study provides some insight into the effects on younger students, it is limited to the mathematics and science outcomes of its participants. A study by Robertson (2012) investigated elementary teacher and administrator perceptions regarding the transition from self-contained and departmentalization. This study helps to fill the gap in literature regarding the teacher perception and beliefs that is similar to research question three that seeks teacher feedback. Although quantitative and qualitative data was collected, this research study analyzed feedback from teachers from grades 1 to 5 and administrators, instead of limiting data collection to teachers that were directly participating in a classroom transition.

Finally, there has not been any research conducted regarding the effects of the balanced literacy approach in self-contained and departmentalized classrooms in second grade. The elementary studies have ranged from third grade to fifth grade, and the participants have ranged from 1 to 202 elementary schools within the same school district. The proposed study will examine 148 students from self-contained and departmentalized second grade classrooms on one campus. This study will provide information about how these two classroom structures affects the comprehension levels of second graders that are receiving balanced literacy instruction within a diverse school environment.

Chapter III

Methodology

Introduction

The purpose of this chapter is to explain the methods used to complete an experimental study of the effects that self-contained and departmentalized classrooms had on the reading achievement of second graders that were taught using a balanced literacy program with basal readers. As previously mentioned, an elementary self-contained classroom, also known as traditional instruction, involves students remaining with one homeroom teacher all day for instruction in all academic subjects. An elementary departmentalized classroom, also known as block instruction, involves students receiving instruction in only a few designated academic subjects for a portion of the day, and then going to a different teacher to receive instruction in the remaining academic subjects. To explore the impact of social competence, academic competence, and teacher preparation, the experiences, perceptions, and opinions of the participating teachers will also be addressed and analyzed through an interview process.

The components of the methodology section will include: research design, participants, procedure, instrumentation, data collection, and data analysis.

Research Design

A quasi experimental method will be used to conduct an ex post facto study of data. Archival data from the 2011-2012 school year will be examined for the reading achievement of the second grade students on the Developmental Reading Assessment (DRA) to investigate the effects of self-contained and departmentalized instructional techniques. A pre-test/post-test design was used to compare the comprehension levels of

students in the self-contained classes with the comprehension levels of students in the departmentalized classes. A pre-test/post-test design was also used, along with a 2 x 3 measures design, to compare student comprehension levels from the first administration of the test to the last administration of the test within the gender subgroups to determine progress.

The teachers' experiences, perceptions, and opinions regarding the instructional techniques were gathered through interviews.   Interviews were conducted with self-contained teachers and departmentalized teachers separately to gather feedback about how their personal beliefs, training, and teaching strategies influenced their classroom environments within the varying teaching schedules. Each teacher was interviewed for approximately forty-five minutes with the same leading interview questions. The primary researcher served as the interviewer, and verbal responses were transcribed for comparative analysis.

Participants

This particular elementary campus in a school district in Texas had an enrollment of 780 students in grades pre-kindergarten through fourth grade. It had been identified as a Title I campus, and 78 percent of the students were considered economically disadvantaged. The student mobility rate as of the 2010-2011 school year was 36.5 percent. There was no bilingual program; however 24 percent of the students whose primary language spoken at home was not English were identified as Limited English Proficient (LEP).

There were seven second grade classes with an average class size of 24.7 students within each classroom with a total of 147 students enrolled. Four of the classrooms

participated in a departmentalized structure and the remaining three participated in a traditional self-contained structure. Classrooms that were departmentalized were pre-determined by the principal and served as the experimental group, while classrooms that were predetermined as self-contained served as the control group. Participants within each classroom were classified into subgroups according to gender.

Student placement within a classroom was predetermined by first grade teachers and finalized by administrators on the campus at the end of the previous school year. Students that were previously assessed by instructional support staff for gifted and talented education prior to second grade were clustered together into the same self-contained homeroom. Students that were previously identified as struggling in reading and mathematics by their first grade teachers were clustered together into the same homeroom. Strugglers were identified by their academic performance on first grade reading and math benchmarks, as well as their report card grades from the previous year. The remaining students were placed according to gender, classroom behavior, and academic performance in the additional five classrooms to create heterogeneous groups of students.

Students that were identified as Limited English Proficient (LEP) or Special Education were included in the sample because the same reading comprehension benchmark was administered to assess performance without modifications after receiving daily instructional modifications within classrooms. However, if there are significant differences in the groups as a result of LEP students it will be controlled.

Because this is an ex post facto study of archival data, the primary researcher will be included as one of the seven participating teachers. The second grade teachers all had

Bachelor's degrees. At the time of the study, one teacher had a post-baccalaureate degree in the field of education, while three of the teachers were completing graduate programs in education at local universities. All of the participating teachers also had work experience that ranged from two to twenty years. Four of the teachers were categorized by the Texas Education Agency as having one to five years of experience, while three of the teachers were categorized as having eleven to twenty years of experience. All seven of the participating teachers possessed standard Texas teaching certificates, six of the teachers were certified in Texas to teach students identified as Limited English Proficient (LEP), and four of the teachers were certified to accommodate students identified as Gifted and Talented (GT). Selection for teacher interviews was completed through stratified sampling. The involved teachers were categorized and chosen for interviews according to their years of teaching experience.

Procedure

Departmentalized classrooms shared daily schedules and lesson plans on a weekly basis. In the departmentalized setting, one teacher was responsible for teaching Language Arts to his/her homeroom in the morning and his/her partner teacher's homeroom in the afternoon, while the partner teacher followed an identical schedule for teaching Math and Science. Social Studies was taught by each teacher to his/her own homeroom.

Departmentalized literacy classrooms were designed to be print-rich environments. The walls consisted of word walls, alphabet lines, literacy workstations, grammar charts, genre listings, and anchor charts that were reflective of previously taught lessons and strategies. The reading classrooms were void of any graphic organizers, charts, and strategies that promoted mathematics and science concepts. Teachers were

expected to teach a balanced literacy lesson for 120 minutes before lunch to his/her homeroom, then teach the same lesson for 120 minutes after lunch to his/her partner teacher's homeroom.

Departmentalized reading teachers followed a scope and sequence of a basal series published by MacMillan/McGraw-Hill and adopted by the district for literacy instruction. The components of the basal series included: student reading textbooks, leveled readers, vocabulary word cards, and workbooks with phonics, grammar, spelling, and comprehension strategies that could be copied for student work. The teacher's manuals included lesson plans with weekly word lists that were based on Donald Bear's *Words Their Way*, and instructional techniques for LEP students and struggling readers. Lesson plans were written by one teacher and distributed electronically to each teacher responsible for teaching reading.

Materials and activities from the basal series were taught in a balanced literacy format for a total of 120 minutes. The balanced literacy block was based on Fountas and Pinnell's Guided Reading Program. Balanced literacy activities consisted of: shared reading, read aloud, small group lessons, independent work, and work stations. Writing was integrated throughout the balanced literacy block. Lessons began with the teacher facilitating a spelling mini-lesson with the entire class, which included word building, phonics instruction, and word reading. Shared reading and read aloud included classroom reading, think aloud, and discussion of text in the student textbooks. One fiction and one nonfiction text was read and discussed over the course of the week. The teacher used the story to model a strategy for practicing a literacy skill that was designated in the teacher's manual. The focus strategy was reflective of a second grade

objective listed on the Texas Education Agency's Texas Essential Knowledge and Skills (TEKS) expectations. The students would practice the skill for the week independently using the activity sheets provided by the basal series each day. During independent assignments, the teacher pulled three small groups daily and engaged in twenty minute lessons using the leveled readers provided by the basal series. The leveled readers were numbered from one to forty-four on the same number system used by Fountas and Pinnell's leveled readers. Students were grouped homogeneously according to reading benchmark results, and lessons were targeting the acquisition of reading skills according to the students' reading levels. Students who completed independent assignments early engaged in work station activities either individually or with a partner. The balanced literacy block concluded with writing instruction. One grammar skill that was pre-determined by the basal series was practiced on activity sheets, and then the teacher based interactive, shared, and independent writing activities on Lucy Calkin's Writer's Workshop. The scope and sequence for writing lessons were pre-determined by the district's Language Arts department.

Self-contained classrooms followed a traditional schedule and the teachers individually constructed their daily schedule. Lesson plans for all subjects were shared, and the students stayed with the same teacher for all academics. The Language Arts lesson plans for self-contained classrooms were identical to the lesson plans for the departmentalized classrooms, and the same basal readers and materials were used for instruction. The balanced literacy block was framed using Fountas and Pinnell's Guided Reading program. Writing instruction was also based on Lucy Calkin's Writer's

Workshop, however writing skills were integrated throughout all subjects during the instructional day.

The self-contained classrooms had walls that were covered with charts, graphs, and work stations that were reflective of all academic subjects. The materials for each subject were segregated and clustered in distinct areas of the room to create an organized sequence for instruction and engagement.

Instrumentation

Students were administered the Developmental Reading Assessment, First Edition (DRA), an individualized benchmark published by Pearson (Beaver, 1997). Each benchmark was used to determine a student's independent reading level. Each student was administered a beginning of the year benchmark in September, a middle of the year benchmark in January, and an end of year benchmark in May. If a student entered in between those testing months, he/she was administered the test to identify the current instructional reading level. The purpose of this study was to examine student's beginning benchmarks and ending benchmarks to determine reading comprehension levels.

DRA K-3 kits contained books that were leveled with numbers that ranged from 1 to 44. One book that was identified as emergent was labeled with the letter A. Books increased in difficulty as the levels increased. They were created to reflect cultural diversity, include strong female and male characters, and represent a range of text difficulty (Pearson, 2005). DRA was used for reading benchmarks because it was specifically designed for grades K-3 and was not used during daily instruction. Each book was accompanied with a test form that provided a teacher script and areas for recording student answers and scores. Teachers used all fictional texts to individually

test students for oral reading and comprehension in September, January, and May. The classroom reading teachers tested each student according to the directions on the assessment. The teachers read directly from the assessment script to prompt student feedback in five areas: (1) book preview, (2) oral retelling, (3) oral comprehension, (4) connection to schema, and (5) oral reading fluency rate.

During an assessment, teachers from both the experimental and control classrooms read a scripted preview of the story, and students were to use picture clues to predict the events of the text. Students being tested in books leveled A to 16 would read the text orally while the teacher made notations of words read correctly and incorrectly on the scripted test form. A student being tested in books leveled 18-44 would read the text silently. The student would then proceed to orally retell the story. Teachers would prompt the student with questions from the test form if he/she begins to struggle retelling the events. Teachers asked all students one inferencing question from the test form and recorded student responses. Students being tested on levels 18-44 were then asked to read one to three pages of the text orally while teachers made notation of words read correctly and incorrectly. Comprehension scores were calculated according to a rubric of four characteristics listed on the test form. Each characteristic was worth a particular point value. Points earned for each characteristic were totaled to calculate a student's comprehension level for the text being read. Oral reading was also determined according to the number of errors recorded below the text. The percentage scale was printed at the bottom of each test form. A student was benchmarked at a particular level if their comprehension score was a total of sixteen to twenty, and if their oral reading score ranged from 89% to 94%. Students that scored above twenty in comprehension and

above 94% orally continued to test in books that increased in difficulty until they reached an instructional range.

The district determined levels that were grade appropriate. The district considered instructional levels 18-28 to be the appropriate level for second grade. Students that read below level 18 were considered to be performing below expectations, and any student reading above level 28 were considered to be performing above expectations. Students could be tested until they reached level 44, but were not benchmarked above that level because it was the highest level in the K-3 kit.

As a supplement to the current investigation, an interview will be constructed by the researcher. The interview questions will be based on informal observations, feedback, and lesson planning with the involved teachers. Interview questions will explore teachers' feedback regarding their teacher preparation for the differing classroom structures, their attitudes towards the classroom structures, and how these factors may have influenced academic performance.

Instrument Reliability

A reliability and consistency study of the DRA was conducted to examine the inter-rater agreement of teachers using the assessment and its internal consistency. A group of 306 students from kindergarten through third grade were assessed and rated. Three teachers previously trained in DRA assessment were assigned to each student for review. The assumption was that there would be an agreement of student assessment amongst all three raters. The inter-rater reliability was calculated using Rasch rating scale analysis. The reliability among the three raters was 0.74 across students.

Cronbach's alpha was employed to determine the internal consistency of the items and text. The five rating scale items (accuracy, comprehension, stage, phrasing, and reading rate) revealed a strong internal consistency with a Cronbach's Alpha of 0.98, suggesting that the DRA is a reliable assessment (Williams, 1999).

The reliability of the interview questions will be examined according to its consistency of categories and questions posed to the participants. Also, for reliability to be calculated, it is mandatory to the qualitative researchers to document their procedure and to reveal that categories have been used consistently. This to say, it is possible for qualitative research to be properly reliable (Bapir, 2012). Questions will be pre-determined prior to the interview, and be reflective of the categories related to this study (teacher preparation for the differing classroom structures, teacher attitudes towards the classroom structures, and factors influencing social and academic performance). The same questions will be asked in each of the four individual interviews to increase consistency.

Instrument Validity

To establish the construct validity of the DRA, individual scores were compared to performance on to the Iowa Test of Basic Sub skills in the following areas: Vocabulary, Reading Comprehension, and Total Reading. Populations of urban/suburban second graders' DRA scores were compared at the end of the school year to the scores of beginning third graders on the Iowa Test of Basic Skills. All correlations were significant at the 0.01 level using Spearman's Rho rank order correlation. The highest correlation was with Total Reading with a $r = 0.71$, $p < .01$ (Williams, 1999).

The Developmental Reading Assessment, First Edition (DRA) was used to determine the effectiveness of departmentalized and self-contained instruction. This method is valid because it assesses individual students' comprehension. Students' reading comprehension levels will be a tool to determine the extent of academic progress.

Data Collection

This particular study examined archival data that was previously collected by the district to monitor student progress and determine student promotion and retention status. The data was collected during the 2011-2012 school year. Permission will be obtained from the school district's department of instruction to access and analyze data from campus level data spreadsheets. Permission will also be obtained from the University of Houston Institutional Review Board in the Center for the Protection of Human Subjects. Student identities were concealed in the collection of data. Student gender, class organizational structure (departmentalized and self-contained), and DRA scores is the only information that will be included. A random code will be used to record data for analysis.

Interviews of involved teachers during the 2011-2012 school year will also be recorded. Permission to interview the teachers will be obtained from the district's department of instruction. Permission will also be obtained from the University of Houston Institutional Review Board in the Center for the Protection of Human Subjects. Teacher's identities will be kept confidential, and the only information that will be incorporated will include: gender, education level, and years of teaching experience.

Data Analysis

Quantitative data will be analyzed using the Statistical Package of Social Sciences (SPSS). Student reading levels from DRA will be coded on a numerical scale. The DRA scores in the DRA kit range from A – 44. A reading level of A will be coded with the number one. The variables in the study (departmentalized classrooms, self-contained classrooms, and gender) will also be numerically coded.

Qualitative data will be analyzed using ethnographic methods. Transcribed interviews will be coded according to low impact and high impact, and be analyzed for meaning fields. Data analyzed will either support or nullify the hypothesis that there will be a difference in classroom implementation and academic outcomes for departmentalized classrooms and self-contained classrooms.

The following research questions guided this study: (1) What effect does receiving balanced literacy instruction in a departmentalized or self-contained classroom have on the reading comprehension of second graders, and (2) Are there gender differences in the observed reading comprehension of second graders with regard to a self-contained or departmentalized classroom? Lastly, how do teachers' experiences, perceptions, and opinions relate to the implementation and academic outcomes of the instructional organization of the classroom? The first research question will be determined by comparing the beginning reading levels to ending reading levels for both departmentalized and self-contained classrooms. Repeated measures will be used to compare the increase for each group from the beginning to the end of the school year. These results will either support or nullify the hypothesis that students in the

departmentalized environment will achieve higher reading comprehension than students in the self-contained environment.

A 2 x 2 x 3 mixed analysis of variance (ANOVA) will be used to compare comprehension achievement for the gender subgroups. This data will answer the second research question. It will also either support or nullify the hypothesis that there will be no difference in the reading achievement of females in departmentalized and self-contained classrooms, but that there will be a difference in the reading achievement of males in departmentalized and self-contained classrooms.

Summary

This chapter outlined the methodology that will be used in the study, including the research design, participants, procedure, instrumentation, data collection, and data analysis. The study will examine the effects that departmentalized and self-contained classrooms that implemented a balanced literacy program with basal readers had on the reading achievement of second graders.

Introduction

The purpose of this study was to analyze possible differences in reading

achievement among students that were taught using balanced literacy lessons in

classrooms with two different modes of scheduling. The pilot group consisted of students

who were taught balanced literacy in classrooms on a departmentalized schedule, and the

non-pilot group consisted of students who were taught balanced literacy in classrooms on

a self-contained schedule. To compare the two groups, student comprehension levels

from the beginning, middle, and end of year district benchmarks were obtained. This

archival study examined the benchmark results from the 2011-2012 school year. The

following section elaborates on the results from this proposed study.

Effects of Departmentalized and Self-Contained Balanced Literacy on

Comprehension Levels

To answer the first research question, statistical analyses were administered using

the Statistical Packages of Social Sciences (SPSS). Repeated measures were conducted

to examine the effects of departmentalized and self-contained balanced literacy on

student comprehension levels in departmentalized and self-contained classrooms. An

independent samples t-test compared the comprehension scores at the end of the year for

each group. The independent samples t-test indicate a statistically significant difference

between the two groups, $p = .002$. Departmentalized comprehension levels at the end of

the year ($m = 27.38$, $s = 6.532$) indicates that the average comprehension level was within

a Developmental Reading Assessment (DRA) range of 24-28. This is within end of the

year second grade expectations for the school district. Self-contained comprehension levels at the end of the year (m = 31.51, s = 8.605) indicates that the average comprehension level was within a DRA range of 30-34. This is within beginning of the year third grade expectations for the school district. Results reveal a difference in comprehension levels at the end of the year.

General Linear Model (GLM) repeated measures were conducted to analyze scores from the beginning and middle of the year. The GLM indicates a significant difference in time by group, $F(2,117) = 3.785$, $p = .126$. Departmentalized classrooms' average comprehension level at the beginning of the year (m = 15.85) is equivalent to a DRA range of 14-16. The average comprehension level increased six points in the middle of the year (m = 21.99), which is equivalent to a DRA range of 20-24. The mean comprehension level increase by six points at the end of the year (m = 27.47), which is equivalent to a DRA range of 24-28. Results reveal an average increase of twelve points from the beginning to the end of the year.

Self-contained classrooms' average comprehension level at the beginning of the year (m = 19.10) is equivalent to a DRA score of 18-20. The average comprehension level increased seven points in the middle of the year (m = 26.88), which is equivalent to a DRA range of 24-28. The mean increased by five points by the end of the year (m = 31.73), which is equivalent to a DRA range of 30-34. Results also reveal an average increase of twelve points from the beginning to the end of the year.

Table 1

Average comprehension levels for self-contained and departmentalized balanced literacy classrooms

	schedule	Mean	Std. Deviation	N
BOYDRA	self-contained	19.10	6.050	52
	departmentalized	15.85	6.363	68
	Total	17.26	6.410	120
MOYDRA	self-contained	26.88	6.656	52
	departmentalized	21.99	7.504	68
	Total	24.11	7.526	120
EOYDRA	self-contained	31.73	8.803	52
	departmentalized	27.47	6.652	68
	Total	29.32	7.913	120

BOYDRA = beginning, MOYDRA = middle, EOYDRA = end

Effects of Departmentalized and Self-Contained Balanced Literacy on

Comprehension Levels According to Gender

Independent same t-tests compared the comprehension levels between males and females within the departmentalized group and the self-contained group. There was no statistically significant difference between the end of the year comprehension levels within each group between males and females, $F(1,116) = .053$, $p = .818$.

The average comprehension level of departmentalized males (m = 21.95, s = 7.713) in the middle of the year is equivalent to a DRA comprehension level that ranges from 20-24. The average comprehension level of departmentalized females (m = 22.04, s = 7.320) in the middle of the year is equivalent to a DRA comprehension score that ranges from 20-24. Data indicates that comprehension achievement between departmentalized males and females were similar by the second assessment. Comprehension levels were ranging slightly below expectations to meeting expectations

within the school district at the time of the year. Although the difference between comprehension levels increase, the results also indicate no significant difference between levels at the end of the year between males and females that share a departmentalized setting. The average comprehension level of departmentalized males (m = 27.76, s = 6.545) at the end of the year is equivalent to a DRA comprehension level that ranges from 24-28. The average comprehension level of departmentalized females (m = 27.04, s = 6.914) at the end of the year is equivalent to a DRA comprehension score that ranges from 24-28. Departmentalized males and females' DRA scores were identified as ranging slightly below expectations to meeting expectations within the school district. The results indicate no significant difference between levels at the end of the year between males and females that share a departmentalized setting.
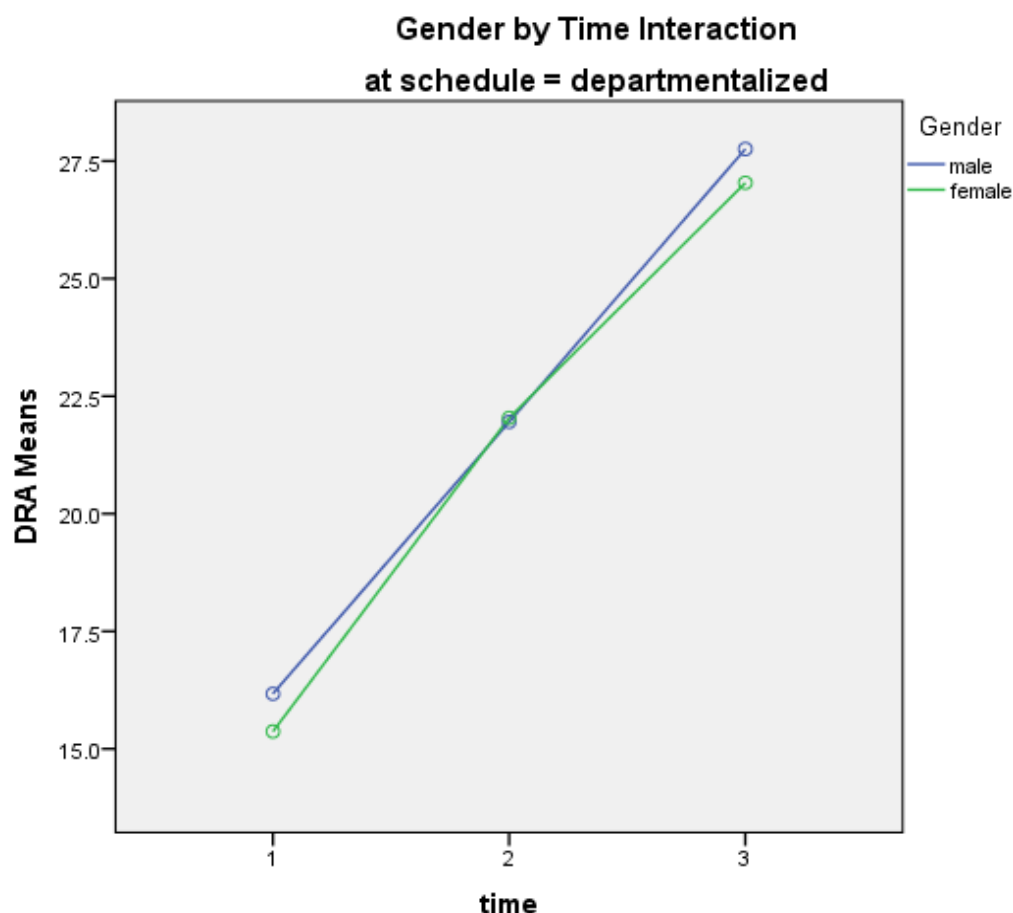
Figure 1. Comprehension scores of departmentalized males and females

When male and female comprehension levels were compared in the middle of the year, self-contained males average comprehension scores (m = 27.00, s = 6.331) and self-contained females average comprehension scores (m = 26.77, s = 7.090) were similar. Both groups had comprehension levels that were equivalent to DRA levels ranging from 24-28. These scores were identified as slightly above expectations for the school district at that time. Although the difference in scores widened, results from comprehension levels at the end of the year within a self-contained setting also yield no statistically significant difference. Self-contained males reveal an average comprehension level (m = 31.15, s = 6.909) that is equivalent to a DRA range of 30-34 at the end of the year.

Likewise, self-contained females reveal an average comprehension level (m = 32.31, s = 10.472) that is equivalent to a DRA range of 30-34 at the end of the year. Self-contained males and females' DRA scores were identified as ranging from meeting expectations to exceeding expectations within the school district. These results also indicate no significant difference between levels at the end of the year between males and females that share a self-contained setting.
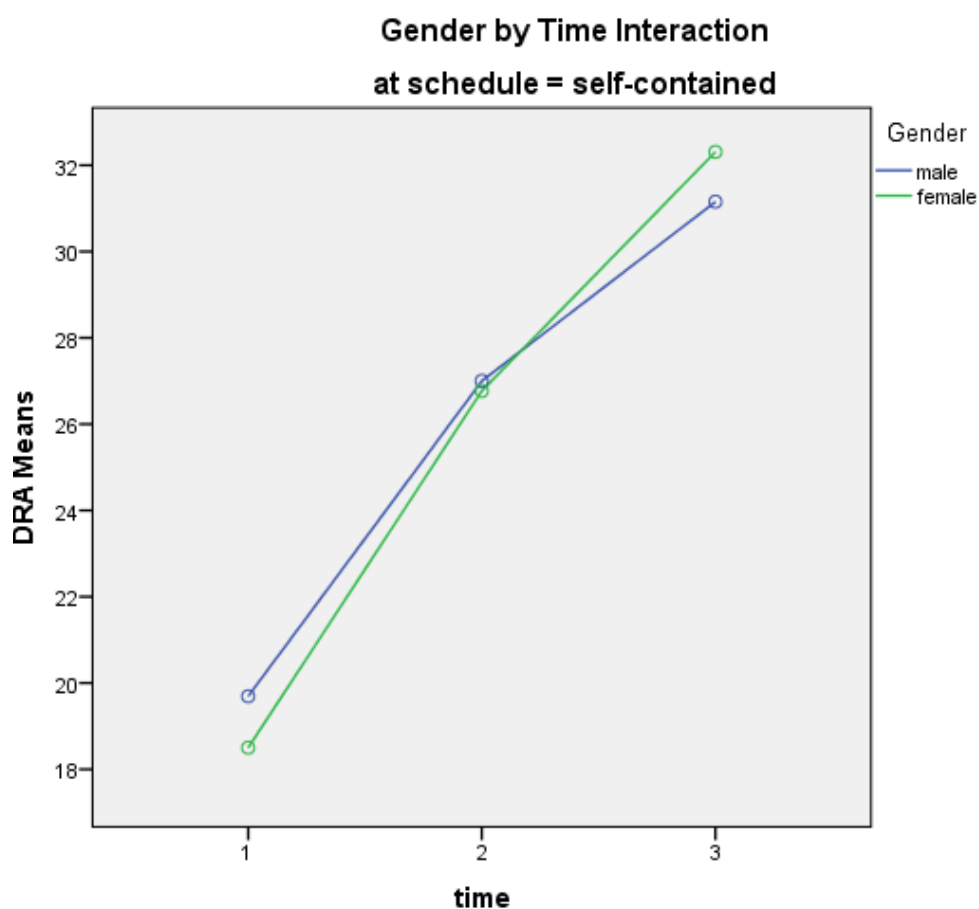
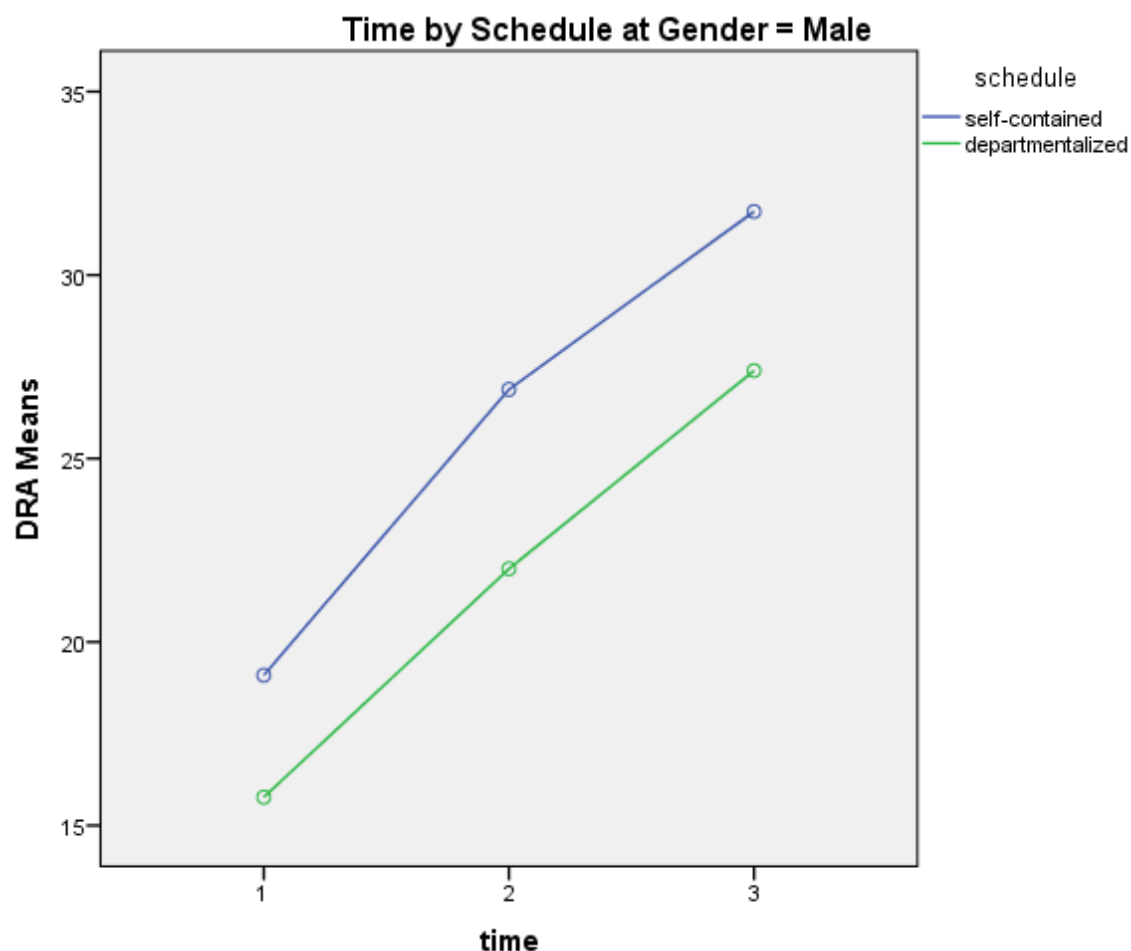*Figure 2*. Comprehension scores of self-contained males and females

To compare similar gender subgroups between different schedules, a 2 x 2 x 3 mixed analysis of variance (ANOVA) was conducted. GLM repeated measures examined the effects of departmentalized and self-contained balanced literacy on comprehension levels within gender subgroups according to classroom schedule throughout the three

testing administrations. Data was investigated to determine if there is a significant difference in males and females' increase in comprehension levels over the three periods of time. Repeated measures GLM examined three factors: two gender subgroups (male and female), schedule (self-contained and departmentalized), and three periods of time (beginning, middle, and end of the year).

Time by gender interaction. When gender subgroups are compared for a time by gender interaction, there is no significant difference in the increase in comprehension levels over the three periods of time, $F(2,115) = 1.365$, $p = .259$. However, departmentalized males and self-contained males reveal a difference between comprehension levels in the beginning, middle, and end of the year scores. Departmentalized males' mean comprehension level at the beginning of the year ($m = 16.17$, $s = 6.399$) is equivalent to a DRA range of 14-16, and self-contained males reported a mean level ($m = 19.69$, $s = 5.297$) is equivalent to a DRA range of 18-20. By the middle of the year, departmentalized males' mean level ($m = 21.95$, $s = 7.713$) is within a DRA range of 20-24, while self-contained males' mean level ($m = 27.00$, $s = 6.331$) is within a DRA range of 24-28. At the end of the year, the average comprehension level for departmentalized males ($m = 27.76$, $s = 6.545$) is equivalent to a DRA range of 24-28, and the average comprehension level for self-contained males ($m = 31.15$, $s = 6.909$) is equivalent to a DRA range of 30-34. Results reveal that both departmentalized and self-contained males made progress in comprehension through the school year.

Figure 3. Comprehension increase of departmentalized and self-contained males

Although comprehension scores differ, departmentalized and self-contained females also display no difference in the increase of comprehension levels at the beginning, middle, and end of the year. Departmentalized females' mean comprehension levels at the beginning of the year (m = 15.37, s = 6.398) is equivalent to a DRA range of 14-16, and self-contained females' mean comprehension levels (m = 18.50, s = 6.772) is equivalent to a DRA range of 16-20. By the middle of the year, departmentalized females' mean comprehension level (m = 22.04, s = 7.320) is equivalent of a DRA range of 20-24, and self-contained females' mean comprehension (m = 26.77, s = 7.090) is equivalent to a DRA range of 24-28. By the end of the year, the mean comprehension

level for departmentalized females (m = 27.04, s = 6.914) is equivalent to DRA scores

ranging 24-28, and self-contained the mean comprehension level for self-contained

females (m = 32.31, s = 10.472) is equivalent to DRA scores ranging 30-34. Data reveals

that departmentalized and self-contained females also made progress in comprehension

throughout the school year.
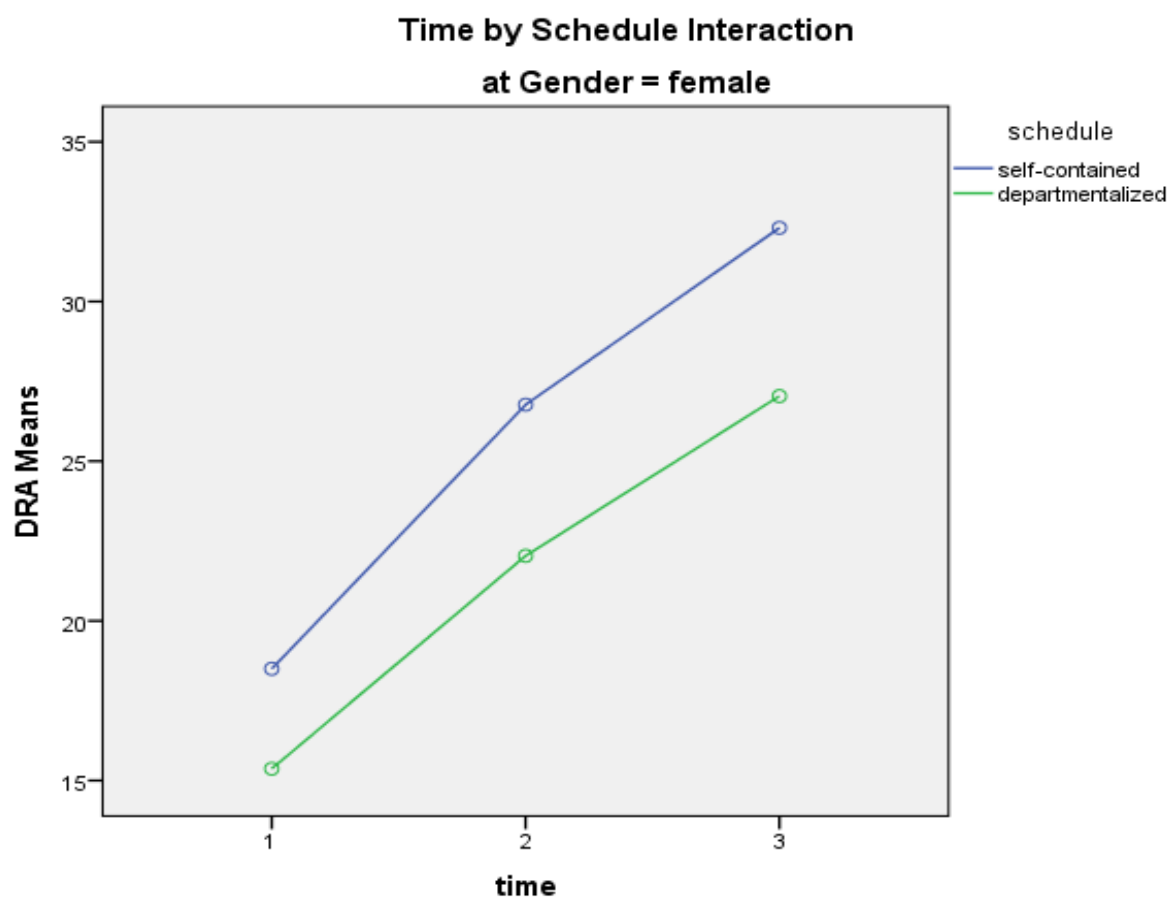
Figure 4. Comprehension increase of departmentalized and self-contained females

Time by schedule interaction. Data is also examined for a time by schedule

interaction across gender. No statistically significant difference is found for variations in

the rate of increase in comprehension levels according to gender subgroups, $F(2,115) =$

.883, p. = .416. When departmentalized and self-contained males are compared, both

groups increase eleven points in comprehension from the beginning of the year to the end

of the year. When departmentalized and self-contained females are compared, departmentalized females increase seventeen points in comprehension from the beginning of the year to the end of the year, and self-contained females increase in comprehension eighteen points from the beginning of the year to the end of the year.

Males within departmentalized classrooms have an increase of six points in comprehension scores between each time period. Self-contained males increase eight points from the beginning to the middle of the year, and increase four points between the middle and the end of the year. Departmentalized females' comprehension scores increase by seven points between the beginning and middle of the year, and increase five points between the middle and the end of the year. Self-contained females' comprehension scores increase eight points between the beginning and the middle of the year, and six points between the middle and the end of the year. Data shows that the rates of increase for both gender subgroups are similar within each schedule structure.

Table 2

Average comprehension scores in self-contained and departmentalized balanced literacy classrooms according to gender

	schedule	Gender	Mean	Std. Deviation	N
BOYDRA	self-contained	male	19.69	5.297	26
		female	18.50	6.772	26
		Total	19.10	6.050	52
	departmentalized	male	16.17	6.399	41
		female	15.37	6.398	27
		Total	15.85	6.363	68
	Total	male	17.54	6.200	67
		female	16.91	6.709	53
		Total	17.26	6.410	120
MOYDRA	self-contained	male	27.00	6.331	26
		female	26.77	7.090	26
		Total	26.88	6.656	52
	departmentalized	male	21.95	7.713	41
		female	22.04	7.320	27
		Total	21.99	7.504	68
	Total	male	23.91	7.575	67
		female	24.36	7.527	53
		Total	24.11	7.526	120
EOYDRA	self-contained	male	31.15	6.909	26
		female	32.31	10.472	26
		Total	31.73	8.803	52
	departmentalized	male	27.76	6.545	41
		female	27.04	6.914	27
		Total	27.47	6.652	68
	Total	male	29.07	6.843	67
		female	29.62	9.149	53
		Total	29.32	7.913	120

BOYDRA = beginning, MOYDRA = middle, EOYDRA = end

Teacher Feedback

Although participants' comprehension levels were analyzed for possible differences in academic performance, teachers were later interviewed to explore if their actions and beliefs served as an influencing factor in the student outcomes within each schedule group. Self-contained and departmentalized teachers were interviewed separately for approximately forty-five minutes and responses were transcribed by the interviewer. Analysis of teacher responses yielded feedback that was categorized into three areas that can impact the outcome of classroom performance.

Teachers that had second grade students participate in the study gave verbal feedback regarding their beliefs, opinions, and teacher preparation for literacy instruction within either a departmentalized or self-contained classroom in the primary grades. A combination of departmentalized and self-contained teachers who were responsible for teaching balanced literacy were asked identical questions in interview sessions. Teachers elaborated on their perceptions about schedule, teacher preparation, and instructional approaches. Collectively, responses from the participating teachers are categorized according to the daily schedule that was followed within their classroom.

Scheduling perceptions. Teachers were asked to elaborate on which classroom schedule (self-contained or departmentalized) was preferred and they perceived each class schedule in relationship to teaching. Overall, self-contained teachers preferred teaching in a self-contained environment because it was the traditional schedule of instruction that was familiar. They felt responsible for the complete academic education of each of their students, desired to build strong student-teacher relationships with only their group of students, and admitted to having past difficult working relationships with

previous teaching partners. According to one teacher," If my name is on them then I want the full responsibility for their education for the year." Self-contained teachers perceived that their schedule differed from a departmentalization because of their ability to observe how a child develops in all academic areas, and because of their opportunities to focus on targeting specific skills to enhance their development. Although they viewed their scheduling method as being more nurturing, self-contained teachers perceived departmentalized teachers as having the advantages of devoting more time to developing their teaching skills and student development to one content area without facing what they believe are overwhelming feelings of preparing for all subject areas.

Departmentalized teachers favored their scheduling method over the traditional self-contained classroom because it allowed opportunities to creatively extend lessons without a time constraint, narrowed the student focus so that they could keep up with academic content throughout the day, and allowed time for them to analyze student progress more closely. As one teacher states, "I like my classroom being strictly literacy. That way when I tell a child to read around the room, he or she won't waste time trying to figure out which walls in my room are designated for reading, which one is for math, etc." Additionally, departmentalized teachers found this scheduling method to serve as a gateway to co-teaching and team teaching for teachers that prefer collaboration and benefit from teacher support. Although departmentalized teachers shared the belief that the academic development of the child can be developed in its entirety in a self-contained environment, they also believed that departmentalizing established the freedom for instructional differentiation and targeted instruction to strengthen each student academically.

Table 3

Self-contained and departmentalized teacher responses about schedule perception

Schedule Perception	
Self-Contained	Departmentalized
Preferred (familiar and traditional)	Preferred
Strong student-teacher relationships	Creatively extend lessons
More nurturing	No time constraint
Dept. teachers can devote time to enhancing teaching skills and develop students in 1-2 areas without being overwhelmed by all subjects	Narrowed student focus
Observe all academic areas (target Instruction)	Gateway for co-teaching and team teaching
	Freedom for differentiation and targeted instruction
	Self-contained teachers can develop students in their entirety

Teaching preparation. When asked about preparation for teaching within a

particular class schedule, neither self-contained nor departmentalized teachers

acknowledged receiving either formal or informal training for preparing reading

instruction within a specific schedule structure during any time of the school year.

However, both self-contained and departmentalized teachers expressed that they attended

series of professional development training sessions about reading instruction and early

reading strategies from the school district during the summer. None of the participating

teachers could recall an acknowledgement of scheduling style or an introduction to

specific instructional modifications outside of a traditional self-contained schedule during these literacy training sessions.

Table 4

Self-contained and departmentalized teacher responses about teacher preparation

Teacher Preparation	
Self-Contained	Departmentalized
No formal or informal training for schedule structure	No formal or informal training for schedule structure
District professional development for early reading instruction	District professional development for early reading instruction
No acknowledgement of scheduling style or instructional modifications for non-traditional scheduling during literacy training	No acknowledgement of scheduling style or instructional modifications for non-traditional scheduling during literacy training

Instructional approaches. When questioned about learning approaches and activities that were limited and approaches that were implemented in their classroom schedule, self-contained and departmentalized teachers expressed varying viewpoints. Self-contained teachers expressed their ability to teach lessons in units of study that were integrated across content areas. They believed that specific unit projects that require a large amount of instructional time would be limited and tedious if it is only confined to a block of time when the student is present in class. As one teacher states, "I enjoy teaching units of study, where all curriculum is integrated across content areas. I believe this takes a lot of cooperation with partner teachers. Also, when projects need a lot of time I am able to adjust across the day and not worry about the students needing to switch teachers." The content area integration within one classroom allows them the flexibility

to adjust their schedules throughout the day without concern about the students needing to change teachers.

Departmentalized teachers shared the same belief that integration across content areas and schedule flexibility would be limited without close collaboration with their teaching partner. However they enjoyed the additional opportunities for student collaboration, cooperative activities, student-led discussions, and workstations that were implemented on a daily basis because of the large block of time that was dedicated to literacy instruction. The teachers also expressed more flexibility for independent practice and small group instruction as opposed to flexibility for content integration. Another teacher says, "I like having the chance to do different cooperative activities—like group projects, partner reading, and graphic organizers in this big block of time. If I was in a self-contained room, I would have to choose one activity to do each day. In this schedule, I have the chance to do all of them in one day." Departmentalized teachers also shared that they had the flexibility to move students between classes to receive instruction that was targeted to meet their needs.

Table 5

Self-contained and departmentalized teacher responses about instructional approaches

Instructional Approaches	
Self-Contained	Departmentalized
Integrate units of study across content	Limited time flexibility without close collaboration with teaching partner
Flexibility in time to complete unit projects	Student-centered activities, cooperative projects, and workstations on a daily basis
Adjust as needed to address special lessons/projects	Flexibility for independent practice and small group instruction instead of unit integration
	Narrowed student focus
	Flexibility to move students between classes to target instructional needs

Summary

Results reveal that there are significant gains in comprehension levels for both departmentalized and self-contained groups from the beginning to the end of the year. There is a significant difference in the comprehension scores at the end of the year, however there is no significant difference within the rate of growth for each group. There are also gains within gender subgroups. However, there is no significant difference in comprehension scores at the end of the year between males and females within a departmentalized setting, and between males and females within a self-contained setting. Departmentalized males and self-contained males, as well as departmentalized and self-contained females, reveal no significant difference in increase in comprehension. There

is also no significant difference in the rate of increase between the subgroups of males and the subgroups of females. Teacher feedback reveals that overall, self-contained and departmentalized teachers favor the scheduling method that they are implementing to strengthen students academically.

Chapter V

Discussion

Introduction

Currently, there has not been any extensive research conducted on the effects of departmentalized and self-contained reading instruction in the elementary grades prior to third grade. Previous studies have concentrated on participants in third grade and higher (Chang, Munoz, & Koshewa, 2008; Hampton, 2007; Kent, 2010; Wilcox, 1964). Also, there has been no in-depth research comparing the comprehension levels of students that have received balanced literacy instruction in departmentalized classrooms with students that have received balanced literacy instruction in self-contained classrooms. This study contributes to the literature by formally analyzing and documenting the effects that departmentalized and self-contained balanced literacy has on student comprehension levels in primary grades. This study also contributes to the literature by formally analyzing and documenting the effects of departmentalized and self-contained balanced literacy on comprehension levels according to gender. Chapter Five provides a review of the study and its findings, recommendations, limitations of the study, proposals for future studies, and conclusions.

Findings

This study examined the effects of departmentalized and self-contained balanced literacy instruction on the comprehension levels of second grade students. The effects were measured by comparing the comprehension levels of students taught in departmentalized classrooms with the comprehension levels of students taught in self-contained classrooms. Students that were in the departmentalized classrooms were the

pilot group and students that were in the self-contained classrooms were the non-pilot group. Both groups received balanced literacy lessons with identical basal programs. The pilot classrooms received literacy instruction in an uninterrupted 135 minute block from one teacher and mathematics and science instruction from a different teacher in a neighboring classroom. The non-pilot classrooms received instruction in all academic subjects from one teacher during the school day. Participants were 147 second graders from one elementary campus in an urban district in Texas. The pilot group consisted of 86 students from four classrooms that were departmentalized and the non-pilot group consisted of 61 students from three classrooms that were self-contained. Archival data was collected from the beginning, middle, and end of the year district benchmarks that was administered during the 2011-2012 school year.

The study desired to answer the following research questions:

1. What effect does receiving balanced literacy instruction in a self-contained or departmentalized classroom have on the reading comprehension of second graders as measured by district assessments?

2. Are there gender differences in the observed reading comprehension of second graders with regard to a self-contained or departmentalized classroom?

In addition, this study qualitatively examined the teachers' experiences, perceptions, and opinions about self-contained and departmentalized instruction in the implementation and academic outcomes of the instructional organization of the classroom.

A series of statistical tests were administered to answer the first research question. General Linear Model (GLM) repeated measures indicated a significant difference

between the end of year scores for departmentalized and self-contained classrooms. Self-contained classrooms had a higher average comprehension level of 30-34, while departmentalized classrooms had an average level of 24-28. This reveals that students in self-contained classrooms exceeded grade level expectations at the end of the year, and departmentalized classrooms were either at or slightly below grade level expectations at the end of the year. However, when analyzed separately, there was no significant difference in the rate of growth in comprehension for each group. A possible explanation for this finding might be that departmentalized classrooms began the school year at a lower comprehension level than self-contained classrooms. Departmentalized classrooms began the year with an average comprehension score of 14-16 and ended the year with an average score of 24-28. Self-contained classrooms began the year with an average comprehension score of 18-20 and ended the year with an average score of 30-34. Both groups indicated an average growth rate of twelve points. Although this shows that self-contained classrooms score higher in comprehension than departmentalized classrooms, both groups exhibited the same rate of growth from the beginning to the end of the year. These results from the statistical analyses support the hypothesis that there will be no difference in the rate of growth in comprehension between groups that received departmentalized and self-contained balanced literacy instruction.

Data was further examined to investigate the effects of scheduling according to gender. Results reveal no statistically significant difference in comprehension levels between males and females at the end of the year that received balanced literacy instruction within a departmentalized setting. Both departmentalized males and females ended the year within a DRA range of 24-28, which is second grade winter and spring

expectations for the school district. There is also no significant difference in comprehension levels between males and females at the end of the year that received balanced literacy instruction within a self-contained setting. Both self-contained males and females ended the year within a DRA range of 30-34, which is considered third grade fall and winter expectations for the school district. When a comparative analysis was conducted for a time by gender interaction, results showed no significant difference between the increases in comprehension scores between departmentalized and self-contained males, and between departmentalized and self-contained females by the end of the year. Overall, departmentalized and self-contained males both increase an average of eleven comprehension points, and departmentalized and self-contained females increase an average of thirteen comprehension points. It is possible that this finding is a result of teachers from both groups using identical lesson plans from basal reading programs as a foundation for instruction. When analyzed for a time by schedule interaction, there was also no significant difference in the rates of increase between scheduled groups according to gender. Both subgroups of males increase an average of six points between time periods. Both subgroups of females increase an average of seven points between the first and second test period, and six points between the second and third test period. These findings support studies that report achievement gaps in reading between males and females (Lundberg et al., 2012, Prado & Plourde, 2011). This also supports the hypothesis that there will be no difference in achievement between the females receiving self-contained and departmentalized instruction. However this rejects the hypothesis that there will be a difference between males that received self-contained and departmentalized instruction.

Collective feedback from teachers yield trends for the participating teachers. Each group of teachers favor the schedule that was being used in their classrooms. Both departmentalized and self-contained teachers acknowledge the convenience of concentrating on a specific content area; however self-contained teachers share the belief that remaining with one homeroom throughout the instructional day created more opportunities to build student-teacher relationships, manipulate the daily schedule, and integrate subject areas. Departmentalized teachers express interest in developing the student through the utilization of extended lessons during their specific block of time, the flexibility of moving students between classrooms to meet their needs, and the inclusion of multiple student-centered collaborative projects. It is possible that the teachers' variations in perceptions and approaches to the schedules may explain how their opinions and beliefs impacted student performance in each group.

Recommendations

This study investigated two schedules of balanced literacy instruction in second grade classrooms, one that implemented literacy in a departmentalized environment, and one that implemented literacy in a self-contained environment. When compared, the comprehension levels among students taught using the different schedules of instruction were statistically significant at the end of the year. Although there were statistically significant differences in the end of year comprehension levels, there were no statistically significant differences in the rate of increase in comprehension levels between the two groups. Each group demonstrated a significant increase in comprehension from the beginning to end of the school year. Therefore, districts can implement either a

departmentalized or self-contained schedule in balanced literacy instruction to

successfully increase student comprehension in the years prior to third grade.

For students to acquire the literacy instruction that is necessary to be successful

readers, teachers need to begin introducing reading and writing in a structured program

that has designated blocks of time allotted to keep students immersed in literacy.

Teachers use a variety of activities, some with basal readers as the foundation, and some

without, to develop a structure to assist students in learning to read. According to Rog

(2003),

> "Today, balance is the buzzword in literacy education. We work
> to *balance* a wide repertoire of teaching strategies and learning
> activities to meet the needs of all of our students. We look for a
> *balance* of text resources, from picture books and novels, to
> newspaper articles and brochures, to posters and visuals. We
> strive to *balance* different grouping structures in our classroom—
> whole-class, small group, and individual. A balanced program
> requires opportunities for reading and writing *to* students, reading
> and writing *with* students, and reading and writing *by* students."

Reports suggest that reading comprehension achievement has become stagnant in

the United States. According to the National Center for Education Statistics (2013), the

average reading scores for 9-, 13-, and 17-year old students have not made significant

gains since 2008. Comprehension is a primary focus of reading instruction. Gaps in

early comprehension instruction can affect reading development in the later years.

Formal instruction in reading during the primary years in school can impact reading

performance and comprehension. Balanced literacy is formally structured to target

specific literacy skills that collectively lead to comprehension. The amount of time that

is dedicated to activities that develop literacy skills in the early reader is an important

factor that can impact comprehension achievement. Students that struggle to acquire the

literacy skills that are targeted during balanced literacy will be at-risk for not developing into a successful reader.

Perhaps the most critical (and unresolved) time allocation issue that schools face is the indisputable fact that some students need more time to learn than others (Canady & Rettig, 1995). It is important for schools to develop balanced literacy instruction within a schedule that is structured to foster comprehension development and reduce the risk of gaps in literacy development. This study shows that balanced literacy implemented in a departmentalized classroom in the second grade can increase comprehension at the same rate as a traditional self-contained classroom. It also demonstrates that early balanced literacy instruction that is carried out in departmentalized or self-contained environments in lower elementary is beneficial to gender subpopulations. Comprehension levels increased in males and females in both schedule structures. Therefore, schools that are concerned about closing the reading achievement gaps between genders in the earlier grades would benefit from implementing departmentalized classrooms or retaining self-contained environments. Since there is not a significant difference in the rate of comprehension growth between the two schedules, there is not enough evidence to support the addition of departmentalization balanced literacy classrooms in all grades prior to third grade based on this single study. There is a need for further examination of an elementary departmentalized approach prior to any conclusion being made. This study supports the conclusion that either scheduling method would be effective in increasing comprehension levels for early readers in second grade. However, other factors, such as student motivation and student performance without basal readers instruction that could not be measured. These factors, which will be discussed in future

studies, must be considered in the decision-making process when determining which scheduling method is best for students.

Limitations

Since this is an archival study, there are variables that could not be controlled by the researcher, resulting in limitations to the study. First, this study is limited to measuring the effectiveness of departmentalized and self-contained classrooms that used basal readers as the foundation for balanced literacy instruction on one campus. All of the participating classrooms taught using identical lesson plans that incorporated the use of basal readers that were adopted by the school district. Although additional departmentalized and self-contained second grade classrooms from other campuses needed to be included in the study, the extent in which basal readers are integrated into literacy instruction varies according to campus. Therefore, the sample size was limited to participants that received similar lessons that integrated the same materials. A larger sample size would also allow an opportunity to further examine if there is a significant difference with the gender by time interaction. Also, additional time was needed to solicit interview candidates from within the pool of participating teachers.

Secondly, the methods of display varied in each classroom. Although all of the departmentalized classrooms and self-contained classrooms had the same second grade concepts, each teacher displayed the concepts with a variety of materials. Therefore, students were exposed to literacy concepts using different styles of print and media.

Furthermore, there was no inter-observer reliability used during the administration of the instrument used to measure comprehension levels. Teachers received training prior to giving the benchmark assessment, and this same instrument was used in every

second grade classroom across the district. There was little chance for misinterpretation as a result of the list of acceptable student responses and scripted teacher prompts. The comprehension is scored on a rubric and is calculated according to a list of specific behaviors that were exhibited by the student during the assessment, which leaves little opportunity for teacher interpretation. This assessment design reduces the margin of error by the testing administrator.

Finally, the effects of departmentalized and self-contained balanced literacy instruction were measured according to comprehension levels. The effects of the two approaches to teaching literacy need to be examined using alternative measures. The alternatives to measuring the effectiveness of the two methods will be discussed in more detail in future studies.

Future Studies

There is a need for more studies on the effects of departmentalized and self-contained classroom structures on primary reading achievement. No other studies on the effects of classroom schedule on student achievement prior to third grade have been documented. Additional studies are needed on departmentalized and self-contained classrooms during the early childhood years to determine if they will produce similar results. Since this is a study of archival data, the cost of implementation was not considered. Schools that are interested in incorporating these varying approaches must be conscious of the expenses associated with acquiring training and materials for participating teachers prior and during implementation of a departmentalized approach.

Schools and districts that are interested in adding a departmentalized schedule to balanced literacy in the lower grades must also be conscious of the impact it will have on

comprehension levels if basal readers are not used. The basal reading program used by participating groups outlined a scope and sequence of activities that were followed by all of the teachers and students. The current study was unable to measure classrooms that included lessons outside of a basal. Many institutions develop reading curriculums that do not include a basal. Future studies are needed to analyze the effects of balanced literacy in departmentalized and self-contained classrooms in the primary grades that use alternative teaching materials.

Educational groups that are interested in implementing balanced literacy within a departmentalized approach in grades prior to third grade are recommended to consider the social development of students. The current study did not factor in the social behaviors of the students; therefore future studies may need to consider the impact of a departmentalized approach on the social interactions and relationships between students and their teachers. Many campuses and districts believe that building positive student relationships serve as a component that is needed to foster academic achievement. Social development is also a priority during the early years of a child's life. Future studies need to examine the effects of departmentalized and self-contained approaches on the social development and student attitudes towards school in the early grades. Also, future studies need to examine the long term effects of students that receive self-contained and departmentalized balanced literacy as they transition from elementary to secondary education.

Prospective studies should also investigate the student application of comprehension strategies and student attitudes towards reading after receiving balanced literacy instruction in departmentalized and self-contained classroom structures. Some

schools share the belief that the amount of exposure to reading, as well as the types of student engagement with literacy impacts their perception of reading and motivation to be a life-long reader. Impending studies should explore student feedback regarding how the classroom structure has impacted student motivation to read.

Although teacher feedback was acquired following an analysis of student data, future studies should contemplate soliciting teacher feedback regarding their attitudes and opinions about balanced literacy in the different settings before and during implementation. Further investigation of teacher attitudes and opinions need to seek more specific details that can identify strengths and areas of improvement within the approaches, as well as specific literacy activities that yield favorable and unfavorable results within each classroom organizational structure.

Conclusion

Balanced literacy instruction within a departmentalized schedule is an effective approach for teaching reading with students in second grade. According to Lewis (1999) a number of elementary schools have adopted block scheduling to reduce instructional fragmentation, improve discipline, and provide regularly scheduled opportunity for learning enrichment. However, a traditional self-contained schedule in elementary school is an effective approach for teaching foundational reading skills as well. Students in self-contained classrooms have been found to perform just as well in Language Arts (McGrath & Rust, 2002; Randler et al., 2006). Balanced literacy encompasses a variety of teaching strategies that are designed to meet the needs of all learners. These strategies are structured into a formal structure to develop comprehension by allowing large amounts of time for reading, collaborative learning, and encouraging student discussions

of texts with peers and with teachers (Fielding & Pearson, 1994). Educational leaders and administrators must consider establishing balanced literacy within an organized schedule that promotes comprehension growth in all students.

Gaps in reading achievement have led to the exploration of alternative schedules to strengthen student comprehension. Schools have begun implementing instruction in non-traditional schedules to maximize student engagement and decrease the number of at-risk students. In the primary grades of kindergarten to second grade, reading has become a tool for determining academic ability and mastery. Therefore, early childhood and teachers in the primary grades dedicate large portions of their instructional day to developing a child's literacy skills. The goal of designing a literacy framework that includes well-developed, small group instruction coupled with effective, whole-group literacy teaching (Fisher & Frey, 2007) has caused educators to focus on the most effective ways to deliver balanced literacy instruction. In Texas, retention rates decreased in every grade except for second grade in 2011 (Texas Education Agency, 2013), therefore the approaches that are being employed to teach balanced literacy need to be revisited. Although alternative class schedules are commonly observed beginning in the third grade, balanced literacy within a traditional self-contained environment and within a non-traditional environment are equally effective in second grade. The effectiveness of both scheduling methods in second grade allows administrators and teachers the flexibility to design a balanced literacy program that can target students that have been identified as struggling readers in the early grades and assist them in acquiring the skills that are needed to mature into life-long readers.

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Appendix A

UNIVERSITY of **HOUSTON**

DIVISION OF RESEARCH

April 8, 2014

Ms. Katina Thomas
c/o Dr. Laveria F. Hutchison
Curriculum and Instruction

Dear Ms. Katina Thomas,

The University of Houston Committee for the Protection of Human Subjects (1) reviewed your research proposal entitled "Departmentalized versus Self-Contained Balanced Literacy Instruction: Its Effects on Second Grade Comprehension Levels" on March 7, 2014, according to federal regulations and institutional policies and procedures.

At that time, your project was granted approval contingent upon your agreement to modify your protocol as stipulated by the Committee. The changes you have made adequately fulfill the requested contingencies, and your project is now **APPROVED**.

- **Approval Date: April 8, 2014**

- **Expiration Date: April 7, 2015**

As required by federal regulations governing research in human subjects, research procedures (including recruitment, informed consent, intervention, data collection or data analysis) may not be conducted after the expiration date.

To ensure that no lapse in approval or ongoing research occurs, please ensure that your protocol is resubmitted in RAMP for renewal by the **deadline for the March 2015** CPHS meeting. Deadlines for submission are located on the CPHS website.

During the course of the research, the following must also be submitted to the CPHS:

- Any proposed changes to the approved protocol, prior to initiation; AND
- Any unanticipated events (including adverse events, injuries, or outcomes) involving possible risk to subjects or others, within 10 working days.

If you have any questions, please contact Alicia Vargas at (713) 743-9215.

Sincerely yours,

Dr. Daniel O'Connor, Chair
Committee for the Protection of Human Subjects (1)

PLEASE NOTE: All subjects must receive a copy of the informed consent document, if one is approved for use. All research data, including signed consent documents, must be retained according to the University of Houston Data Retention Policy _(found on the CPHS website)_ as well as requirements of the FDA and external sponsor(s), if applicable. Faculty sponsors are responsible for retaining data for student projects on the UH campus for the required period of record retention.

Protocol Number: 14284-01   Full Review: ____   Expedited Review: _X_

Appendix B

Developmental Reading Assessment (DRA)

Game Day

Name _____ Date _____

Teacher _____ Grade _____

Text selected by: ❏ Teacher ❏ Student

Accuracy Rate: _____ Comprehension Level: _____

Phrasing and Fluency: _____ DRA Stage: _____

INTRODUCTION TO THE TEXT: PREVIEWING AND PREDICTING

T: *In this story, Game Day, Raccoon helped her friends Otter, Rabbit, and Squirrel get ready for the games. But Raccoon wasn't too sure what she could do. Please read the first three paragraphs aloud to see what you think might happen in this story.*

The student reads the first three paragraphs aloud. If the level is appropriate, continue with the next question.

T: *What do you think might happen in this story?*

Prediction(s)
Choose one of the following statements.
Student:
- ❏ gathers limited information to predict next possible event or action with prompting
- ❏ gathers some information to predict several possible events or actions with prompting
- ❏ gathers pertinent information to predict several possible events or actions without prompting

T: *Now it's time to read and enjoy this story by yourself. When you have finished reading, please come to me, and I'll ask you to tell me what happened in this story.*

The student reads the rest of the story silently and then gives a retelling with the book closed.

COMPREHENSION AND RESPONSE

Close the book before the retelling and then say:

T: *Start at the beginning and tell me what happened in this story.*

Highlight or underline information included in the student's retelling on the story overview that follows. Please note that the student does not need to use the exact words in order for you to underline the statement, idea, action, or event.

Characters: Raccoon, Otter, Rabbit, Squirrel
Setting/Places mentioned in the story: forest, river

STORY OVERVIEW

1. Raccoon found a shiny stopwatch by the river and put it around her neck.

2. Raccoon helped Otter get ready for Game Day by timing him as he swam.

3. Raccoon helped Rabbit get ready by telling him when to start.

4. Raccoon helped Squirrel get ready by measuring how far she could jump.

5. On her way home, Raccoon felt sad. She didn't feel she could do anything well.

6. The next day was Game Day. Raccoon's friends all won shiny medals.

7. That night the animals had a party. Raccoon felt sad.

8. Then Raccoon's friends gave her a shiny medal for helping them.

Ending: Raccoon was proud of her new medal. She could be a good friend.

If necessary, use one or more of the following prompts to gain further information after the initial retelling.

1. *Tell me more.*
2. *What happened at the beginning?*
3. *What happened after _____ (an event mentioned by the student)?*
4. *Who else was in the story?*
5. *What was Raccoon's problem?*
6. *How was Raccoon's problem solved?*
7. *How did the story end?*

Record all other questions asked.

RESPONSE

T: *Why did you choose this story?*

T: *Tell me what you liked about this story.*

T: *What does this story make you think of?*

MAKING CONNECTIONS
The student links to:
- ❏ personal experience
- ❏ other media or events
- ❏ other literature
- ❏ other _____

DRA COMPREHENSION RUBRIC

Circle the number to the left of one statement in each row that best describes the student's retelling. Then add the circled numbers together to obtain a total score. Circle the total score (from 6–24) where it appears in the row of numbers at the top of the rubric to determine the level of comprehension.

Very Little Comprehension 6 7 8 9	Some Comprehension 10 11 12 13 14 15	Adequate Comprehension 16 17 18 19 20 21	Very Good Comprehension 22 23 24
1 Tells 1 or 2 events or key facts	**2** Tells some of the events or key facts	**3** Tells many events in sequence for the most part, or tells many key facts	**4** Tells most events in sequence or tells most key facts
1 Includes few or no important details from text	**2** Includes some important details from text	**3** Includes many important details from text	**4** Includes most important details and key language or vocabulary from text
1 Refers to characters or topics using pronouns *(he, she, it, they)*	**2** Refers to characters or topics by generic name or label *(boy, girl, dog)*	**3** Refers to many characters or topics by name in text *(Ben, Giant, Monkey, Otter)*	**4** Refers to all significant characters or topics by specific name *(Old Ben Bailey, green turtle)*
1 Responds with incorrect information	**2** Responds with some misinterpretation	**3** Responds with literal interpretation	**4** Responds with interpretation that reflects higher-level thinking
1 Provides limited or no response to teacher questions and prompts	**2** Provides some response to teacher questions and prompts	**3** Provides adequate response to teacher questions and prompts	**4** Provides insightful response to teacher questions and prompts
1 Requires many questions or prompts	**2** Requires 4 or 5 questions or prompts	**3** Requires 2 or 3 questions or prompts	**4** Requires 1 or no questions or prompts

ORAL READING AND STRATEGIES USED

Record the student's oral reading behaviors on the record of oral reading that follows or take a running record on a blank sheet of paper as the student reads pages 5, 6, and 7. Number the miscues that are not self-corrected.

Page 5

On the way, she saw Squirrel jumping in the grass.

"Will you help me?" asked Squirrel. "I need someone to measure how far I can jump."

So Raccoon stopped to help Squirrel.

It was getting dark when Raccoon headed home. She began to feel sad. "I can't swim as fast as Otter or run as fast as Rabbit. And I can't jump as far as Squirrel. I can't do anything!" she said to herself.

Page 6

The next day Raccoon and all the other animals went to watch the games. Raccoon's friends did very well. Otter, Rabbit, and Squirrel all won shiny medals.

That night all the animals went to the river to have a party. Raccoon couldn't help feeling a little sad. "I can't do anything well," she said to herself.

Page 7

Otter, Rabbit and Squirrel found Raccoon sitting on a log.

"You are a great friend!" they said. "We couldn't have done well without your help."

Otter placed a shiny medal around Raccoon's neck.

Raccoon looked at her shiny new medal and felt proud.

"I can be a good friend," said Raccoon.

Circle accuracy rate: Word Count 181

%	100	99	98	97	96	95	94	93	92	91	90	89	88
Miscues	0	1–2	3–4	5–6	7–8	9	10–11	12–13	14–15	16–17	18–19	20	21

Phrasing and fluency

- ❏ word by word
- ❏ word by word with some short phrases
- ❏ in short phrases most of the time
- ❏ in longer phrases at times; inconsistent rate

- ❏ in longer phrases most of the time; adequate rate
- ❏ in longer, meaningful phrases; rate adjusted appropriately

Intonation

Student reads with:

- ❏ no intonation; monotone
- ❏ little intonation; rather monotone
- ❏ some intonation; some attention to punctuation; monotone at times

- ❏ adjusts intonation to convey meaning at times; attends to punctuation most of the time
- ❏ adjusts intonation to convey meaning; attends to punctuation
- ❏ begins to explore subtle intonation that reflects mood, pace, and tension

At difficulty

Student problem solves using:

- ❏ picture
- ❏ letter/sound
- ❏ letter-sound clusters
- ❏ syllables
- ❏ rereading

- ❏ multiple attempts
- ❏ pauses
- ❏ no observable behaviors
  Appealed for help: _____ times
  Was told/given: _____ words

Analysis of miscues and self-corrections

Miscues interfered with meaning:

- ❏ no
- ❏ a few times
- ❏ sometimes
- ❏ often

Student:

- ❏ detects no miscues
- ❏ self-corrects a few significant miscues
- ❏ self-corrects some significant miscues
- ❏ self-corrects most significant miscues
- ❏ self-corrects most significant miscues quickly
- ❏ self-corrects all significant miscues quickly

Comments:

READING PREFERENCES

T: *When do you like to read? Why?*

T: *Tell how you choose a book to read.*

T: *What is one of your favorite books? Why?*

Circle the statements on the DRA Continuum that best describe the student's observable reading behaviors and responses.

Appendix C

Teacher Feedback Questions

1.   By 2011, how many years had you been teaching?

2.   How many years had you been teaching second grade?

3.   Were you self-contained or departmentalized?

4.   Did you receive any type of training to prepare for teaching in a departmentalized classroom? If so, please describe.

5.   How do you believe that teaching in one method (self-contained) differ from another (departmentalized)?

6.   What kinds of activities did you implement in your classroom (self-contained or departmentalized) that you believe would be more difficult to implement in the other type of classroom (self-contained or departmentalized)? Why?

7.   Which scheduling method (self-contained or departmentalized) do you prefer? Why?

Appendix D

Daily schedules

Daily Departmentalized Schedule--Language Arts

Implemented in the morning and repeated in the afternoon

Literacy Activity	Timeframe
Spelling/Phonemic Awareness	15 minutes
Class Note (Grammar, Language)	10 minutes
Shared Reading/Read Aloud (Model Comprehension Strategy)	20 minutes
Guided Practice (Comprehension Strategy)	20 minutes
Independent Practice, Literacy Centers, Small Reading Groups (concurrently)	40 minutes
Writing	30 minutes

Daily Self-Contained Schedule (All Academic Subjects)

Implemented with one homeroom

Subject	Time
Language Arts	8:15-9:05, 9:50-11:15
Specials (Art, Music, PE, Technology)	9:05-9:50
Social Studies	11:15-12:00
Lunch/Recess	12:00-12:45
Mathematics	12:45-2:00
Science	2:00-2:45