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THE EFFECTS OF PARTICIPATION IN LITERATURE CIRCLES ON READING
COMPREHENSION

By

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A DISSERTATION

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Research supports that comprehension is a vital component of reading

and life-long literacy, and there are many instructional approaches for teaching

reading comprehension. Literature circles are a popular approach which are

widely used but have not yet been studied empirically. The purpose of this study

was to determine the effects of participation in literature circles on the reading

comprehension of middle school students. More specifically, the study examined

whether there was a difference in the reading comprehension scores of students

after participating in literature circles versus after participating in directed reading

activity, and whether there were interactions of type of instruction and students'

overall reading achievement levels. A mixed design using split-plot ANOVA was

used to examine the within-subject variable of treatment, and the between-

subject variables of class period, assessments (or passages used), and overall

reading achievement levels, as well as determine interactions among the

variables. Eighty six eighth-grade students (65% male, 35%female) in a

suburban public middle school in the southeastern United States participated in

the eight-week study. By class period, students were randomly placed in

literature circle groups for four weeks and also participated in whole-class

directed reading activity for four weeks. Students read one short story each week and comprehension was assessed with corresponding cloze passages. The reading scores indicated there were no significant differences between the two types of instruction. However, results were statistically significant for all interactions (treatment and passages, treatment and class period, and treatment and overall reading achievement). In addition, when the data were analyzed by overall reading ability it can be argued that the findings have practical significance. Evidence suggests that students with low overall reading achievement levels may not respond to literature circles as positively as other students, and that students with high overall reading achievement may respond more favorably. Overall, literature circles appear to have promise as an instructional approach to reading, especially for non-struggling readers. The discussion expands on the limitations of this study as well as focuses on the need for further scientifically-based research on this popular reading approach.

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CHAPTER 1

Introduction

Comprehension is a vital component of literacy. It is critically important to

the development of children's reading skills and their ability to obtain an

education (NPR, 2000). Reading comprehension has been referred to as the

"essence of reading" (Durkin, 1993) and as such is necessary for academic as

well as life-long learning. However, according to the report of the *National*

Assessment of Educational Progress (NAEP), large numbers of middle school

students are not reading on grade level. Only 29% of eighth graders met the

standard for proficiency set for literacy (2003). Research also shows that

students who fail to become proficient readers are rarely able to catch up with

their peers and are expected to struggle with reading all through their lives

(Snow, Burns, & Griffin, 1998). In addition, reading assessments (Campbell,

Hombo, & Mazzeo, 2000) demonstrate a persistent deficiency in instruction on

higher-level reading and thinking strategies of students. Lacking proficiency in

reading, many students are denied participation in reading and subject-matter

instruction that focuses on the construction of meaning and understanding

because they are pulled out of classrooms for remedial and corrective reading

instruction.

It is important to define what reading comprehension is, in order to both

recognize and create more competent readers. The RAND Reading Study Group

(RRSG) defines the term reading comprehension as "the process of

simultaneously extracting and constructing meaning through interaction and

involvement with written language" (Snow, 2002). The RRSG believes that comprehension consists of three elements: the reader, the text, and the activity or purpose for reading. In terms of the reader, one should think of what is being brought to the act of reading – the ability, knowledge, and experience of the reader. When considering text, all printed or electronic reading material is included, and the activity encompasses the purpose, process, and consequences or outcomes of reading. The reader, the text, and the activity, define what occurs in the context that shapes and is shaped by the reader (2002). From a socio-cultural perspective, the type of instruction (the way instruction is delivered), the social interactions that occur, and the focus of instruction (the content) are clearly important. Students will likely respond differently depending on what they posses as a reader, the text they are reading, and the activity in which they are participating. (Discussion of this interaction will be clarified further in the Theoretical Orientation section of Chapter Two.)

Other research (Collins & Smith, 1982; Palinscar & Brown, 1984) has also shown that the development of effective reading comprehension skills is facilitated by specialized types of instruction. This research also proposes that reading comprehension skills are processes developed through socially mediated experiences. This implies that reading comprehension can also be *re*mediated by manipulating the social organization of and interaction within the reading activity (King, 1988). King (1988) validates this notion in her dissertation study of Question-Asking-Reading, an approach similar to literature circles, which are explored in this study.

There are many ways to engage students in reading and in using discussion groups. Book clubs, literature discussion groups, or peer discussion groups are all approaches that are commonly used, but literature circles are unique in that they encompass much more than these other approaches. Literature circles are a form of literary engagement in which students are placed in small groups and encouraged to read with a focus and then report on and discuss what they read, determining for themselves what is significant and why (Daniels, 1994). During discussion, each student assumes a role that corresponds to specific cognitive tasks during discussion, thereby providing a support framework for the discussion. The classroom teacher offers guidance and support to students as they apply strategies while interacting with each other and with the text. A long-term goal of this approach is the self-regulated use of these strategies to foster comprehension (Hill, Noe, & King, 2003).

Literature circles are very popular in classrooms today and many teachers champion the strategy and use it consistently in their classrooms (Daniels, 2002). Although similar to other approaches, literature circles are gaining rapidly in popularity. An online search with the term "literature circle" provides 15, 600, 000 results today; whereas, it produced approximately half as many just over a year ago. The purpose of this study was to investigate the effects of participation in literature circles on the reading comprehension of middle school students.

Statement of Problem

Instructional practices in use in classrooms today must address the needs of all students. Reform measures have recently arisen, like the *No Child Left*

Behind (NCLB) Act, a comprehensive plan created to help disadvantaged children reach expected levels of achievement in reading (US Department of Education, 2001). The NCLB act mandates that students score within the range of their expected performance on a state-standardized reading test in order to pass to the next grade level. Schools that fail to bring students up to this level face financial losses as well as loss of control over decisions regarding materials and personnel. This act has added increased pressure to schools and teachers to raise the reading scores of all students.

In addition, instructional practices in use in classrooms today must be developed from theory and supported by research. It is not enough for an instructional strategy to be popular or well-liked by teachers. The federal government has created the requirement that only instructional practices supported by scientifically-based reading research will be funded. One of the criteria of scientifically-based research is that instruction must have evidence of a research foundation (Allington, 2001). These policies demonstrate the need for connecting theory to potentially successful approaches, such as literature circles, and for studying them empirically. As popular as literature circles are, this approach has yet to be studied empirically (see Review of Literature in Chapter Two).

In terms of how to best meet students' reading needs, experts offer teachers a variety of solutions, such as directed reading-thinking activity, guided reading, early intervention, literature-based instruction, phonics instruction, and integrated language arts (Raphael, Florio-Ruane, & George, 1998). High quality

discussions and the exchange and exploration of ideas are central elements to

the understandings of developing readers and the creation of competent literate

students (Eeds & Wells, 1989; Gambrell & Almasi, 1996). Research has shown

that the development of reading comprehension skills are developed through

socially mediated experiences (e.g. King, 1988). Therefore, it is crucial to

examine how the social organization of reading instruction affects

comprehension of text. Sociocognitive theories of reading instruction focus on the

social interaction that takes place in the classroom, including the reading, writing,

and talk that surrounds it (Applebee, Langer, Nystrand, & Gamoran, 2003). The

belief that learning is a socially mediated process is inherent in Vygotsky's

sociocultural theory (1978). Literature circles seem to instantiate the principles of

Vygotsky's theory, which will be explained further in the Theoretical Orientation

section within the Review of Literature.

In summary, there have been no documented connections between

literature circles and theory. Likewise, there has been little or no empirical

research to support this reading approach. Documented empirical research is

absolutely vital if the use of literature circles is to continue in current and future

classrooms.

Purpose of this Study

Empirical research studies have been conducted on a variety of

instructional approaches, such as question-answer relationships (Raphael,

1986), question-asking-reading (LCHC, 1982) reciprocal teaching (Palinscar &

Brown, 1984), collaborative strategic reading (Vaughn, Hughes, Schumm, &

Klingner, 1998), and Class-wide peer tutoring (Delquadri, Greenwood, Whorton, & Carta, 1986) which attempt to focus the teaching of reading around discussions that occur when students are organized socially. Literature circles are a popular approach to reading instruction that promotes social interaction and discussion as students learn to comprehend text. Teachers have heralded the merits of literature circles with testimonials and action-researchers have explored it, but as of yet, it has not been explored empirically (see Review of Literature, Chapter Two). The purpose of this study is to compare the effects of participation in literature circles (LC) to the effects of participation in a directed reading activity (DRA), and to determine the interactive effects of type of instruction (LC or DRA) with students' overall reading levels.

The research questions addressed in this study are:

1. Is there a difference between the reading comprehension scores of students participating in LC versus in DRA?

2. To what extent do the effects of type of instruction on reading comprehension interact with students' overall reading levels?

Definition of Terms

Literature Circles. Literature Circles are small discussion groups consisting of students who are reading the same text. Harvey Daniels (1994) defines a literature circle as a small, temporary reading group in which each member agrees to read a text and to assume specific responsibilities during discussion time. The students meet regularly, and their roles or responsibilities change at each session or meeting. When the group finishes reading and

discussing the text, group members determine the manner in which to share what they have read and discussed in a whole-class setting. The acronym LC will be used in place of the term literature circles for the remainder of this document.

Directed Reading Activity. Directed reading activity is a strategy for providing students with instructional support before, during, and after reading. The teacher takes an active role by eliciting prior knowledge, highlighting important vocabulary, providing a purpose for reading, and coordinates discussion after reading (Betts, 1946). The term directed reading activity will be replaced with the acronym DRA for the remainder of this document.

Summary

Literature circles are a widely used instructional approach that has not yet been subjected to research-based or scientific standards. Schools are filled with classroom teachers that proclaim the effectiveness of using this approach. Teacher and/or student popularity is no longer enough to support the use of instructional practices in classrooms today. Since recent federal mandates on student achievement in reading greatly affect funding and other important aspects of the operation of school and its personnel, it is imperative to conduct scientific studies on reading approaches such as literature circles.

CHAPTER 2

Review of Literature

LCs are currently a popular approach to reading instruction, and existing

research on their effectiveness is minimal and seldom empirical. This review of

literature consists of a description of LC, a discussion of their intended purpose,

an explanation of how the approach is most commonly used, a step-by-step

account of how the search for empirical research was conducted, followed by a

summary of the existing research. This chapter concludes with a proposed

theoretical orientation linking LC to sociocultural theory.

Definition of Literature Circles

LC are a form of literary engagement used in many classrooms today. The

purpose of this approach is to encourage students to read with a focus and then

report on and discuss what they read, determining for themselves what is

significant in their reading and why. LC have many forms, but essentially they

are small, discussion groups consisting of students who are reading the same

text.

LC encompass much more than similar approaches such as book clubs

(Raphael, Florio-Ruane, & Geroge, 2001) or peer-led discussion groups (Fountas

& Pinnell, 2001). Harvey Daniels (1994) defines a literature circle as a small,

temporary reading group in which each member agrees to read a text and to

assume specific responsibilities during discussion time. The students meet

regularly, and their roles or responsibilities change at each session or meeting.

When the group finishes reading and discussing the text, group members

determine the manner in which to share their comprehension in a whole-class setting.

Students are individually assigned roles they must assume that are reflected in the tasks they must accomplish and discuss when meeting with their group. There are many roles used for literature circle groups, but the roles most often utilized include the Connector, Word Wizard, Artful Artist, Passage Picker, and Question Asker. The purpose of the roles is to give students a focus for reading, as well as a task to help them through their own comprehension of the text. The Connector is the student responsible for making connections between the text and the real world. When discussing the text with the group, the Connector might start by saying, "This story reminds me of…". The Word Wizard is in charge of finding vocabulary in the text. The Word Wizard can identify words he or she does not know, finds interesting, or thinks are important to the story. The Artful Artist is responsible for visualizing what is happening in the story and turning that mental image into a drawing to share with the rest of the group. The Passage Picker's role is to find sections of the text that are important, interesting, or possibly difficult to understand. These passages are shared with the reading group and discussed. The person in the group responsible for creating questions to ask of other group members is the Question Asker. The questions can have answers that come directly from the text, or can be questions to ask other group members, or even questions that can only be answered by the author. Eventually students are guided away from strict, assigned roles; but initially, these roles provide structure and focus for participating in a literature circle.

Purpose of Literature Circles

A claim is made that LC contribute to the development of skillful and thoughtful readers at all grade levels (Daniels, 2002). Readers collaborate to build conversational skills for talking about texts in personal and thoughtful ways. LC can also function as a method of helping students generate their own ideas about what they read and provide conversational structures that help students and teachers break away from typical discourse patterns. They can gradually enable students to take responsibility for reading, comprehending, interpreting, developing discussion of text, and engaging in increasingly more complex levels of reading and thinking (Brabham & Villaume, 2000).

Search Method for Review of Literature

Given their widespread use, one might expect to find a research base for LC. However, the existence of research on this approach is scarce, and thus, it is important to conduct a search of the literature in a clear and systematic way. The term "literature circle" was used to conduct an initial search of literature and seven articles were identified. To identify more potential search terms, the *Handbook of Reading Research I (*Barr, Kamil, Mosenthal, et al., 1991), *The Handbook of Reading Research II* (Pearson, Barr, Kamil, et al., 1984) and *The Literacy Dictionary* (Harris & Hodges, 1995) were consulted. The following list of search terms were identified as being related to or associated with LC: book circle, book club, book group, literacy circle, literacy club, literature circle, literature club, literature group, reading circle, reading club, reading group.

The database PsycINFO was used to conduct the search, entering each term listed above, separated by the linking word OR. The pool of articles identified included 439 articles. The report of the National Reading Panel (2000) was consulted to determine appropriate terms related to reading achievement (p. 3-22) which are as follows: reading, reading achievement, reading achievement, reading comprehension, reading development, reading disabilities, reading education, reading materials, reading measures, reading readiness, reading skills, reading speed, remedial reading, and silent reading. An output of 56, 056 articles were obtained. This pool of articles was combined with the earlier search terms on LC using AND as the link between the two searches. The resulting combination identified 365 articles. Articles that did not pertain to reading or reading achievement and also those that focused wholly on learning disabilities were eliminated. Studies that pertained to LC, grouping, ability grouping, tutoring, social interactions/discussions, or book clubs yielded 29 articles. After close examination of these articles, it was clear that this search elicited no *empirical* research on the topic of study - determining the effect of participation in LC on reading comprehension.

As noted earlier, even with the extreme paucity of empirical research on LC, the approach is still extremely popular. Searching the topics of sessions presented at the annual meetings of the International Reading Association and National Council of Teachers of English over the past decades shows, by the substantial number of sessions devoted to LC, that they are becoming increasingly more so. A great number of articles on this approach have also been

published in *The Reading Teacher* in the past decade. Most often, publications are predominantly qualitative pieces written by classroom teachers and are limited to the implementation of and/or modifications to LC implemented in classrooms. Listing these studies and categorizing them is futile, as they overlap in many domains which are outside the scope of this study, and none are based on theory. A representative sample of the types of articles located on LC is discussed instead.

Existing Research

Most studies of LC simply corroborate what is already known about effective literacy practices. It has been reported that the use of LC create opportunities to develop oral language skills (Souvenir, 1997), and that the role of the teacher and appropriate teacher talk is important when facilitating LC (Short & Kaufman, 1999). It has also been suggested that LC aid comprehension through retelling (Hanssen, 1990) and that students are able to compare and contrast events in their reading to events in their own lives, as well as create their own questions, and think about the author's purpose (Keegen & Shrake, 1991). However, none of these were empirical studies.

Summary of the Review of Literature

Given their widespread use, one might expect to find a large research base for LC. However, the existence of scientific research on this approach is scarce. Studies have been conducted by classroom teachers, but most speak to the process of implementing or modifying LC for particular classrooms. Other studies of LC simply corroborate what is already known about effective literacy

practices. After extensive searches and thorough reviews of the literature, no empirical studies on LC have yet to be found.

Theoretical Orientation

As stated earlier, the belief of teachers that LC are an effective approach to teaching reading, and their increasing popularity, warrants investigation of their potential effects on teaching students to read. However, LC emerged out of classroom practice, and did not originate from theory. Teachers typically use LC with students as a way to generate responses to literature. Reader response theory stresses the importance of the reader's role in interpreting text and rejects the notion that there is one single or fixed meaning inherent in text (Rosenblatt, 1995). Literature circles may promote this theory since an outcome of participating in LC is that students respond personally to text. Although teachers typically use LC as a way to have students respond to literature, much more is happening that can and should be connected to theory. Therefore, a set of principles that promotes learning interactions proposed by theory needs to be articulated in order to understand how participation in LC affects reading comprehension.

It is important to first include a more complete definition and model of what is meant by the term *reading comprehension*. The following section attempts to articulate more clearly a definition of comprehension as well as offer an explanation of the processes that occur during reading. The purpose is to allow one to more easily predict what should happen during the reading process, and more specifically, during engagement in literature circles.

The RAND Model of Comprehension. The RRSG acknowledges that there does not seem to be one universally accepted definition for comprehension, and points out that most actually believe such a strict definition is unnecessary because the term is so widely used and understood by all. The (RRSG) has instead taken on the comprehensive project of outlining ways to improve instruction in reading and provide suggestions for research and development. For the purpose of this study, however, the definition of comprehension will be that which was created by the RAND group and stated earlier, in the introduction of this document. Reading comprehension is "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (Snow, 2002). The process of comprehension changes over time as readers develop cognitively, as they face more difficult text, engage in different experiences, and as they benefit from instruction. The RRSG believes that comprehension consists of three elements: the reader, the text, and the activity or purpose for reading.

To understand what is being read, a reader must have a broad range of abilities. These capabilities include cognitive abilities like attention, memory, visualization, and inferring, as well as motivation and knowledge. Motivation includes a purpose for reading, an interest in what is being read, and self-efficacy as a reader. Knowledge can include understanding of vocabulary, discourse, linguistics, and awareness of specific strategies. These abilities will vary by student, and can also vary within each student, depending on the situation. A

student might be a highly successful reader in some situations (with narrative text on a topic of interest, for example) and operate as a less proficient reader in another situation (as when reading text in a science class with content specific vocabulary). Readers already possess these capabilities and will use them in an activity like LCs. The role or focus assigned to the student may possibly interfere with the task, helping or hindering the process of comprehension. Thus, the abilities needed for reading comprehension can depend on the text being used as well as the specific activity students are engaged in while reading.

The features of a text greatly impact students' abilities to comprehend what they are reading. Readers must understand the exact wording of the text as well as the meanings being represented (Snow, 2002). Texts can be easy or difficult, depending on the elements in the text itself, as well as the interaction between the text and the ability of the reader. In LCs, the reader is given the text to read with a specific role or focus to follow. If the text is one the reader finds difficult or uninteresting, this may also interfere with the student's ability to understand what is being read.

A reading activity involves many purposes or operations that allow a reader to process the text. The purpose can be influenced by motivational factors like interest level or prior knowledge. The purpose can also change as the reader is reading the text, depending on the cognitive occurrences. The purpose can also be internally or externally generated. In school settings, the purpose is usually given to the students by a teacher (external) in the form of instruction, and students decide whether to comply with the given assignment. When

students have their own purpose for reading (internal) these can sometimes conflict with the external and cause problems in comprehension (Snow, 2002). In LCs, the student is given a role which directs the student to a purpose for reading. If the student is acting as the Word Wizard, for example, he or she is responsible for finding vocabulary words pertinent to the text. This could act as an aid or a hindrance to the student, depending on the reader, the text, or the interaction between the two.

The process of reading is complex and involves many elements. From a socio-cultural perspective, the process (which includes the type of instruction as well as the social interactions that occur) as well as the purpose for instruction, greatly impact comprehension. In LCs, the context, the reader, the text, and the activity, all interact and therefore must impact learning. While it has not been researched scientifically, literature circles seem to incorporate principles inherent in the model given by the RRSG, those in reader response and also socio-cultural theory. A complete explanation of the nature of LCs and a deeper articulation of their social structure is evident in that LCs seem to instantiate Vygotsky's (1978) socio-historical theory.

There are four central principles of sociohistorical theory that may explain the learning interactions when mediating students' participation in LC. The first principle pertains to social processes, the second refers to the zone of proximal development, the third relates to thinking and neurological development, and the fourth explains the use of psychological tools, such as language, musical

notations, and mathematical systems, and instrumental tools, such as computers, pencils, and books.

Principle One: Human Consciousness Develops Out of Social Processes. Children learn to self-regulate their activities from the outside. Sociohistorical theory (Vygotsky, 1978) proposes that cognitive structures are first structures located on the social plane. Later, they are internalized on the psychological plane as cognitive structures. Individual and social activities are also complementary. The thinking of the collective group influences the thinking of the individual, and in turn, the thinking of the individual affects the thinking of the group. Thus the thinking processes that mediate engagement in activities such as reading, writing, and listening, are first social processes that exist in the social relations in which students participate, and are later internalized as thinking structures. In a literature circle, one would see this principle emerge through the discussions of the groups. The Connector, for example, might vocalize ways a particular topic or theme in the text related to his or her life. Different group members would add their own experiences on this particular topic or theme, along with their own way of thinking. Discussion, negotiation, and critical evaluation should occur as students make meaning of the text.

Vygotsky's view of internalization is not the same as traditional American psychological theory; he did not believe that individuals make an exact copy of external activity and place it inside their heads. Rather, internalization of the structure of external activities transforms the internal psychological plane and creates an internal symbolic representation of external activity (Frawley, 1997;

Leontiev, 1981; Rogoff, 2003; Wertsch, 1991, 1995). Symbolic processes stimulate the reorganization of and communication among basic functional systems, such as memory, language, and thought. These systems mediate the learning and development of literacy and affect how information is selected, organized in memory, later accessed and recalled, and connected to new learning.

Principle Two: Learning Occurs In the Zone of Proximal Development. Vygotsky (1978) defined the Zone of Proximal Development (ZPD), as the difference between a child's "actual developmental level as determined by independent problem solving," and the level of "potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 46). Students seem to learn best with the assistance of others and gradually develop the ability to accomplish tasks independently - without assistance – that they were previously unable to accomplish on their own. From a sociohistorical perspective, an effective way to teach comprehension is to arrange the learning context so that students can participate in comprehension activities within a collective zone of proximal development. In a literature circle, students are placed in groups of four to six students. These students are all functioning at different levels and their shared interactions influence each other. With the guided assistance of a teacher and the support of members of the group, what the collective reading group can accomplish affects what the members are able to accomplish.

Principle Three: The Structure of Activity Affects Thinking and Neurological Development. Thinking and learning are influenced by the structure of the activity in which one participates. The sociocultural approach describes the ways in which participation structures, roles, and instrumental and psychological tools, mediate students' attainment of educational outcomes, such as accomplished reading. The structure of the reading activity directs attention to the meaning-making resources in the learning environment. Language is used to attend to and index these resources, stimulating the development of new neuronal pathways, reorganization of existing neuronal pathways, and transformation of functional systems (National Research Council, 2003). The external language mediating the activity is internalized as a meta-language for mediating thinking and framing and regulating activity, such as reading. The meta-language also mediates the transfer of learning and participation in language arts and other subject matter instruction. This newly developed form of behavior is called the "cultural form of literacy behavior" (Cole, 1996).

The framework of a reading lesson, such as LC, represents and mediates the desired thinking processes of students and mediates the thinking processes of the group, which are later internalized by individual students. Variations in the structure of a lesson will affect changes in how students think about and think with the information, concepts, and skills learned in the activity. In LC, this is observed in the use of reading roles. The roles students use provide a focus and purpose for reading, which affects the way students think about and plan their reading activity. The Question Asker, for example, learns how to ask questions of

himself/herself, the text, and the author, throughout the reading of the text. This form of questioning becomes internalized and the student begins to use this strategy each time he or she is reading, whether participating in LC or not. Students learn to integrate the use of learning tools into thinking, through the guided assistance of teachers and more accomplished students who participate in the learning activity. How well students are able to plan, monitor, and evaluate their reading activities independently, will be a direct indication of the quality of the lesson framework.

Principle Four: The Use of Instrumental and Conceptual Tools Affects Thinking. Research on the effects of tool use provides some insight into how their use affects thinking and may affect participation in reading instruction. Goody's (1977) historical analysis of the introduction of tools, such as lists, tables, and recipes, into human activity demonstrates how tools affect modes of thinking. Olson's (1994) exploration of the "world on paper" reveals how the inclusion of tools, such as reading and writing, computers, and study skills, transforms human cognition from thinking about things to thinking how things can be understood and represented.

When students are engaged in a reading activity arranged by a lesson framework, the reading instruction, strategy, language, and conceptual tools mediating the lesson intermingle with each other and form a thinking alloy comprised of the characteristics of the set of tools. From this point on, how students engage in reading instruction and regulate their participation is fundamentally changed. The characteristics of the changes are related to the

types of lesson structures and tools mediating activity. By participating in LC, students engage in many different roles, as described earlier. The processes used while participating in the LC (choosing texts, deciding on pages to read, having to perform different roles while reading, sharing ideas, discussing text, and sharing text with others) all intermingle and form a set of tools to mediate thinking and comprehension that stays with students, long after participation in the literature circle has ended.

Reading Research Based on Vygotsky's Principles

The four theoretical principles outlined above form a conceptual framework for LC. As noted previously, there are currently no studies published that connect LC to this theory, but there are other basic studies on reading instruction that support these principles. For example, Anderson, Nguyen-Jahiel, McNurlen, Archodidou, Reznitskaya, Tillmanns, & Gilbert (2001) studied the social influences and strategies of fourth-graders during small group discussions. They observed that when conceptual tools, like strategies for arguing, were inserted into discussions the tools were internalized by students. In their words, the use of the tool "snowballs". Once a student demonstrated a useful strategy during a discussion, it was taken up by other students and used with increasing regularity. This effect was found most often during discussions with open participation rather than teacher-controlled participation. This is precisely what was described in principle one; the thinking of the collective group influenced the thinking of the individual, and in turn, the thinking of the individual affected the thinking of the group.

Reading researchers have proposed for some time that a reading group is a social activity that is organized in such a way that both the collective reading group and each participant develop a ZPD. As an illustration, research on reciprocal teaching (Palinscar & Brown, 1984) and think-alouds (Davey, 1983) demonstrate that learning how to comprehend text and internalize reading strategies while reading is the result of the participation in a ZPD. In reciprocal teaching, the students are learning in a collective ZPD, but also using the roles (such as the summarizer, clarifier, predictor, and questioner) to help them attend to certain tasks. In a think-aloud approach, students consistently hear more accomplished learners vocalize their thought-processes aloud as they perform a task. They eventually internalize the think-aloud language and use it to mediate their reading activity, without the social support and language of another learner. Through the use of reciprocal teaching and think-aloud strategies, the student is learning with the assistance of others and gradually developing the ability to accomplish tasks independently. These newly learned tasks are ones that they were previously unable to accomplish on their own.

Class-wide Peer Tutoring (Delquadri, et al, 1986) is another example of a ZPD in use in reading instruction. It is a version of peer tutoring that combines peer-mediated practice, teacher-orchestrated procedures, and whole class participation. Students are paired with other students, most often ones who are more accomplished readers, who provide models and social support for thinking, questioning, and discussing the comprehension of text.

Raphael's (1986) work on question-and-answer-relationships (QAR) is also based on sociohistorical theory. The strategy uses cards similar to literature circle roles to mediate students' attention to the location of answers to questions about text, and the eventual creation of internalized thinking patterns.

Collaborative Strategic Reading (CSR) (Vaughn, Hughes, Schumm, & Klingner, 1998) is another example of an approach to reading in which groups of students act as a ZPD. Students work together in small groups and assume roles or a focus for reading and discuss the text, but the text is expository, rather than narrative.

As evident in these studies, the social structure, use of tools, group participation, and a setting which provides students with a ZPD mediates the construction of the four theoretical principles for reading instruction outlined earlier. LC seem to instantiate these principles of socio-historical theory.

Summary of Theoretical Orientation

The process of reading comprehension is complex and involves many elements. From a socio-cultural perspective, the process (which includes the type of instruction as well as the social interactions that occur) as well as the purpose for instruction, greatly impact comprehension. In terms of comprehension, the context, the reader, the text, and the activity, all interact and impact learning. Literature circles are an activity that most definitely incorporates the reader, the text, a role or focus for reading, and social interactions. It is important to determine how these elements interact during LC and whether or how they impact comprehension.

The four theoretical principles above form a possible conceptual framework for LC. Although LC do not originate from this theory, they seem to be connected conceptually. Through LC, students are situated in small groups; thus students may be participating in a social activity in which activities are demonstrated externally by others and come to be regulated internally by the individual, as outlined in principle one. Students receive social support as they read and discuss material and eventually what they can accomplish as a collective group, they can eventually accomplish individually, which is an example of principle two, the ZPD. Principle three appears to be represented in that the literature circle is a structured activity in which the act of participation, assignment of roles, and tools used, mediate the students' thinking and comprehension. Participants in LC are assigned roles which are conceptual tools that give students a focus and affect their modes of thinking, which is defined in principle four. All four theoretical principles appear to be represented, which gives reason to expect that principles of learning and development promoted by socio-historical theory mediate learning interactions in LC. This premise needs to be explored in future studies.

Summary

The popularity of LC continues to be reflected in current classroom practice. However, participation in LC has not been explored empirically; it simply does not currently exist. In order to continue to utilize this popular reading approach in classrooms, and to meet state mandates which would provide approval and funding, it is imperative to conduct scientific-based research on the

use of LC. It is important to validate this approach, especially given its popularity.

In addition to meeting state and federal guidelines on acceptable instructional

practices, and endorsing claims of classroom teachers, scientific research on LC

could extend their use globally. If LC prove to be an effective approach to reading

instruction, they may also be a viable alternative for attaining many other

instructional goals, such as learning to read expository text or diagnosing the

reading difficulties of students. With no empirical studies currently published,

scientific-based research on LC is clearly warranted.

CHAPTER 3

Methodology

This study investigated the effects of participation in LC by comparing the

reading comprehension scores of students who participated in LC and in DRA.

The interaction of type of instruction and students' overall reading levels was also

studied. This chapter first describes the setting, participants, research design and

sampling procedures used in this study followed by descriptions of the treatment,

materials, instruments, and procedures. The chapter concludes with explanations

of the methods used for data collection and data analyses.

Setting

The participants for this study consisted of eighth grade students enrolled

in a suburban public middle school located in the Southeast. This school was

selected because it was indicative of the demographics of the county in which it

resides. All classes contained diverse students who represented a variety of

ethnicities, aptitudes, and socioeconomic levels. The student composition of this

middle school was 39% Hispanic, 27% Black Non-Hispanic, 23% White Non-

Hispanic, 8% Asian or Pacific Islander, and 3% Multiracial. Approximately 23% of

these students qualified for free or reduced lunch and 7% were classified as

Limited English Proficient.

Participants

The sample for this study initially consisted of 89 students from four

different class periods: 14 students from class period one, 25 students from

period three, 24 students from class period four, and 26 students from class

period five. However, throughout the course of the research study, three students left the study, all from period three. Of the three, one student was consistently absent from class due to discipline problems, and two students withdrew from the school, after only two weeks into the study. Thus, the sample ultimately included 86 students (14 from period one, 22 from period three, 24 from period four, and 26 from period five). The student composition of this sample was 65% male and 35% female. The diversity of the participants was represented as follows: 45% Hispanic, 32% White Non-Hispanic, and 23% Black Non-Hispanic. Five percent of the students in this sample were classified as Limited English Proficient.

Research Design

This study used quantitative research methods. The research questions addressed in this study were as follows:

1. Is there a difference between the reading comprehension scores of students participating in LC versus in DRA?

2. To what extent do the effects of type of instruction on reading comprehension interact with students' overall reading levels?

A quantitative experimental mixed design was used to answer these research questions. A mixed design is an extension of the randomized block to two or more independent variables. In a mixed design, there are two or more independent variables; at least one is a non-repeated measure or between-subjects variable, and at least one is a repeated or within-subjects variable. In this study, the within-subjects variable was treatment, which was the type of instruction, and it included two levels (LC and DRA). The between-subjects

variables included order of type of instruction, class period, texts and corresponding assessments used, and overall reading achievement. The dependent variable in this study was a reading comprehension score, as measured by the students' scores on cloze assessments.

Both types of instruction were administered to all students, but the order of the type of instruction varied. All students were assessed with cloze assessments, but the reading texts used with each type of instruction also varied. There were four different class periods of students and the research protocol was as follows:

Class 1: LC with texts 1 – 4 then DRA with texts 5-8

Class 2: LC with texts 5-8 then DRA with texts 1-4

Class 3: DRA with texts 5-8 then LC with texts 1-4

Class 4: DRA with texts 1-4 then LC with texts 5-8

Sampling Procedures

The sampling frame consisted of middle school students attending schools in the geographical vicinity of the university where the researcher was a doctoral student. Initial correspondence consisted of a letter (see Appendix A) which contained a very brief synopsis of the study. These were faxed to the principal and/or reading coach of each middle school (those with a published, working fax number) located in the county in which the university is located, as well as the county north of the university. The research study was explained verbally in greater detail to those who responded.   The intention was to randomly select schools or classes from those able to participate. Initially, contact persons from

ten different schools contacted the researcher and expressed interest. Over the course of approximately two weeks, in the midst of discussions of timelines for research, eight schools ended correspondence by not returning phone calls or emails. Two schools maintained interest, which eventually narrowed to one school. The reading coach at this school shared the researcher's letter at a language arts department meeting the following week. An eighth grade language arts teacher who was already planning to implement LC, asked to participate in the study. The teacher was expected to maintain her current (2004-05) schedule for the 2005-06 school year, which consisted of teaching four class periods of approximately 20 – 25 students, for a total of approximately 80 – 100 students. Thus, although random sampling was attempted, a sample of convenience was ultimately obtained.

However, once the new (2005-06) school year began, and meetings between the researcher and teacher initiated, the researcher was informed that the teacher's schedule had changed slightly. The teacher still taught four class periods of students, but the number of students in period one was only expected to be 10-15 students (while the other class periods were still expected to have 20-25 students). The teacher had also been given class periods in which students were grouped by reading achievement. In the previous year, the teacher had a more diverse group of students in terms of reading achievement in each class period, which was expected to be the case again. Instead, period one was called an intensive class, and consisted of lower performing students, periods two and four were developmental classes, which consisted of students reading

on grade level, and period three was designated as an advanced class, with students performing above grade level. The students were assigned to classes based on their reading comprehension scores on the FCAT, taken at the end of the previous school year.

Treatment

All students in this study participated in both types of instruction: LC and DRA (see research schedule in Appendix B). The order of type of instruction varied by class period, as did the texts (short stories) used with each instructional method. The researcher trained the teacher in the protocol for LC. The teacher was already familiar with and practicing DRA. Both the teacher and the researcher acted as facilitators of LC and leaders of DRA throughout the study.

Literature Circles (LC). When students participated in LC, they were randomly assigned to groups of five or six students, were given a role to assume, and a short story to read. After reading the story independently and completing a role sheet, students discussed the story within their small group, each focusing on their role or task. Students were encouraged by the teacher and researcher to add to the discussion, whenever possible, not just when sharing their role sheet. The researcher trained the teacher in how to conduct LC, but both the teacher and the researcher took an active role in facilitating the approach throughout the study. Students rotated and switched to a new role each week, with each new text.

Directed Reading Activity (DRA). When students participated in DRA, they were not in small groups, but in a whole class setting. Each student was given a

short story to read independently, but first participated in a whole-class

discussion. Students were given a purpose for reading and led by the teacher

and researcher, discussed key concepts, created predictions for the plot, and

predicted vocabulary they might encounter in the text. Students read the text

silently and independently, and were then led in another whole-group discussion,

exploring the meaning of the text and confirming and denying previous

predictions. The researcher was already accustomed to the format of DRA as it is

commonly used in the school, but students were led by both the teacher and the

researcher in this approach and were encouraged to add to the discussion as

often as possible.

Materials

All students, during both types of instruction used the same reading

material but the order varied. Narrative texts were selected by the researcher

and the classroom teacher based on the grade level of the students, typical

interests of middle school students, topics suited to the current curriculum, and

mandates concerning textbook use. The teacher and reading coach assessed

the overall reading levels of all students (as a collective group) the previous year

and determined that the appropriate reading instructional level for eighth grade

students at this particular school ranged from sixth to eighth grade. Thus, texts

used in this study range from sixth to eighth grade in readability level.

To determine the combination texts to be used with each type of

instruction, stories were first listed alphabetically and numbered one through

eight. Numbered this way, the first four texts had grade levels of 6, 6, 7, and 8

respectively, and the second four texts had grade levels of 6, 6, 8, and 7,

respectively. Genre and topic were not taken into consideration when listing or

numbering the texts. Since each combination of four texts represented the same

reading levels, these groupings were used for this study (see Appendix I for

passage numbers, titles, and corresponding reading levels). The instructional

level is one in which students are able to read with 90-94% accuracy in word

recognition and 75-89% accuracy in comprehension (Tompkins, 2003).

Readability of each text was determined using Fry's (1968) readability and was

taken on three separate sections of each text. This readability formula was

chosen because it is a traditional method with a long history based on syllable

and sentence length and is fairly quick and simple to use. It should be noted,

though, that most readability scores, including Fry's, do not take into account

factors such as interest and motivation of students and are best used as a rough

estimate of reading level (Tompkins, 2003).

A literature circle tool-kit created (See Appendix F) for this study was

used. The kit contained the role sheets that students needed and suggestions for

conversation starters. The instructional protocol was given to students orally.

Instruments

Cloze Procedure. The dependent variable was the reading comprehension

score as determined by a researcher-constructed cloze assessment for each

text. Cloze has been defined as any procedure that omits portions of text and

asks readers to re-supply the missing elements (Oller & Jonz, 1994). It is a

measure of reading comprehension that is based on the psychology that humans

have a tendency to complete familiar, but unfinished patterns (Taylor, 1953). The reader has to reason and construct suggestions to fill gaps in text on the basis of evidence derived from the context. The cloze procedure was chosen for this study for its ease of objective construction and because of its similarities to fluent reading. The fluent reader is able to anticipate what is coming next in a language sequence based on clues in the text (Rye, 1985).

A cloze test can be developed in two different ways: by fixed deletion or by systematic (or rational) deletion of words in a passage. Fixed deletion requires that every nth word of a text be deleted and replaced with a blank. Research recommends a rate between every fifth and twelfth word (Alderson, 1979, 1980; Ranalli, 2002). Selective deletion is when the creator of the cloze chooses specific words for deletion, based on a particular purpose. Selective deletions may include content-specific words, or words belonging to particular grammatical classes (Oller & Jonz, 1994). It has been pointed out that novice creators of cloze assessments should use fixed deletion over selective as it helps avoid problems with bias or issues with technical competence needed for constructing the cloze assessments (Rye, 1985). A study by Bachman (1985) on cloze assessments created through fixed deletion versus rational deletion was conducted to determine if these two techniques would yield differences when used with four different groups of students (nonnative English speakers entering pre-university courses, nonnative English speakers entering full-time academic programs, nonnative English speakers who had completed one year of academic courses, and native English-speaking students). Results showed that both techniques

were equally reliable, both were correlated highly with other measures of language proficiency, and both made the same discriminations among groups being tested.

In both cases, deletions are replaced with blanks and test takers are asked to write in a word that fits into each of the blanks. In traditional cloze procedures, test takers are not given choices but are told to think of the word the author would have used and write it in the blank (Taylor, 1953). As a general rule, the larger the number of deleted items, the less chance there is of error being introduced because of poor items. Studies show assessments should contain at least 250 words and at least 50 deletions (Bormuth, 1968; Mobley, 1980; Ranalli, 2002).

The cloze may be scored in two ways: exact replacement of the deleted word or replacement with a grammatically correct synonym. Research has demonstrated that either method yields reliable and valid test scores that correlate significantly with reading comprehension (McKenna & Robinson, 1980; Meredith & Vaughn, 1978; Robinson, 1981). It has also been found that synonym scoring leads to subjective judgment rather than objective testing (Mobley, 1980) and that synonym scoring increases the likelihood of test error due to human interpretation (Rye, 1984).

A variation of cloze is to provide the test taker with choices for each blank. This kind of exercise is usually found to be used with students in primary grades or with less able secondary students. However, it has been shown that this technique causes more attention to be placed on the list of alternatives rather

than the context. This process also limits the context to one sentence and the reader is therefore not being encouraged to develop the ability to search outside the immediate sentence for important clues. This may encourage students to think briefly about the meaning of a particular word from the list of choices, but it is not likely to encourage them to generate language based on appreciation of the passage or demand much thought about meaning of the passage (Oller & Jonz, 1984).

There is evidence for the validity of cloze reading tests. When compared to multiple-choice tests on the same material, correlations of .82 were found, and correlations of .78 and .73 were found between cloze scores and scores on two standardized reading tests (Rye, 1985). There is also evidence for the reliability of cloze tests. Using a test-retest method for calculating reliability, Taylor (1953) obtained coefficients which ranged from .80 to .88.

Based on this research, for the purposes of this study, the researcher created a cloze passage (see Appendix C) for each narrative text using the fixed-deletion method (every 5th word) and used exact word scoring. All assessments contained at least 250 words and at least 50 deletions.

To ensure that the 5th word deletion method was effective, assessments were piloted the summer prior to the start of the study with five different classes of approximately 30 eighth-grade students in a school with a similar demographic to the school in this study. Cloze assessments were given to classes of students to complete prior to reading the stories and then given again after having read the story to examine test-retest reliability. These pretest/posttest comparisons

were conducted on six of the eight reading texts. Due to conflicts with class periods and teacher scheduling, two assessments were not given in this format. Instead, for two of the stories (texts numbered 3 and 4), the cloze assessments were given to one class of students prior to the reading of the story, and to a different class of students after reading the story.

Using a test-retest method for calculating reliability, correlation coefficients were obtained using scores from cloze assessments taken before reading the story and then again after reading the story. Correlation shows whether and how strongly pairs of variables are related. The shorter the time gap between testing, the higher the correlation is likely to be. High test-retest reliability means that students would probably get similar scores if tested at different times. The correlation coefficients obtained from these eight assessments ranged from .10 - .72. Most of these coefficients were between .5 and 1, showing that, as expected, when the same group of students took the assessment in pre and post form, there was a relationship between the two scores. In addition, correlation coefficients were calculated to determine whether the *same* groups of students produced scores that correlated on two *different* cloze assessments, and those coefficients ranged from .09 -.3 (see Appendix D). These correlation coefficients were small, showing that, when the same group of students completed the assessments on two different stories, there was little relationship between those scores.

To determine whether the cloze assessments were measuring what they were intended to, the mean scores obtained before and after reading each text

were compared. The expectation was that the scores would be lower in the pretest format, when students took the assessment without having read the text. The difference in means for each text in pretest and then posttest format ranged from 9.01 – 34.07 (see Appendix D). With all eight texts, the mean was indeed lower for the pretest format (when students completed cloze passages prior to reading the text) than in the posttest format (when students completed the cloze passage after reading the text). This was true even in the case of texts numbered 3 and 4, in which different groups of students completed the cloze assessment in pretest format than in posttest format. Based on these results, all eight texts and corresponding cloze assessments were found to be reliable and valid and appropriate to use for this study.

Florida Comprehensive Assessment Test. To get a comprehensive picture of overall reading achievement, scores on the reading comprehension portion of the Florida Comprehensive Assessment Test (FCAT) were obtained and recorded. Reported reliability indices for all grade levels are reported to be above .90. The FCAT test has content validity and shows no indication of test item bias (Department of Education, 2005).

There are two versions of the FCAT reading test: a criterion-referenced test (CRT) and a norm-referenced test (NRT). The NRT is designed to compare the performance of Florida's students to the performance of other students in the nation. The correlation between the CRT and NRT scores for all students who were tested on these components for grade 8 is between .70 and .81. The CRT is tied to grade level expectations of the Sunshine State Standards in language

arts, mathematics, and other academic areas. The content of this portion of the

FCAT was created from state standards which were created by classroom

teachers and adopted by the State Board of Education. The FCAT is designed to

measure performance relevant to those standards. At the eighth grade level, for

the reading comprehension portion, the standard measured was the ability of

students to determine the main idea and identify the relevant details, facts, and

patterns of the organization of the text (Florida Department of Education, 2005).

The cooperating school provided the CRT scores for students participating in this

study. FCAT scores were only obtained and recorded for students who returned

signed permission slips, allowing access to their academic records.

Implementation Checklist. To ensure proper implementation of LC, the

researcher used an implementation checklist, which was a modified version of

the Intervention Validity Checklist (IVC) that Vaughn, Hughes, Schumm, and

Klingner used to study Collaborative Strategic Reading (CSR) groups (1998).

The researcher and teacher completed the checklist (see Appendix E) each

week when observing the class periods participating in LC. During the first and

last week that each class period participated in LC, a second researcher

observed and also completed the checklist.

The checklist consisted of the following eight statements: (1) Students are

given time to read the text, (2) Students work in groups with specified roles, (3)

Children spend time discussing the text, (4) The teacher monitors student

understanding during group work, (5) Students take turns speaking, (6) Each

group member contributes to the conversation, (7) The students are focused on

their particular roles, and (8) The group demonstrates understanding of the text. Each statement was given a rating for each behavior or action listed. A zero was to be used as the rating if the behavior was not observed, a one was to be used as the rating if it was observed on a limited basis, and a two was to be used as the rating if the behavior or action was observed consistently. The checklist was used as a measure of fidelity each week for the duration of the study. Having two researchers and the classroom teacher complete the checklist ensured inter-rater reliability.

Procedures

The participating classroom teacher in this study received training from the researcher on the instructional protocol for using LC before the start of the study. A literature circle tool kit (see Appendix F) was provided which consisted of student role sheets, suggestions for conversation starters, a list of sample text to use for practice, and a copy of suggested readings from *Literature Circles: Voice and Choice in the Student-Centered Classroom* (Daniels, 1994). Two weeks prior to the start of the study, the researcher presented the tool kit to the teacher, went over the different student roles, the methods for training students to use roles, and reviewed the format for LC. The teacher had limited exposure to LC but was already proficient in DRA, as it was the predominant method of instruction in reading at the target school.

Parental permission forms (see Appendix G) were given to the teacher to disperse and were read aloud to all students at that time. Students were given the opportunity to ask questions about the study. Approximately one week prior

to the study, and when parental permission forms had been returned, student assent forms (see Appendix G) were given out to each student. The researcher also read these aloud to the students, making sure they understood what was being asked of them, and answered all questions. Then, the researcher and the teacher spent the remainder of the week with students going over expectations (behavioral and academic), discussing the format and structure for each class period, and training students on the use of different roles.

Training began in August and consisted of two days per week for two weeks. The actual study was to begin the very next week. However, there was an unexpected break in the schedule of approximately two weeks between the end of training and the start of the study due to a last minute test preparation event at the school followed by a week of unforeseen school closures due to a hurricane threat. Therefore, the actual study began the first week in September. Students participated in LC two times per week for four weeks, and also participated in DRA two times per week for four weeks. Four different classes of language arts students (all taught by the same teacher) were the target population, and the order of type of instruction varied by class period. The researcher led the instruction with the help of the teacher on Tuesday and Wednesday of each week. A second researcher (a fellow doctoral student of the researcher) also came in to observe and complete the implementation checklist.

The study had one other unexpected break, due to a two week closure of schools in November, as a result of another hurricane. Fortunately, this interruption came as students were about to switch instructional methods (from

LC to DRA or from DRA to LC, depending on the class period) and did not seem to interfere with the flow of instruction. The researcher and the teacher reviewed the instructional method once more when the study resumed, reminding students they would be switching to the other type of instruction.

Therefore, the study lasted slightly longer than the expected 8 weeks; the training started in August, the actual study started in September, and ended during the last week in November (see research calendar in Appendix H). The time frame of the research study fortunately still fit the request and needs of the teacher and administrative personnel, as it did not interfere with start-of-school procedures, winter holidays, or state standardized preparation and testing.

Each student in the participating school had already taken the reading comprehension portion of the FCAT, at the end of the previous school year. The researcher obtained permission for access to these scores from students who would be participating in the study. FCAT scores were used to determine an overall reading level for each student. It was explained to students and parents that they did not have to provide the researcher with access to these scores if they did not wish to, and it would not affect their grade in the teacher's course in any way.

Students were randomly assigned to LC groups of between four and six students to promote diversity of groups as well as encourage the likelihood of discussion among groups. Students were also randomly assigned to one of five roles when first participating in LC. Since students rotated through the roles, random assignment was a logical starting point. Daniels (1994) has found that

random assignment limits problems and student arguments. In this study, students kept the same role for two sessions and then rotated at the end of session two, which was also at the end of each week (and at the conclusion of a reading passage). Students were trained in all roles prior to the study and had four weeks to rotate roles. This allowed each student the opportunity to participate in the same role for one week (two sessions) and also permitted each student to assume four of the five possible roles. Daniels (1994) has also found that allowing students to keep the same roles for the entire length of participation in LC does not produce good results. Students are not able to internalize different purposes for reading, boredom was pronounced, and disputes arose about inequities of workload (p.104). In this study, students participating in LC were responsible for reading and discussing one narrative text per week (two sessions) and were assessed on that material at the end of each week (for a total of 4 assessments). The text-based cloze assessment was developed and piloted by the researcher as described earlier.

Students participating in DRA did so for two class periods each week. Instruction consisted of the following: the researcher and teacher gave the purpose for reading, students participated in whole-group instruction on this purpose for reading, and students then read the material independently. Students were then led by the teacher and the researcher in whole-class discussion and were assessed on the material read. The text-based cloze assessment was developed and piloted by the researcher. The cloze assessments and reading material for DRA was identical to that used for LC.

Data Collection

Quantitative data were collected by the researcher and input SPSS for analysis each week for the duration of the research study. Data collection is described extensively by variable.

Type of Instruction. To compare students' reading comprehension scores after participation in LC and DRA, students participated in each type of instruction for four weeks. Each week students read a selected text and then completed the corresponding cloze passage. The researcher and the classroom teacher administered these cloze assessments each week, for a total of eight assessments (4 for each type of instruction). The cloze assessments given after each narrative text were scored by the researcher for correct answers. Scores were shared with students, but only recorded for students who had returned signed parental permission letters.

By individual class period, for each student, a raw score and the score as a percentage was recorded for each cloze assessment taken. Because number of items on each cloze passage differed slightly, the score as a percentage was used for all analyses. Then, through SPSS, an average (or total) score was calculated across the four assessments given with LC to give an average or total LC score. The same process was repeated with the scores from the assessments taken when these same students participated in DRA, to give an average or total DRA score. These scores were input as data into SPSS. The scores were then analyzed as described in the Results section in Chapter Four.

Students in periods one and three read texts numbered one through four for LC sessions and texts numbered five through eight for DRA sessions. For the purposes of data analysis, these students are referred to as Group One. Students in periods two and four read texts five through eight for LC sessions and texts one through four for DRA sessions. For the purposes of data analysis, these students are referred to as Group Two.

Texts. The eight short stories or texts read for each type of instruction varied by class period. Because there were two different combinations of texts and corresponding cloze assessments used depending on type of instruction and class period, there was a need to determine if there was an effect due to these combinations. Therefore, the scores on the cloze assessments were grouped and coded for analyses. If students read texts numbered one through four, the scores on these four corresponding cloze assessments were averaged to create a total score, which was named Assessment One. If students read texts numbered five through eight, the scores on these four corresponding cloze assessments were also averaged to create a total score which was classified as Assessment Two. These combinations were coded and input into SPSS for analysis.

Overall Reading Level. To determine if the type of instruction (LC or DRA) interacted with overall reading level, a score was obtained to reflect students' overall reading achievement. FCAT reading comprehension scores were recorded for all students who returned signed parental permission letters which allowed access to their academic records. These were reported to the school as

a scale score (ranging from 100 – 500) with a corresponding achievement level of 1 to 5. School personnel converted these achievement level scores into a code of 1 (low), 2 (average), or 3 (high) and used for placement in language arts and reading classes. If a student had an achievement level of 1 or 2, a code of 1 was given, signifying that the student had performed low on the reading comprehension test. If the student had an achievement level of 3, a code of 2 was given, which meant the student had performed on an average level on the reading comprehension test. An achievement level of 4 or 5 was converted to a code of 3, signifying that the student performed above average on the reading comprehension portion of the state-standardized test. These codes reflected an overall reading level for each student as high (3), average (2), or low (1).

Class Period. The target school had already placed students in different class periods by reading achievement. To confirm that these placements were correct, analyses were conducted in SPSS by the researcher. The scale score was first entered into SPSS for each student. This is the score used to report test results on the reading comprehension portion of the FCAT. Scale scores on this test range from 100–500 for each grade level and content area (Department of Education, 2005)**.** The school designated period one as the intensive class and this is the class in which students who scored low on the reading comprehension portion of the FCAT were to be placed. Periods two and four were called developmental classes and were designed to have students with average reading comprehension scores, and period three was designated as the

advanced class, and should therefore have students who earned the highest comprehension scores.

A comparison of means was conducted to calculate scale score averages by class periods in order to first determine if students were placed correctly by the school. Students were in fact, placed into the different class periods correctly as period one (the intensive class) had the lowest average scale score of 263, periods three and five (the developmental classes) had scores that were similar to each other and that were higher than the average score for period one (300 and 320, respectively), and period four (the advanced class) had the highest average of all four periods, which was 359.

Since the school also provided corresponding FCAT achievement levels for each student (ranging from 1 to 5), a comparison of means was conducted to calculate achievement level averages by class periods as a second measure to confirm that students were placed correctly by overall reading achievement. Results were expected to be the same as noted earlier; the average achievement level for students in period one should be approximately 1, the average achievement level for students in periods two and four should be approximately two, and the average achievement level for students in period three should be approximately 3.

It was determined that students were indeed placed in the correct class periods as students in period one had an average achievement level of 1, students in periods two and four had average achievement levels of 1.6 and 2, respectively, and students in period three had an average achievement level of

2.75. These codes (of 1, 2, or 3) were used in analyses (as described in the Results section in Chapter Four) in this research study to determine which type of reader benefited most from each type of instruction.

Data Analysis Procedures

At the completion of data collection and input, pre-analysis checks were performed using SPSS to ensure homogeneity of variance and normality. Standard deviations were obtained to ensure they were consistent and data were examined by visually checking histograms. Data had normal distributions and no violations were present.

A quantitative experimental mixed (or split-plot) design was used in this research study. The within-subjects variable was treatment. The between-subjects variables included order of type of instruction, class period, group, and overall reading achievement. The dependent variable in this study was the reading comprehension score, as determined by the students' scores on cloze assessments (see Table 1).

Table1

Research Protocol

Group	Class Period	Assessment	Treatment	Reading Level
ONE	1	One then Two	LC then DRA	Low
	3	One then Two	DRA then LC	High
TWO	2	Two then One	LC then DRA	Average
	4	Two then One	DRA then LC	Average

Assessment One = Mean from texts 1 – 4; Two = Mean score from texts 5-8

Descriptive statistics were first used to examine and compare means of independent variables. Split-plot ANOVAs were conducted to determine the main effects and interactions of (1) treatment and group, (2) treatment and class period, and (3) treatment and overall reading level. Dependent samples t-tests were used when necessary and all results are described comprehensively in Chapter Four.

CHAPTER 4

Results

In this section, quantitative data procedures are described and results are reported for the two research issues: (1) the comparison of reading comprehension scores of middle school students who participated in LC versus DRA, and (2) the extent to which the effects of type of instruction on reading comprehension interacts with students' overall reading levels. The correct implementation of LC was also an important issue, which was examined through the use of implementation checklists completed weekly by three raters.

Data Analysis

Quantitative data were collected and used to conduct analyses of all variables. This is a mixed or split plot design with one within-subject variable, which was treatment (or type of instruction). Treatment was confounded by many between-subject variables, including texts and corresponding cloze assessments used with each treatment, class period, and students' overall reading levels. For statistical analysis, students were classified as belonging to Group One or Group Two. Group one is the term used for students who read texts numbered one through four and took the corresponding cloze assessments with treatment LC. Group two is the term used for students who read texts numbered five through eight and took corresponding cloze assessments with treatment LC. Results discussed in this chapter are organized by the variables mentioned above

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(treatment, group, class period, and overall reading level) as a way to explain and unravel the intricacies of the design of this study.

Treatment. Quantitative data were collected to answer the question: Is there a difference in the reading comprehension scores of students participating in LC versus DRA? As noted earlier, this was a mixed or split plot design with treatment (type of instruction) as the within-subjects variable. A comparison of means was first conducted and showed that students' total mean scores were 0.9 percentage points higher after they participated in LC than DRA (see Table 2). A t-test was then conducted and the difference in overall mean scores for all students was not statistically significant (t (85) = .884, p = .379 (two-tailed)).

Table 2

Descriptive Statistics of Treatment by Group

Group	LC		DRA		LC - DRA	
	M	SD	M	SD	M	SD
One	52.6	14.3	62.8	13.3	-10.2	6.7
Two	63.4	8.1	53.3	9.3	10.1	5.8

Students in Group One had lower mean scores after they participated in LC and students in Group Two had higher mean scores after they participated in LC. Because students were classified as Group One or Group Two according to the combination of texts and corresponding cloze assessments they were given for each instructional method, it was important to next look at whether there was a between-subjects effect for group and treatment.

A split plot ANOVA was conducted with treatment as the within-subject variable and group as the between-subject variable to determine if there was a main effect of treatment, a main effect of group, and/or an interaction between the two variables. Results showed that there was no significant main effect of treatment (F (1, 84) = .005, p = .945) and no significant main effect of group (F (1, 84) = .068, p = .796), but there was a very strong statistically significant interaction of treatment and group (F (1, 84) = 224.29, p = .000).

To explain this strong interaction, simple effects of treatment at each level of group were calculated and the overall difficulty levels of the two assessments were investigated.

Groups. Scores on each cloze assessment were recorded for each student, as described in Chapter Three. An average (or total) score was computed in SPSS for Assessment One (cloze assessments based on texts numbered one through four) and for Assessment Two (cloze assessments based on texts numbered five through eight). Students who had LC with Assessment One were classified as Group One and students who had LC with Assessment Two were classified as Group Two. The simple effects of treatment with each group were conducted and showed that the effect of treatment *does* depend on group. When students had Assessment One with LC (Group One), there was a statistically significant effect (t (37) = - 9.29, p = .000 (two-tailed)). Because the value of t is negative, this shows that the mean DRA score is higher (and LC score is lower) when students had Assessment One with LC. When students had Assessment Two with LC (Group Two), there was again a statistically significant

effect (t (47) = 12.07, p = .000 (two-tailed)). Because the value of t is positive, this shows that when students had Assessment Two with LC, the mean LC score is higher (and DRA score is lower). This is also represented visually (see Figure 1) in a line graph which depicts the average score on each treatment, by group. The solid line depicts the LC average scores of students in Group One and the dashed line shows the average DRA scores of students in Group Two.

Figure 1

Graph of Assessment Scores by Group
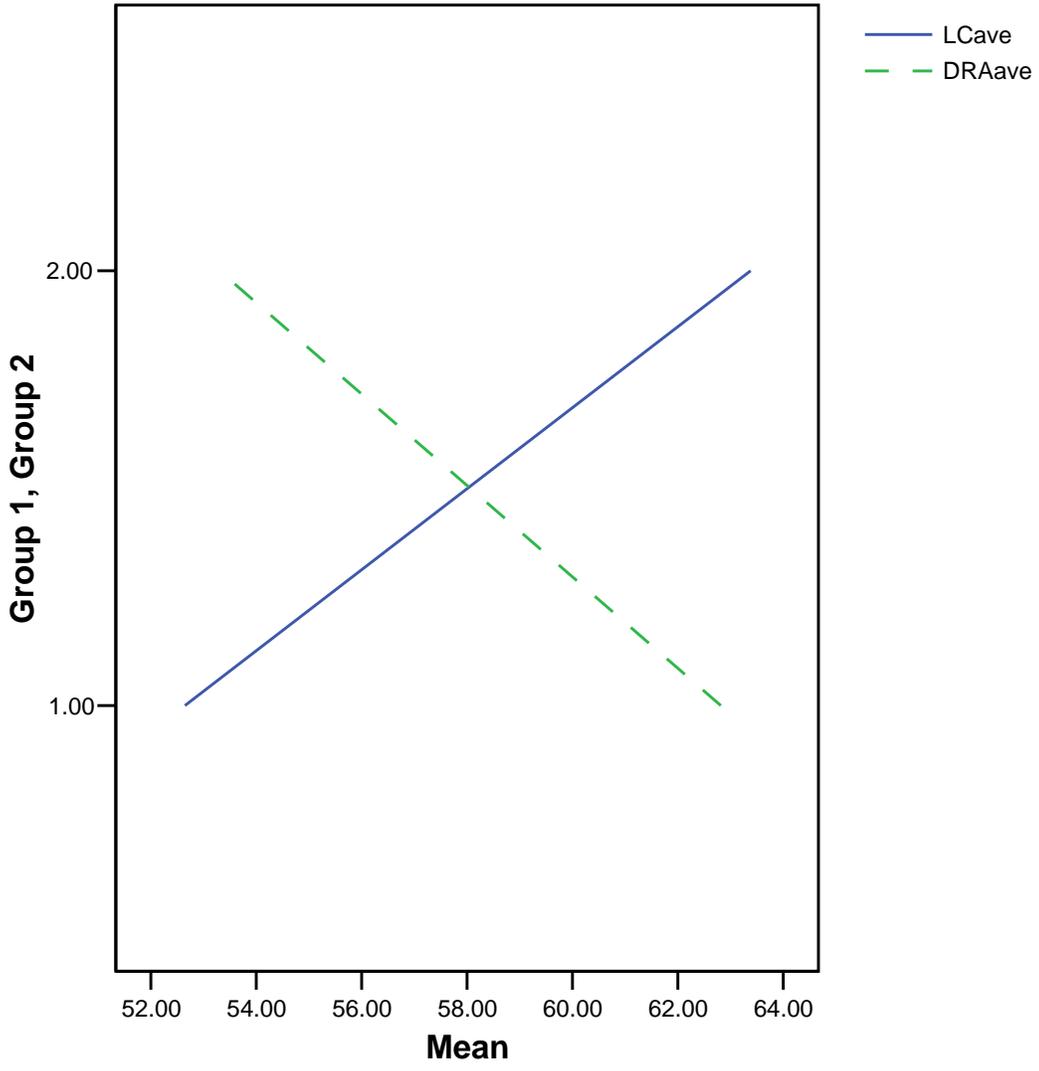
A dependent samples t-test was then conducted to evaluate the difference between Assessment One versus Assessment Two. Results confirmed that the mean difference between Assessments One and Two is statistically significant (t (85) = - 15.16, p = .000). Examining the total mean first shows that the average score of all students on Assessment Two was approximately 10.1 percentage points higher than the average score of students on Assessment One (62.0 – 51.9 = 10.1, as shown in Table 3). These results imply that Assessment One is more difficult than Assessment Two. Looking at the descriptive statistics of each assessment by individual class period also confirms that the mean scores are lower on Assessment One, regardless of type of instruction.

Table 3

Descriptive Statistics of Assessments by Class Period

Class Period	Assessment One		Assessment Two	
	M	SD	M	SD
1	**41.2**	**13.9**	56.5	16.6
2	52.3	10.9	**59.9**	**9.8**
3	**59.3**	**9.7**	66.5	9.5
4	54.2	7.8	**65.2**	**7.9**
TOTAL	51.9	11.72	62.0	11.1

Scores in bold indicate assessment taken with treatment LC

Earlier results showed there was no main effect of group, but there was a significant interaction of group and treatment. However, it must also be noted that two class periods were nested within each group. The class periods placed in each group contained students who had the same assessments for each treatment. Thus, a comparison of means of assessments was also conducted (see Table 3) by class period. It is important to look at how the type of instruction might be affecting students based on class period.

Class Period. Students were placed in class periods by overall reading achievement levels. Based on FCAT reading comprehension scores, period one contained low-performing students, periods two and four consisted of average-performing students, and period three had high-performing students.

A split plot ANOVA was conducted with treatment as the within-subject variable and class period as the between-subject variable. This was done to determine if there was a main effect of treatment, a main effect of class period, and/or an interaction between the two variables. Results showed there was no significant effect of treatment ($F (1, 82) = .967$, $p = .328$) but there was a significant effect of class period ($F (1, 82) = 6.38$, $p = .001$) and there was a strong statistically significant interaction of treatment and class period ($F (3, 82) = 96.67$, $p = .000$). This interaction means that the effect of treatment does depend on which class periods students were placed. Data suggest that treatment with LC may have caused students in periods one and three to perform worse on the reading comprehension measure, but appeared to have helped the performance

of students in periods two and four. This concept is further clarified (see Table 4)

by examining the descriptive statistics of treatment by class period.

Table 4

Descriptive Statistics of Treatment by Class Period

Class Period	LC		DRA		LC - DRA	
	M	SD	M	SD	M	SD
1	41.2	13.9	56.5	16.6	-15.3	5.6
2	59.9	9.8	52.3	10.9	7.6	5.7
3	59.3	9.7	66.5	9.5	-7.2	5.5
4	65.2	7.9	54.2	7.8	11.0	5.8
TOTAL	58.4	12.6	57.5	12.2	0.9	11.9

However, as mentioned previously, different texts and corresponding

cloze assessments were used with each type of treatment, by different class

periods. Assessment One was the score earned on cloze assessments that

matched texts numbered one through four and it was given to students in class

periods one and three for LC. Assessment Two was the score earned on

assessments that matched texts numbered five through eight and it was given to

class periods two and four for LC. The predicted total difference between these

two assessments was calculated earlier in this chapter (see Table 3) for the total

number of students and found to be 10.1. To determine if the mean difference of

these assessments for each class period was different from 10.1, these

differences were calculated in SPSS (see Table 5) and labeled variable *D*. Single

sample t-tests were conducted to determine if the observed and expected

difference for *D* was significant for each class period. Results were not significant

for periods two (t (21) = -.891, p = .383) or four (t (25) = .776, p = .445). Results

showed that the difference in means between the two assessments was

statistically significant for scores earned by students in period one (t (13) = 3.43,

p = .005) and scores earned by students in period three (t (23) = - 2.59, p =

.016). The effect size (Cohen's d) was calculated for each significant result

(period one and period three) and found to be .91 and .53, respectively. Due to

the significant difference of the difficulties of each assessment found earlier, the

expected *D* value should be 10.1 for all class periods (see Table 5). The

observed value for scores from students in period one was 15.27, which

suggests that treatment LC might be lowering the LC score. The expected *D*

value should also be 10.1 for scores from students in period three, but the

observed value was 7.2, which suggests that treatment LC might have helped

raise the LC score for these students.

Table 5

Deviations in Expected Means by Class Period

Class Period	Observed *D*	Expected *D*	Deviation	Significance
Period 1	15.27	10.1	5.17	.005
Period 3	7.2	10.1	- 2.90	.016

Since students were placed (by the school) into class periods based on overall reading levels based on their FCAT scores, an analysis was conducted to determine if the type of instruction might be affecting students based overall reading level, regardless of class period.

Overall Reading Level. Quantitative data were collected to answer the question: To what extent do the effects of type of instruction on reading comprehension interact with students' overall reading levels? As described in Chapter Three, FCAT reading comprehension scores were used to determine an overall reading level for each student and results confirmed that students were correctly placed into class periods as intended by the school. Students with an overall reading level of one performed low on the reading comprehension portion of the FCAT, those with a reading level of two had an average performance, and those with a reading level of three were considered to have a high overall reading level. Even with the assumption that achievement levels and scale scores were accurate measures of overall reading achievement, and that students were placed correctly into class periods, it was still important to determine if type of instruction produced different results for different types of readers (low, average, or high), regardless of class period.

A split plot ANOVA was conducted with treatment as the within-subject variable and overall reading level as the between-subject variable. Results showed that effect of treatment was not significant ($F (1, 83) = 1.185$, $p = .279$), but there was a significant effect for overall reading level ($F (2, 83)$, $p = .000$) as well as an interaction between treatment and overall reading level ($F (2, 83) =$

4.34, p = .016). Descriptive statistics (see Table 6) show that students with low

and high overall reading levels had lower LC scores, while students with average

overall reading levels earned higher LC scores.

Table 6

Descriptive Statistics of Treatment by Overall Reading Level

Overall Reading Level	LC		DRA	
	M	SD	M	SD
1 (Low)	50.4	14.1	51.6	13.6
2 (Average)	62.1	7.6	55.4	7.9
3 (High)	64.4	9.4	66.3	8.3

However, Assessment One was the score earned on texts numbered one

through four and it was given to students in periods one (designated as low

performers) and period three (designated as high performers) for LC.

Assessment Two was the score earned on texts five through eight and it was

given to class periods two and four (average performers) for LC. It was important

to first determine the breakdown of students by reading achievement level, rather

than class period. It was found that, of the 86 students in the sample, 32 were

classified as having low reading achievement levels, 26 were categorized as

having average reading levels, and 28 were determined to have high reading

achievement levels. There was overlap in that some students with low reading

achievement levels had been placed with average students in periods two and

four, and a few students with average reading achievement levels had been placed with high students in period three.

The predicted total difference between these two assessments was calculated earlier in this chapter for the total number of students and found to be 10.1. To determine if the mean difference of these assessments for each reading achievement level was different from 10.1, these differences were calculated in SPSS (see Table 7) and labeled variable *D*. One sample t-tests were conducted to determine if the observed and expected difference for *D* was significant for each reading achievement level. For students with average reading achievement levels, results were not significant (t (25) = .053, p = .958). Results showed that the difference in means between the two assessments was statistically significant for scores earned by students with low reading levels (t (31) = 2.46, p = .020) and scores earned by students with high overall reading levels (t (27) = - 2.99, p = .006). The effect size (Cohen's d) was calculated for each significant test (low performers and high performers) and found to be .43 and .57, respectively. Due to the significant interaction of group and treatment found earlier, the expected *D* value should be 10.1 for students with low reading achievement levels. The observed value was 12.7, which suggests that treatment LC could be lowering the LC score. The expected *D* value should also be 10.1 for high performing students, but the observed value was 7.1, which implies that treatment LC might be helping raise the LC score for these students.

Table 7

Deviations in Expected Means by Overall Reading Levels

Reading Level	Observed *D*	Expected *D*	Deviation	Significance
1 (Low)	12.7	10.1	2.61	.020
3 (High)	7.12	10.1	- 2.98	.006

As expected, these results corroborate those found when analyses were conducted by class period. After examining data for effects of treatment, group, class period, overall reading level, and interactions of these variables, it was important to determine inter-rater reliability for the implementation of treatment. Because DRA was already the current practice at the target school, and LC were the focus of this study, LC were observed weekly by the teacher and two researchers and implementation checklists were completed.

Implementation of Literature Circles. Examining the effects of participation in LC on reading comprehension is the focus of this study and therefore it is important to determine if this type of instruction was implemented correctly and consistently. The ratings (0, 1, or 2) given on the Implementation Checklist by the teacher and researcher were consistent each week for each statement during weeks two through eight of the research study. During those weeks, both the teacher and the researcher gave each statement a rating of 2 (happens consistently) for each class period, signifying that LC were being implemented correctly and consistently. A second researcher observed and completed a checklist during the first and last week of participation in LC (which occurred

during weeks 1, 4, 5, and 8) and those results are described in further detail below.

During the first week of the study, class periods one and two participated in LC, so those class periods were observed and implementation checklists were completed by the teacher and both researchers. The ratings of the teacher and both researchers were consistent and showed as each rater gave statement seven ("the group focused on their particular roles") a rating of 1 (happens on a limited basis). All other statements received a rating of 2 (happens consistently) by each rater. For class period two, the teacher and both researchers gave statement five ("students take turns speaking") a rating of 1 (happens on a limited basis), and all other statements received a rating of 2 (happens consistently) by each rater. The classroom teacher commented later that students in period two were often more talkative and lively during class discussions so she was not surprised by the ratings. When these same class periods were observed again in the final week of participating in LC (week four), all three raters gave ratings of two for each statement, showing that LC were implemented correctly and consistently for these two groups of students.

During the observation of students participating in LC during class period three, as noted before, the teacher and researcher had consistent ratings for weeks six through eight of the study. For the fifth week of the study (the first week these students participated in LC), the teacher and researcher had slightly different ratings for period three. The second researcher also observed and

completed the checklist during the first and last week of participation in LC (weeks five and eight of the study).

The teacher gave all statements a rating of two except for statements 5 ("students take turns speaking") and 6 ("each group member contributes to the conversation"), which received a rating of 1. The two researchers gave all statements a rating of two except statements 5, 6, and 3 ("children spend time discussing text") which received a rating of 1. All three raters had 100% agreement and gave all statements a rating of 2 when checklists were completed during week 8 of the study. Thus, it appears that period three may have gotten off to a slower start in exhibiting behaviors expected during participation in LC, but by the second week of participating in LC, received a rating of 2 ("happens consistently") on all statements of behavior.

Period four was the only class period to receive a rating of two on all statements by all raters each and every week of the study. All other class periods received a rating of one on at least one statement during the first week of participating in LC, but improved by the second week, receiving a two on each statement by each rater for the duration of the study.

Summary of Results

Due to the many different variables, each confounding the results, this was a complex design with results that are perhaps arduous to decipher. Numerous independent between-subject variables impacted whether participation in LC affected the reading comprehension of students in this study. Analyses showed there was no main effect for treatment and no main effect for

group, but there were significant effects for class period, and overall reading level. There were also strong significant interactions of treatment and group, treatment and class period, and treatment and overall reading levels.

Texts numbered one through four appear to be more difficult than texts numbered five through eight (by 10.1 percentage points) and this impacted mean scores on assessments taken with each type of instruction. A significant interaction of these variables showed that the effect of treatment did depend on which texts were given to students. Evidence suggests that students who had texts numbered one through four for treatment LC had a lower LC score and students who had texts numbered five through eight with treatment LC had higher LC scores.

Descriptive statistics and data analyses of interactions of treatment and overall reading levels provide some evidence that effect of treatment differs based on group, class period, and overall reading level. Results suggest that the effect of LC differs for students with low and high overall reading levels, and that the difference goes in opposite directions (negative effect for low readers and a positive effect for high readers). The same was found to be true for class periods one and three, and groups one and two, respectively. Results from raters using the Implementation Checklist suggest that LC were implemented correctly in this study.

CHAPTER 5

Discussion

Several variables impacted whether participation in LC affected the

reading comprehension of students in this study. Results described in the

previous chapter determined that there was no effect of treatment, but that

treatment interacted with group, class period, and students' overall reading

levels. This chapter begins with a discussion of the results by variable. Next, the

limitations of the study are discussed. The chapter concludes with an exploration

of the implication of the findings and future directions for research on LC.

Type of Instruction/Treatment

There was no effect of treatment alone, but there were significant

interactions between treatment and group, treatment and class period, and

treatment and overall reading levels. The effect of LC did depend on

assessments used, class period, and the reading levels of the students. It is

important to remember that LC was a new social organization for these students.

LC takes on a structure formed by the students themselves, which could also

have influenced comfort level, and ultimately performance results. In contrast,

DRA was a social organization already in place at the target school, and

therefore perhaps the students' level of comfort with this approach influenced

results. Students in this study had not participated in LC before and may have

been anxious about performance with a new approach. In addition, DRA has a

built in structure and a predictable routine (Betts, 1946) which may have

increased the comfort level for students. As mentioned in the theoretical

orientation section, comprehension involves not only the reader, but also the text,

and the activity. LCs were a new activity for the students in this study, and thus

may have impacted learning.

Also outlined in chapter two, action-research by classroom teachers has

shown that students do enjoy participating in LC and this is corroborated in

research on small reading groups. However, students in this study (mostly those

with lower reading abilities in class period one) did informally vocalize their

distaste for participation in LC to the researcher upon entering class, leading one

to believe that enjoyment and comfort level might have influenced performance

as well. As stated by the RAND group, the reader brings his or her cognitive

capabilities, motivation, knowledge, and experience to the task of reading. The

motivation and interest of these students who vocalized distaste for LC could

certainly have affected performance. Although research has shown that each of

these elements of the reader does relate to comprehension outcomes, there is

still very little known about how to effectively enhance these attributes through

instruction (Snow, 2002). This is yet another argument for continuing to conduct

scientific research on approaches like literature circles.

Consistency of ratings on the Implementation Checklist showed that LC

were implemented correctly and consistently, and that students understood roles

and procedures by the second week of their implementation. This corroborates

research by Wilkinson (1991) that students are able to grasp the social

organization of small reading groups quickly, as effects are often seen in as few as two weeks.

Text and Corresponding Cloze Assessments

For statistical analysis, students were classified as Group One and Group Two based on the combination of cloze assessments they were given with each type of instruction. There was no main effect for group. However, which group they were placed in did significantly interact with treatment. In other words, the effect of treatment (LC or DRA) did depend on which assessments students were given with each treatment. Evidence suggested that students who took cloze assessments which corresponded to texts numbered one through four with LC had lower scores than students who had assessments that corresponded to texts numbered five through eight with LC. Cloze assessments on texts numbered one through four, overall, appeared to be more difficult than those on texts numbered five through eight. However, it could be that there was some unknown factor causing students to perform differently with each text.

Every effort was made to choose text that was appropriate for the age-level of students participating in this study. The texts were piloted and readability levels were determined. On average, the reading level of texts was appropriate but unequal in difficulty level. Although the readability levels for texts numbered one through four was equal to texts numbered five through eight, descriptive statistics showed that when students read texts numbered one through four for LC, the corresponding cloze assessment scores were approximately 10.1 percentage points lower. The reading levels on texts sampled ranged from

grades six to grade eight. The text used for reading is an important element of comprehension. The RAND Reading Study Group found that the features of any text have a large impact on comprehension. The reader must understand the exact wording of text as well as the idea units representing the meaning of that text. Since the text used is a crucial element of comprehension, perhaps future studies might manipulate the level of difficulty of text, which would allow for better matching of text to student, based on readability of text and students' reading levels. In future studies, texts might also be converted into lexiles, a newly used technique, which might provide more accurate results than traditional readability formulas.

This study did not take into account specific student preferences for certain reading material or types of stories (nor the motivation of the reader, as described earlier). A wide variety of popular genres were selected for this study. Some texts might have been more engaging or interesting to students than others. Research studies have shown that the interest level in the reading material can influence students' motivation and success in reading, despite difficulty of text (Allen, 1995). Perhaps students could have been surveyed before the start of the study to determine likes, dislikes, and previous reading experiences.

In addition, it should be noted that this study used narrative text with each type of treatment. The decision to use narrative text was made because LC were first used in classrooms with narrative text (Daniels, 1994). Because there are no empirical studies on LC, it was important to study LC in the way they were

originally developed. Studies have been conducted on similar approaches using expository text (see Review of Literature in Chapter Two) which were found to be successful. Manipulating the type of text (narrative or expository) may have produced different results in this study.

And finally, one should consider the type of assessment used in this study. To meet the requirements of scientifically-based research, a traditional reading comprehension measure in the form of a cloze passage was administered to all students in both treatments, LC and DRA. Although this measure has been found to be reliable and valid, other measures may have uncovered the benefits of using LC. For example, if LC are intended to elicit students' responses to literature, as well as demonstrate sociocultural principles, a measure that better displays those properties may have produced different results. Using multiple measures is a possible recommendation for future studies.

Class Period and Overall Reading Achievement

When results were examined further by class period and overall reading level, results varied. Without accounting for texts used, students in periods one and three appeared to have lower LC scores, while students in periods two and four appeared to have higher LC scores. Consistent with these findings, when analyses were conducted by overall reading level regardless of class period, students with low and with high reading achievement levels appeared to have lower LC scores, while students with average reading achievement levels appeared to have higher LC scores. After even further examination, when assessments were included in the analysis, results varied. Evidence suggested

that LC may have had a negative effect on students with low reading levels and may have had a positive impact for students with high reading levels.

It should be noted that students were placed in class periods by overall reading level, which may certainly have influenced results. Different results might be obtained with diverse classes or groups of students, in which students with low, average, and high reading abilities all interact with one another. Having students grouped by similar reading levels might have affected participation in LC in this study in a number of ways. For example, students with lower reading abilities may have felt less confident in speaking in small groups, even if the group was homogenous. Research has shown that if students have a hard time navigating independent reading, they may benefit from a more structured, guided process and respond better initially to one-on-one time with a teacher (Brozo, 2000).

Further expanding on the notion of homogeneity possibly hindering participation in reading groups, is that one of the principles in Vygotsky's theory, which is believed to be instantiated by LC, is the zone of proximal development (ZPD). A literature circle should be arranged as a ZPD, and provide students the opportunity to interact with others, who are at different levels than themselves. Students should also accomplish tasks they could not have performed independently. Having students interact instead with students whose abilities are very similar may have moderated the effects of participating in LC, both socially and academically.

In addition, research shows that background knowledge is important for students to be able to construct meaning (Chall, 1990; Collins & Smith, 1982; Davey, 1983). Students in this study with lower overall reading achievement levels may not have possessed the background knowledge necessary to comprehend what they were reading. DRA is teacher-directed and students are given a purpose for reading. In LC, students are left to determine for themselves what is important and why. Perhaps the self-regulation required of these tasks was beyond that possessed by students with low reading levels.

And finally, one must consider the interaction of reader and text. The RAND model of comprehension shows that the abilities the reader brings to the task of reading as well as the features of the text play an important role in determining comprehension outcomes. Research that would more precisely identify reader capabilities and limitations, and that could document the impact of different text features on readers with varying abilities would offer considerable help in understanding problems with comprehension.

Limitations

The research findings in this study should be viewed in light of a number of limitations. This study represents an *initial* exploratory study of the effects of participation in LC on reading comprehension. Because of the scarce research on LC, it was important to conduct this study. However, further in-depth investigations need to be conducted to provide clearer insights into using this reading approach to improve and/or monitor the reading comprehension of middle school students. In addition, there is a need for qualitative studies of LC,

to account for interactions promoted by theoretical principles which could complement this quantitative study.

Research Design. The research design was a between-subjects analysis which quickly became very complex due to the number of confounding variables. The researcher initially proposed a traditional treatment-control design in which one group of students would participate in LC and another would participate in DRA. The same texts and corresponding cloze assessments would have been used in the same order with each of the two groups. However, since the study was being conducted in a public school and for the purposes of integrity and equal access for all students, the decision was made to provide both types of instruction to all students. A traditional experimental treatment-control design with random assignment may have produced much clearer results.

Sampling. Several limitations may exist due to the sampling method and sample size. First, generalizations of findings must be limited to school systems demographically similar to the one used in this research study. In addition, the use of a sample of convenience and the participation of a teacher who agreed to have students participate in the study as well as a researcher interested in the topic may have limited generalizability. Certain characteristics (like motivation, interest, etc.) are sometimes present in volunteers which may differ from those of non-volunteers. The sample size in this case was 86. A larger sample size may produce clearer insights into whether participation in LC improves reading comprehension.

Length of Treatment. Another limitation is the length of treatment. This study was approved for an eight week period of time, as to not interfere with start of school procedures, holidays, or state-standardized testing. Although results from the implementation checklist show that students learned how to correctly and consistently participate in LC very quickly, the treatment may require more time to significantly affect learning. In addition, students with low reading levels may need more time to internalize the thinking processes which mediate participation in this approach.

Researcher Bias/Teacher Effect. And finally, researcher bias and/or teacher effect is a limitation of this study. Although this researcher is not aware of any known bias, this phenomenon is common when the researcher acts as a participant and observer. The researcher trained the teacher and helped guide instruction throughout the study, both in LC and DRA. The teacher was familiar with DRA but did not have prior experience with LC. Because this study only involved one teacher, teacher effects are not known. In future studies, especially if conducted with multiple classes and teachers, teacher effect should be studied.

Implications and Future Directions

Instructional practices in use in classrooms today must address the needs of a diverse body of students. Existing pressure by reform measures to raise the reading comprehension scores of all students will likely continue. The federal government has already created the requirement that only instructional practices supported by scientifically-based reading research will be funded (Allington, 2001). Therefore, it is more important than ever for teachers and researchers to

work together to continue to substantiate effective classroom practices with scientifically-based research.

The lack of student progress in reading comprehension has important implications for practice. There is a continuing need for secondary teachers to learn more about effective reading approaches and should incorporate these in their teaching of different content areas. Reading approaches that are appropriate and effective for older students should be explored.

These research findings demonstrate that LC do have promise, and could, with research and development, prove to be an effective way to improve reading comprehension. If further studies prove LC to be a successful approach to reading instruction, they may also be a viable alternative for attaining other instructional goals, such as learning to read expository text and diagnosing reading difficulties in a small group format. Literature circles have great potential, but more empirical research studies on this popular instructional approach is clearly needed.

References

Alderson, C. (1979). The cloze procedure and proficiency in English as a foreign language. *TESOL Quarterly*, 13, 219-227.

Alderson, C. (1980). Native and nonnative speaker performance on cloze tests. *Language Learning*, 30(1), 59-76.

Allen, J. (1995). *It's never too late.* Portsmouth, NH: Heinemann.

Anderson, R. C., Nguyen-Jahiel, K., McNurlen, B., Archodidou, A., Kim, S., Reznitskaya, A. Tillmanns, M., & Gilbert, L. (2001). The snowball phenomenon: Spread of ways of talking and ways of thinking across groups of children. *Cognition and Instruction*, 19(1), 1-46.

Anonymous. (2004). Romeo and Juliet at the mall. In Allen, J. & Daley, P. (Eds) *Read-aloud anthology*. New York: Scholastic.

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal*, 40(3), 685-730.

Au, K.H., & Mason, J. M. (1981). Social organizational factors in learning to read: The balance of rights hypothesis. *Reading Research Quarterly*, 17(1), 115-153.

Bachman, L. (1985). Performance on cloze tests with fixed-ratio and rational deletions. *TESOL Quarterly*, 19, 535-556.

Barr, R., Kamil, M.L., Mosenthal, P., & Pearson, P.D. (1991). *Handbook of Reading Research Volume 2.* New York: Longman.

Betts, E. A. (1946). *Foundations of reading instruction.* New York: American Book Company.

Blum, H., Lipsett, L., & Yocom, J. (2002). Literature circles: A tool for self-determination in one middle school inclusive classroom. *Remedial and Special Education*, 23 (2), 99-108.

Bogdan, R.C., & Biklen, S.K. (1998). *Qualitative research for education: An introduction to theory and methods* (3rd ed.) Boston: Allyn and Bacon.

Bormuth, J. (1968). Cloze test readability: criterion reference scores. *Journal of Educational Measurement,* 5, 189-196.

Brabham, E., & Villaume, S. (2000). Continuing conversations about literature circles. *The Reading Teacher*, 54 (3), 278-80.

Brozo, W. (2000). Hiding out in secondary classrooms: Coping strategies of unsuccessful readers. In *Struggling adolescent readers*. (Eds) Moore, D., Alvermann, D., & Hinchman, K. Newark, International Reading Association, 51-56.

Bruner, J. (1996*). The culture of education*. Cambridge, MA: Harvard University Press.

Burns, B. (1998). Changing the classroom climate with literature circles. *Journal of Adolescent and Adult Literacy*, 42, 124-129.

Cambourne, B. (1988). *The whole story: Natural learning and the acquisition of literacy in the classroom.* New York: Carnegie Forum.

Campbell, J.M., Hombo, C.M., & Mazzeo, J. (2000). *NAEP 1999 Trends in academic progress: Three decades of student performance.* National Center for Educational Statistics (NCES), 2000-469.

Chall, J. (1990). *The reading crisis: Why poor children fall behind.* Cambridge, MA: Harvard University Press.

Cisneros, S. (1991). Eleven. *In Woman hollering creek and other stories.* New York: Random House

Cole, M. (1996). *Cultural psychology: A once and future discipline.* Cambridge, MA: Harvard University Press.

Collins, A., & Smith, E.E. (1982). Teaching the process of reading comprehension. In D.K. Detterman & R.J. Sternberg (Eds.) *How much can intelligence be increased?* (pp. 147-154). Norwood, N.J.: Ablex

Cook, T.D. & Campbell, D.T. (1979). *Quasi-experimental design and analysis for field settings.* Chicago: Rand McNally.

Creswell, J. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage Publications.

Daniels, H. (1994). *Literature circles: Voice and choice in the student-centered classroom.* York, ME: Stenhouse.

Daniels, H. (2002). *Literature circles: Voice and choice in book clubs and reading groups.* Portland, ME: Stenhouse.

Davey, B. (1983). Think aloud: Modeling the cognitive processes of reading comprehension. *Journal of Reading*, 27(1), 44-47.

Delquadri, J.C., Greenwood, C.R., Whorton, D., Carta, J.J., & Hall, R.V. (1986).Class wide peer tutoring. *Exceptional Children*, 52, 535-542.

Dole, J., Duffy, G., Roehler, L., & Pearson, P.D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research*, 61, 239-264.

Eeds, M., & Wells, D. (1989). Grand conversations: An exploration of meaning construction in literature study groups. *Research in the Teaching of English*, 23(1), 4-29.

Florida Department of Education (2005). *Florida Comprehensive Assessment Test (FCAT) Assessment and Accountability Briefing Book*. Retrieved March 1, 2005 from www.firn.edu/doe/sas/fcat/pdf/fcataabb.pdf

Fountas, I.C., & Pinnell, G.S. (2001). Guiding readers and writers: Grades 3-6. Portsmouth, NH: Heinemann.

Frawley, W. (1997). *Vygotsky and cognitive science: Language and unification of the social and computational mind*. Cambridge, MA: Harvard University Press.

Fry, E. (1968). A readability formula that saves time. *Journal of Reading*, 11, 587.

Gambrell, L.B., & Almasi, J.F. (Eds.). (1996). *Lively discussions! Fostering engaged reading*. Newark, DE: International Reading Association.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.

Greene, J. (1997). Advances in mixed method evaluation: The challenges and benefits of integrating diverse paradigms. *New Directions for Program Evaluation*, 74, San Francisco: Jossey-Bass.

Goody, J. (1977). *The domestication of the savage mind*. Cambridge, MA: Cambridge University Press.

Hanssen, E. (1990). Planning for literature circles: Variations in focus and structure. In K.G. Short & K.M. Pierce, (Eds.), *Talking about books: Creating literate communities*, (pp.199-209). Portsmouth, NH: Heinemann.

Harris, T.L., & Hodges, R.E. (1995). *The literacy dictionary.* Newark, DE: International Reading Association.

Hill, B., Noe, K., & King, J. (2003). *Literature circles in the middle school: One teacher's journey.* Norwood, MA: Christopher-Gordon Publishers.

Hughes, L. (1997). *Short stories of Langston Hughes.* New York: Hill and Wang

Imai, M., Anderson, R. C., Wilkinson, L., & Yi, H. (1991). Properties of attention during reading lessons. *Journal of Educational Psychology*, 84, 160-173.

Jennings, P. (1990). Licked. In *Covered with nails and other stories to knock your socks off.* London: Greenleaves.

Jennings, P. (1998). A Mouthful. In *Uncovered! Weird, weird stories.* London: Greenleaves.

Johnson, D.W., & Johnson, R.T. (1991). *Learning together and alone.* (3rd Ed.) Boston: Allyn and Bacon.

Jordan, B., & Henderson, A. (1995). Interaction analysis: Foundations and practice. *The Journal of Learning Sciences*, 4, 39-103.

Kagan, S. (1994). *Cooperative learning.* San Juan, CA: Kagan.

Kasten, W. (1995). Literature Circles for the teaching of literature-based reading. In M. Radencich & L. McKay (Eds.), *Flexible grouping for literacy in the elementary grades*, (pp.66-80). Needham Heights, MA: Allyn and Bacon.

Keegan, S., & Shrake, K. (1991). Literature and study groups: An alternative to ability grouping. *The Reading Teacher,* 44 (8), 542-547.

King, C. A. (1988). *The social facilitation of reading comprehension.* Unpublished doctoral dissertation, University of California, San Diego.

Martinez-Roldan, C., & Lopez-Robertson, J. (1999). Initiating Literature Circles in a First-Grade Bilingual Classroom. *The Reading Teacher*, 53 (4), 270-82.

Laboratory of Comparative Human Cognition. (1982). A model system for the study of learning difficulties. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition*, 4, 3.

Leedy, P.D. (1997). *Practical research: Planning and design* (6th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

Leont'ev, A.N. (1981). *Problems of the developmental mind*. Moscow: Progress Publishers.

MacGillivray, L., Tse, L., & McQuillan, J. (1995). Second language and literacy teachers considering literature circles: A play. *Journal of Adolescent and Adult Literacy*, 39 (1), 36-44.

McKenna, M., & Robinson, R. (1980). *An introduction to the cloze procedure: An annotated bibliography*. Newark, DE: International Reading Association.

Mercer, N. (1995). *The guided construction of knowledge: Talk amongst teachers and learners*. Philadelphia: Multilingual Matters LTD.

Mercer, N. (2000). *Words and minds: How we use language to think together*. London: Routledge.

Meredith, K., & Vaughn, J. (1978). Stability of cloze scores across varying deletion patterns. In P. D. Pearson & J. Hansen (Eds.), *Twenty-seventh yearbook of the National Reading Conference* (pp.181-184), Clemson, SC: National Reading Conference.

Miller, G.A. (1988). The challenge of universal literacy. *Science*, 241, 1293-1299.

Mobley, M. (1980). The readability of school text books. *Language for Learning*, 2(1), 11-19.

Nystrand, M. (1997). Dialogic instruction: When recitation becomes conversation. In M. Nystrand, A. Gamoran, R. Kachur, & C. Prendergast, *Opening dialogue: Understanding the dynamics of language and learning in the English classroom* (pp. 1-29). New York: Teachers College Press.

Oller, J. & Jonz, J. (1994). *Cloze and coherence*. New Jersey: Associated University Press.

Olson, D.R. (1994). *The conceptual and cognitive implications of writing and reading.* New York: Cambridge University Press.

Palinscar, A.S., & Brown, A.L. (1984). Reciprocal teaching of comprehension-fostering and comprehension monitoring activities. *Cognition & Instruction*, 1, 117-175.

Patton, M. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage Publications.

Pearson, P.D., Barr, R., Kamil, M.L., & Mosenthal, P. (1984). *Handbook of reading research*. New York: Longman.

Raphael, T. (1986). Teaching question-and-answer relationships, revisited. *The Reading Teacher*, 39 (6), 516-522.

Ranalli, J. (2002). *Comparing scoring procedures on a cloze test*. Unpublished doctoral dissertation, University of Birmingham.

Raphael, T., Florio-Ruane, S., & George, M. (2001*). Book club plus: A conceptual framework to organize literacy instruction*. Center for the Improvement of Early Reading Achievement (CIERA #3-015).

Rinaldi, D. (2004). Dumb crimes and even dumber criminals. In Allen, J. & Daley, P. (Eds) *Read-aloud anthology*. New York: Scholastic.

Robinson, C. G. (1981). Cloze procedure: A review, *Educational Research*, 23, (2), 128-133.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.

Rosenblatt, L. (1995). *Literature as exploration*. New York: Modern Language Association of America.

Rye, J. (1982). *Cloze procedure and the teaching of reading*. Portsmouth, NH: Heinemann.

Short and Kaufman. (1999). Teacher-watching: Examining teacher talk in literature circles. *Language Arts*, 76(5), 377-384.

Smith, L.S. & Glass, G.V. (1987). *Research and evaluation in education and the social sciences*. Needham Heights, MA: Allyn and Bacon.

Snow, C. (2002). *Reading for understanding: Toward an R & D program in reading comprehension*. Santa Monica, CA: RAND

Soter, A. & Rudge, L. (2005). *What the discourse tells us: Talk as indicators of high-level comprehension.* Paper presented at the American Educational Research Association. Montreal. April 2005.

Stamper, J.B. (2004). The escape. In Allen, J. & Daley, P. (Eds) *Read-aloud anthology*. New York: Scholastic.

Stine, R.L. (1999). Alien candy. In *Nightmare hour*. New York: Parachute Publishing.

Stevens, R.J., Slavin, R.E., & Farnish, A. M. (1991). The effects of cooperative learning and direct instruction in reading comprehension strategies on main idea identification. *Journal of Educational Psychology*, 83 (1), 8-16.

Taylor, W. (1953). Cloze procedure: A new tool for measuring readability. *Journalism Quarterly*, *30*(4), 415-433.

Thayer, E. (1998). *Casey at the bat*. New York: Penguin.

Tompkins, G. (2003). *Literacy for the 21rst century*. Columbus, OH: Prentice Hall.

Vaughn, S., Hughes, M., Schumm, J., Klingner, J. (1998). A collaborative effort to enhance reading and writing instruction in inclusion classrooms. *Learning Disability Quarterly*, 21, 57-74.

Vygotsky, L.S. (1978). *Mind and society: The development of higher psychological process*. Cambridge, MA: Harvard University Press.

Vygotsky, L.S. (1986). *Thought and language*. Cambridge, MA: Harvard University Press.

Wertsch, J.V. (1991). *Voices of the mind; A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.

Webb, N.M., (1991).Task-related verbal interaction and mathematics learning in small groups. *Journal for Research in Mathematics Education,* 2, 366-89.

Wegerif, R. and N. Mercer (1996) Computers and reasoning through talk in the classroom. *Language and Education,* 10(1), 47-64.

Wertsch, J.V., Del Rio, P., & Alvarez, A. (Eds).(1995). *Sociocultural studies of mind*. Cambridge, MA: Cambridge University Press.

Wilkinson, I. (1991). *Silent reading in small-group reading lessons: A micro-experimental analysis*. Paper presented at the meeting of the American Educational Research Association, Chicago.

Wong, B.Y.L. (1995). Metacognition and learning disabilities. *Metacognition, Cognition, and Human Performance*, 2, 137-180

Initial Correspondence: Letter to School

Principals and/or Reading Coaches

TO: School Reading Specialist/Reading Coach/Principal

FROM: Jodi Marshall, Doctoral Student

RE: Literature Circle Study

Please read the following letter about a literature circle study and respond via email, fax, or phone if possible.

To Whom It May Concern:

I am a third-year doctoral student, pursuing a Ph.D in Teaching and Learning with a specialization in Reading. I would like to study literature circles for my dissertation and am wondering if you would be willing to allow me to conduct this study in your classroom/school.

I would like to observe literature circles in action in a middle school for a period of approximately nine weeks, during the Fall 2005 Semester. I am flexible and can work around state testing and other school commitments. I can observe a teacher who is already familiar with literature circles, or I can first help the teacher learn how to implement these into his/her classroom.

Please let me know as soon as possible if you would be willing to participate. I would then need to obtain approval from your principal and your county before starting the study. I would also appreciate a response if you are not interested.

Thank you,

Jodi Marshall

NBCT, Early Adolescence/English Language Arts

Doctoral Student

Appendix B

Research Schedule

Class Period	N	Reading Level	Treatment	Texts
1	14	low	LC/DRA	1-4/5-8
2	22	average	LC/DRA	5-8/1-4
3	24	high	DRA/LC	5-8/1-4
4	26	average	DRA/LC	1-4/5-8

Appendix C

Cloze Assessments

Cloze Assessment for *Alien Candy*

Walter cleared his throat. He was always little nervous around kids he didn't know well.
"I'd like to call this meeting of the Alien Club to order," he said. He adjusted the square, black-framed glasses on his stubby nose and looked around Greg's attic. The attic was long and narrow, with movie posters on the brightly painted walls and beanbag chairs facing a beat-up red leather couch. What a perfect place __1__ these kids to have __2__ meeting, Walter thought.

The __3__ named Greg sat on __4__ old couch, between the __5__ girls in the club, __6__ and Natasha. Greg was __7__ and freckle faced and __8__ very eager to impress __9__ girls. He had a __10__ of a *Star Wars* __11__ on his lap, and __12__ was showing it off, __13__ how it moved.

Evan, __14__ dark haired older boy, __15__ in a beanbag chair, __16__ nose buried in a __17__ *Trek* novel.

"Come on __18__," Walter pleaded. "Can we __19__? This is my first __20__, and I am really __21__ to see what goes __22__ here."

No one paid __23__ attention.

Bonnie, who seemed __24__ and playful, was wrestling __25__ for the *Star Wars* __26__. Her friend Natasha, a __27__ girl with steel-gray eyes, __28__ to a chair to get __29__ from the tug-of-war.

"Hey, __30__?" Walter tried again.

Evan __31__ his face in his __32__. Suddenly he started to __33__, his bony shoulders bouncing __34__ and down. "Sorry, I __35__ read a really funny part," __36__ explained.

What could be __37__ funny in a *Star* __38__ book? Walter wondered. Maybe __39__ was a mistake to __40__ this club. He didn't __41__ know these kids. He __42__ believe it when Bonnie __43__ up to him in __44__ and asked if he'd __45__ to join and be __46__ new president. She said __47__ and the others thought __48__ was a real leader. __49__ that's what their club __50__. Someone who could help __51__ get things done.

Why did he agree to join? Was it because he was flattered that they wanted him? Or was it because it was hard for him to make new friends?

Cloze Assessment for *Casey At The Bat*

The outlook wasn't brilliant for the Mudville nine that day;
The score stood four to two with but one inning left to play;
And then, when Cooney died at first, and Barrows did the same,
A sickly silence fell upon the patrons of the game.

A straggling few got __1__ to go, in deep __2__. The rest
Clung to __3__ hope which "springs eternal __4__ the human breast;"
They __5__, If only Casey could __6__ get a whack at __7__,
We'd put up even __8__ now, with Casey at __9__ bat.

But Flynn preceded __10__, as did also Jimmy __11__,
And the former was __12__ no-good and the latter __13__ a fake;
So, upon __14__ stricken multitude grim melancholy __15__,
For there seemed but __16__ chance of Casey's getting __17__ the bat.

But Flynn __18__ drive a single, to __19__ wonderment of all,
And __20__, the much despised, __21__ the cover off the __22__,
And when the dust __23__ lifted and men saw __24__ had occurred,
There was __25__ safe at second, and __26__ a-huggin' third.

Then from __27__ thousand throats and more __28__ rose a lusty yell,
__29__ rumbled through the valley, __30__ rattled in the dell,
__31__ knocked upon the mountain __32__ recoiled upon the flat,
__33__ Casey, mighty Casey, was __34__ to the bat.

There __35__ ease in Casey's manner __36__ he stepped into his __37__;
There was pride in __38__ bearing and a smile __39__ Casey's face,
And when, __40__ to the cheers, he __41__ doffed his hat,
No __42__ in the crowd could __43__ `twas Casey at the __44__.

Ten thousand eyes were __45__ him as he rubbed __46__ hands with dirt;
Five __47__ tongues applauded as he __48__ them on his shirt.
__49__, while the writhing pitcher __50__ the ball into his __51__,
Defiance gleamed in Casey's __52__, a sneer curled Casey's __53__.

And now the leather-covered sphere came hurtling through the air,
And Casey stood a-watching it in haughty grandeur there,
Close by the sturdy batsman the ball unheeded sped --
"That ain't my style," said Casey. "Strike one," the umpire said.

Cloze Assessment for *Eleven*

What they don't understand about birthdays and what they never tell you is that when you're eleven, you're also ten, and nine, and eight, and seven, and six, and five, and four, and three, and two, and one. And when you wake __1__ on your eleventh birthday __2__ expect to feel eleven, __3__ you don't. You open __4__ eyes and everything's just __5__ yesterday, only it's today. __6__ you don't feel eleven __7__ all. You feel like __8__ still ten. And you __9__ -- underneath the year that __10__ you eleven.

Like some __11__ you might say something __12__, and that's the part __13__ you that's still ten. __14__ maybe some days you __15__ need to sit on __16__ mama's lap because you're __17__, and that's the part __18__ you that's five. And __19__ one day when you're __20__ grown up maybe you __21__ need to cry like __22__ you're three, and that's __23__. That's what I tell __24__ when she's sad and __25__ to cry. Maybe she's __26__ three.

Because the way __27__ grow old is kind __28__ like an onion or __29__ the rings inside a __30__ trunk or like my __31__ wooden dolls that fit __32__ inside the other, each __33__ inside the next one. __34__ how being eleven years __35__ is.

You don't feel eleven. __36__ right away. It takes __37__ few days, weeks even, __38___ even months before you __39___ Eleven when they ask __40__. And you don't feel __41__ eleven, not until you're __42__ twelve. that's the way __43__ is. Only today I __44__ I didn't have only __45__ years rattling inside me __46__ pennies in a tin __47__ box. Today I wish __48__ was one hundred and __49__ instead of eleven because __50__ I was one hundred __51__ two I'd have known __52__ to say when Mrs. __53__ put the red sweater ___54__ my desk. I would've known how to tell her it wasn't mine instead of just sitting there with that look on my face and nothing coming out of my mouth.

"Whose is this?" Mrs. Price says, and she holds the red sweater up in the air for all the class to see. "Whose? It's been sitting in the coatroom for a month."

"Not mine," says everybody. "Not mine."

Cloze Assessment for *The Escape*

Boris looked down the long, dark hallway of the prison. It looked endless.
He was being taken to a place that few people had seen. But everyone feared it.
Solitary. The other prisoners said the word with a shudder.

Behind him the guard __1__. "Well, this should teach __2__ a lesson," he said.
"__3__ you've been in solitary, __4__ will be no more __5__ behavior from you."
Boris __6__ his feet to move __7__ the hall. He knew __8__ was no hope for
__9__. Seven years ago, he __10__ committed a crime. It __11__ a crime so
terrible __12__ he could not believe __13__ had done it.

Now __14__ was in prison for __15__ rest of his life. __16__ was trapped like an
__17__ in a cage. He __18__ not face it any __19__! That is why he __20__ to
escape. It had been __21__ after sunset. He was __22__ alone in the courtyard.
__23__ guard who was supposed __24__ be there had made __25__ mistake.
He had left __26__ alone.

Boris had run for __27__ wall like an animal. __28__ had climbed up and __29__
almost over. Then he __30__ the words, "Freeze, prisoner!"

__31__ he had frozen.

That __32__ just yesterday. Now he __33__ headed to an even __34__ cage.
"You don't have __35__ put me in solitary," __36__ said to the guard __37__ a
scared voice. "I __38__."

The guard just laughed. "__39__ learn your lesson," he __40__ again. "Maybe
they'll let __41__ out after a few __42__. But you're a tough __43__. I know what
you __44__ to get inside. You __45__ deserve anybody's pity."

Boris __46__ hopeless. It was no __47__ trying. He would just __48__ to deal
with it. __49__. They were coming to __50__ end of the hallway. __51__ saw
the door at __52__ end. He saw the __53__ across the small window __54__ the
door.

He knew __55__ this was it. The __56__ had told him what __57__ would be like
inside. __58__ were right The guard __59__ three locks. Then he __60__ open
the door. He __61__ Boris inside.

The room was like a pen. It was long and narrow with one bed. High up there
was a small window with bars across it. The walls were of old, rough stone. To
Boris, it felt as if they were closing in on him.

Cloze Assessment for *Licked*

Tomorrow when Dad calms down, I'll own up. Tell him the truth. He might laugh. He might cry. He might strangle me. But I have to put him out of his misery.

I like my dad. He takes me fishing. ___1___ arm-wrestles with me in ___2___ of the fire on ___3___ nights. He plays Scrabble ___4___ of watching the news. ___5___ tries practical jokes on ___6___. And he keeps his ___7___. Always.

But he has ___8___ faults. Bad faults. One ___9___ to do with flies. ___10___ can't stand them. If ___11___ a fly in the ___12___ he has to kill ___13___. He won't use fly ___14___ because of the ozone ___15___, so he chases them ___16___ a fly swatter. He ___17___ around the house swiping ___18___ swatting like a mad ___19___. He won't stop until the ___20___ is flat. Squashed. Squished – ___21___ still squirming on the ___22___ of the fly swatter.

___23___ a deadeye shot. He ___24___ ever misses. When his ___25___ fly swatter was worn ___26___ I bought him a ___27___ new yellow one for ___28___ birthday. It wasn't yellow ___29___ long. It soon had ___30___ of fly smeared all ___31___ it.

It's funny the ___32___ colors that squashed flies ___33___ inside them. Mostly it ___34___ black or brown. But ___35___ there are streaks of ___36___ red stuff and sometimes __37__ of blue. The wings ___38___ like diamonds if you ___39___ them up to the ___40___. But mostly the wings ___41___ off unless they are ___42___ to the swatter with ___43___ bit of squashed innards.

___44___ flies is Dad's first ___45___. His second one is ___46___ manners. He is mad ___47___ manners.

And it is always my manners that are the matter.
"Andrew," he says, "don't put your elbows on the table."
"Don't talk with your mouth full."
"Don't lick your fingers."
Don't dunk your cookie in the coffee."
This is the way he goes on every mealtime. He has a thing about flies and a thing about manners.

Cloze Assessment for *A Mouthful*

Parents are embarrassing. Take my dad. Every time a friend comes to stay the night, he does something that makes my face go red. Now don't get me wrong. He is a terrific dad. I love him but sometimes I think he will never grow up. He loves playing practical __1__. This behavior first started __2__ night Anna came to __3__ over.

Unknown to me, Dad __4__ into my room and __5__ Doona, our cat, on __6__ spare bed. Doona loves __7__ on beds, but what __8__ doesn't?

Next, Dad unwraps __9__ little package that he __10__ bought at the magic __11__. Do you know what __12__ in it? Can you __13__ this? It is a __14__ piece of brown plastic __15__ poo. Pretend cat poo. __16__ he puts this piece __17__ cat poo on Anna's __18__ and pulls up the __19__. Then he tiptoes out __20__ closes the door.

I __21__ not know any of __22__ is happening. Anna and __23__ are sitting up late __24__ videos. We eat chips __25__ in sauce and drink __26__ whole bottles of Diet __27__.

Finally we decide to __28__ to bed. Anna takes __29__ and ages cleaning her __30__. She is one of __31__ kids who is into __32__. She has a thing __33__ germs. She always places __34__ on the toilet seat __35__ she sits down. She __36__ so clean.

Anyway, she __37__ on her tracksuit bottoms __38__ gets ready for bed. __39__ she pulls back the __40__. Suddenly she sees the __41__ of cat's poo. "Ooh, __42__, ooh," she screams. "Oh __43__, disgusting. Foul. Look what __44__ cat has done on __45__ pillow." Suddenly dad bursts __46__ the room. "What's up __47__?" he says with a __48__ grin on his face. "__49__ all the fuss about?"

__50__ is pulling a terrible __51__.

"Look," she says in horror as she points to the pillow. Dad goes over and examines the plastic poo. "Don't let a little thing like that worry you," he says. He picks up the plastic poo and pops it into his mouth. He gives a grin. "D'licioush," he says through closed lips.

Cloze Assessment for *Romeo and Juliet at the Mall*

Like this is a totally sad play. This guy Shakespeare must have really wanted to get the girls – and a few dudes – crying at the end. Because trust me, there's no happy ending here. Here's how it goes.

There's this dud Romeo – __1__ fierce. And then there's __2__ hottie – Juliet. They had __3__ like that 'cause it __4__ like the really old __5__, even way before MTV. __6__, no one had cool __7__ like Carson, Brittany, or __8__. They all had really __9__ names like Benvolio and __10__ and Mercutio.

They come __11__ these two huge families __12__ like tons of cousins __13__ second cousins. One family __14__ the Montagues and the __15__ is the Capulets. And, __16__, they really hate each __17__. I mean, they can't __18__ walk down the street __19__ wailing on each other. __20__ that's what happens right __21__ the beginning of the __22__.

This dude, Sampson, who __23__ for old man Capulet, __24__ this other dude, Abraham, __25__ hangs with a Montague, __26__ he bites his thumb. __27__ mean, like, Sampson bites __28__ own thumb, which in __29__ old days was like __30__, "Wanna fight?"

And Abraham __31__ something like, "Do *you* __32__ fight?" So they both __33__ beatin' on each other. But __34__ gets broken up before __35__ really messed up, you __36__. And the prince – he's __37__ the principal of the __38__ town – he says, "Yo, __39__ time you guys get __40__ each other's face, I'm __41__ twist someone's head around __42__ there cap's on straight."

__43__, back to the __44__. Remember Juliet? She's the __45__ one. Well her old __46__ decides he's going to __47__ this kickin' party. But __48__ has to send this __49__ out to tell everybody, __50__, like, they didn't have __51__ phones or beepers then. __52__ this servant is like __53__ little slow or something __54__ he can't make out __55__ names on the list, __56__ he stops someone to __57__ him read it. And __58__ it out – it's Romeo.

So Romeo looks at the list, and there's all these names of people he doesn't really like. But then he sees Rosaline's name. She's this chick who is like totally hot and Romeo has always wanted to date her. So he decides to crash the party, which is easy, see 'cause it's a masquerade party.

Cloze Assessment for *Thank you Ma'am*

She was a large woman with a large purse that had everything in it but hammer and nails. It had a long strap, and she carried it slung across her shoulder. It was about eleven ___1___ at night, and she ___2___ walking alone, when a ___3___ ran up behind her ___4___ tried to snatch her ___5___. The strap broke with ___6___ single tug the boy __7___ it from behind. But ___8___ boy's weight and the ___9___ of the purse combined ___10___ him to lose his ___11___ so, instead of taking ___12___ full blast as he ___13___ hoped, the boy fell ___14___ his back on the ___15___, and his legs flew ___16___. The large woman simply ___17___ around and kicked him ___18___ square in his blue-jeaned ___19___. Then she reached down, ___20___ the boy up by ___21___ shirt front, and shook ___22___ until his teeth rattled.

___23___ that the woman said, "___24___ up my pocketbook, boy, ___25___ give it here." She ___26___ held him. But she ___27___ down enough to permit ___28___ to stoop and pick ___29___ her purse. Then she ___30___, "Now ain't you ashamed ___31___ yourself?" Firmly gripped by ___32___ shirt front, the boy ___33___, "Yes'm."

The woman said, "___34___ did you want to ___35___ it for?" The boy ___36___, "I didn't aim to."

She ___37___, "You a lie!"

By ___38___ time two or three ___39___ passed, stopped, turned to ___40___, and some stood watching.

"___41___ I turn you loose, ___42___ you run?" asked the ___43___.

"Yes'm," said the boy.

"___44___ I won't turn you ___45___," said the woman. She ___46___ not release him.

"I'm ___47___ sorry, lady, I'm sorry," ___48___ the boy.

"Um-hum! And ___49___ face is dirty. I ___50___ a great mind to ___51___ your face for you. ___52___ you got nobody home ___53___ tell you to wash your face?"

"No'm," said the boy.

"Then it will get washed this evening," said the large woman starting up the street, dragging the frightened boy behind her.

Appendix D

Statistical Data for Pilot of Cloze Assessments

Mean Data for Eight Cloze Assessments

Text Number	Story Title	N	Minimum	Maximum	Mean	Standard Deviation
1	Alien	30	20.00	88.00	57.20	16.90
2	Casey	29	42.00	85.00	64.38	11.412
3	Eleven	21	4.00	67.00	51.05	13.42
4	Escape	21	33.00	66.00	47.14	8.93
5	Licked	30	49.00	83.00	69.20	8.42
6	Mouthful	30	39.00	80.00	59.50	11.49
7	Romeo	29	41.00	95.00	66.62	14.25
8	Thank-you	30	42.00	90.00	63.00	10.52

Test-Retest Coefficient Data

Test	N	Pearson Coefficient	Pre/Post Difference in Means
Alien Candy	30	.690	23.07
Casey	29	.717	10.24
Eleven	Two different classes		15.13
Escape	Two different classes		9.01
Licked	30	.197	34.07
Mouthful	30	.239	19.87
Romeo & Juliet	29	.590	19.59
Thank You	30	.105	21.27

Correlations for Same Students on Different Cloze Assessments

Alien/Thank	30	.313
Casey/Romeo	29	.272
Licked/Mouth	30	.111
Eleven/Escape	21	.091

Appendix E

Implementation Checklist for Literature Circles

The following rating should be used for each behavior/action listed.

Is not happening   Happens on a limited basis   Happens Consistently

0   1   2

1. Students are given time to read the text.

2. Students work in groups with specified roles.

3. Children spend time discussing the text.

4. The teacher monitors student understanding during group work.

5. Students take turns speaking.

6. Each group member contributes to the conversation.

7. The students are focused on their particular roles.

8. The group demonstrates understanding of the text.

Appendix F

Literature Circle Tool Kit

<u>Role Sheets</u>

The role sheets used for this study can be found on pages 120 – 121 (Set C) in the following text:

Daniels, H. (2002). *Literature circles: Voice and choice in Book Clubs and Reading Groups.* Portland, ME: Stenhouse.

The roles that were used were as follows: Connector, Word Wizard, Artful Artist, Passage Picker, and Question Asker.

<u>Resource Pages</u>

The researcher provided the classroom teacher with the book listed above and referred her to the following resource pages, as part of initial training in literature circles:

Observation sheet, pages 190-191

Questions and concerns, pages 224 – 237

Suggestions when using literature circles with short stories, pages 71 – 75

Possible Conversation Starters

The following sheet was created by the researcher and given to each student each time they participated in literature circles. The sheet was meant to guide students if conversation lagged during discussions.

If You Run Out of Things to Talk About…

Talk about the title – is it appropriate? Could you think of a better one?

Put yourself in the place of a character

Come up with more questions about the story or character…

Think about what you would do if faced with the same situation

Think about what might have happened before or after the story

Discuss whether you know anyone who has gone through something similar

Simply talk about whether you liked the story or not (and why)

Discuss whether any part of the story was difficult or hard to understand

Decide whether the story is believable – could it really have happened?

Practice Text

The researcher used the short story *Dumb Crimes and Dumber Criminals!*
by Denise Rinaldo found in
Allen, J. & Daley, P., (2004). *Scholastic Read-Aloud Anthology*.
New York, NY: Scholastic, Inc.

Practice Cloze Assessment

The researcher created the following cloze passage using that text and had
students practice, prior to the start of the research study.

This first one is called the case of the sloppy shoplifter! While browsing at a
trendy clothing store, 19-year old Jonathan Parker realized that he really wanted
a leather jacket. Then, he realized he wouldn't be happy with just one! He wanted
three leather __1__! Of course, he didn't __2__ any money. So he __3__ no
choice but to __4__ a "five-finger discount." That __5__, he decided to steal
__6__.

Jonathan surveyed the premises __7__ saw the sensor alarm __8__ front of the
shop's __9__. He knew the merchandise __10__ tagged with magnetic strips;
__11__ he tried to slip __12__ with any tagged merchandise, __13__ sensor
would set off __14__ deafening siren.

Undaunted, Jonathan __15__ some jackets that suited __16__ taste and ducked
into __17__ nearest dressing room. He __18__ the jackets, peeling off __19__
one of the magnetic __20__. He checked inside the __21__ and pockets, under
the __22__ and along the waistbands. __23__ clever criminal was very __24__
of himself as he f__25__ the last of the __26__ onto the floor. He __27__ stuffed
the jackets under __28__ coat and boldly walked __29__ the front door.

Jonathan was just about to approach the sensor alarms, but he wasn't worried.
He was confident that he had removed *every* magnetic strip. However, his
confidence was shattered when the loud, piercing alarm went off. The noise
alerted the security guard who quickly apprehended the young thief. Jonathan
was stunned. What could have gone wrong?

Appendix G

Parental Permission Form

Dear Parents or Guardians,

My name is Jodi Marshall, and I am a doctoral student researcher at the University of Miami. I would like to invite your child to participate in a research study regarding reading comprehension and participation in literature circles. The study will start at the beginning of the 2005-2006 school year and will end in December 2005. The goal of the study is to determine whether participation in literature circles can increase children's reading levels.

Purpose: The purpose of this research study is to collect information about the reading comprehension of children when participating in literature circles as compared to participating in a traditional directed-reading lesson. The study is trying to find out if participation in literature circles can improve reading comprehension and overall reading achievement.

Procedures: Your child's language arts teacher is currently planning to implement literature circles as an approach to reading instruction. Literature circles are small discussion groups consisting of students reading the same texts. Students are placed in groups of 4 – 6 students and assigned different roles for reading. Roles that your child may be assigned include: word wizard, artful artist, passage picker, question asker, and connector. These roles are meant to encourage your child to read with a focus and then report on and discuss what has been read. All students in your child's class will participate in literature circles twice per week for four weeks and also a traditional directed reading activity (whole-group instruction) twice per week for four weeks. For the purpose of this study, students will be individually assessed on their reading comprehension at the end of each week, for a total of eight weeks. After reading a text each week, your child will be given a reading comprehension assessment through cloze procedure. In this procedure, the students will read a portion of the text again, with certain words omitted. A blank line is in place of each omitted word. Your child will be asked to write in the best word that fits in each blank. This assessment is written and will be administered by your child's classroom teacher during language arts. Each weekly assessment will take approximately 20 minutes to administer. Your child will not be pulled out of the classroom since literature circles are a part of your child's daily instruction and will be delivered by your child's teacher. For the purpose of this study, I will need access to your child's scores on each of these assessments. I will also need access to your child's SRI (Scholastic Reading Inventory) and FCAT scores in order to gather information about your child's current reading level. I therefore request your permission to gain access to these documents.

Risks: There are no known risks in participating in this study since the instruction received, forms part of your child's language arts curriculum.

Benefits: It is expected that your child's reading skills will improve in the areas of comprehension and overall reading. It is also anticipated that results from this study will help us understand how to help other children improve their reading skills. The information we collect may help other people, such as teachers, who are interested in using literature circles in their classrooms.

Compensation: No compensation for participation is being offered in this study.

Alternatives: You have the alternative not to allow your child to participate in this study. While your child is being assessed, he or she can stop at any time. Nothing negative will happen to your child if the cloze assessment is not completed.

Confidentiality: Names are collected and a list does link responses to individuals, but this list will be destroyed when data collection is complete. There will be no way to link the information collected with your child in the final publication of the results. The investigators and their assistants will consider your child's records confidential to the extent permitted by law. Your child's records may also be reviewed for audit purposes by authorized University of Miami employees, The Department of Health and Human Services (DHHS), or other agents who must follow the same rules of confidentiality.

Right to Withdraw: Your child's participation in this study is voluntary; your child has the right to withdraw and will not be negatively affected by withdrawal or lack of participation.

Other related information: The researcher will answer any questions you may have regarding the study. The researcher will give you a copy of this consent form. If you have any questions about the study, you may call graduate student researcher Jodi Marshall or Dr. William Blanton. If you have questions about your child's rights as a research participant, you may call the Director of Human Subjects Research Office at (305) 243-3195.

Please fill in the information below:

_____   _____
Name of Parent/Legal Guardian (print)   Signature of Parent/Legal Guardian
_____   _____
Name of Student (print)   Date
Please check one:

I want my child to be part of this study: _____
I do not want my child to be part of this study.   _____

Youth Assent Form

Hello,

      My name is Mrs. Marshall. I am a student at the University of Miami. I am conducting a study that will help me learn more about how participation in literature circles might help eighth-graders improve their understanding of what they read. Your teacher has already planned to use literature circles in his/her classes. Literature circles are when students get together in small groups of 4 – 6 people and read and discuss the same story. To study this, I need to see how eighth-graders understand what they read while participating in literature circles and also while participating in a traditional, whole-class reading lesson. In your language arts class, you will be reading one story each week for eight weeks. For this study, you will be asked to complete a fill in the blank passage after reading each story. You will write the word you think best fits into each blank.

      The literature circle and traditional directed reading activity will occur in your language arts class and will last the entire period. The fill in the blank passage you will be asked to complete each week should take approximately 20 minutes. I will also look at your school records to find out your current reading level.

      How you do on the reading passages will not affect your grade in language arts. We will keep your records private. You don't have to participate in this study if you don't want to. If you decide to participate and then change your mind, just let me know and you will be able to stop and nothing negative will happen to you. Please ask us any questions that you may have at any time.

I agree _____ I do not agree _____ to participate in the above outlined study, which I have read or has been explained to me by _____.

_____   _____   _____
Name (please print)   Date   Signature

Appendix H

Calendar for Research Study

August

15	16	17	18	19
Initial Meeting				
22	23	24	25	26
Tchr Training				
29	30 Student Training	31 Student Training		
Tchr Training				

September

5	6 Student Training	7 Student Training	8	9
12	13 School Event	14 School Event	15	16
19	20 Hurricane Closure	21 Hurricane Closure	22	23
26	27 Study Begins – Week One	28 Week One	29	30

October

3	4 Week 2	5 Week 2	6	7
10	11 Week 3	12 Week 3	13	14
17	18 Week 4	19 Week 4	20	21
24	25 Hurricane Closure	26 Hurricane Closure	27	28

November

	1 Hurricane Closure	2 Hurricane Closure	3	4
7	8 Week 5	9 Week 5	10	11
14	15 Week 6	16 Week 6	17	18
21	22 Week 7	23 Week 7	24	25
28	29 Week 8	30 Week 8		

December

5	6 Wrap-Up - End of Study	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

Appendix I

List of Texts with Readability Ratings

According to Fry Readability Graph

#	Story	Beginning	Middle	End	Average
1	*Alien Candy* Grade Level: 6	111-4	137-5	138-8	129-6
2	*Casey at the Bat* Grade Level: 6	120-4	123-5	123-5	122-4.6
3	*Eleven* Grade Level: 7	127-7	130-3	126-3	128-4.3
4	*The Escape* Grade Level: 8	125-6	140-4	135-5	133-4
5	*Licked* Grade level: 6	116-7	120-6	100-4	112-5.6
6	*A Mouthful* Grade Level: 6	126-11	130-9	151-8	136-9.3
7	*Romeo and Juliet* Grade Level: 8	126-6	144-5	135-4	135-5
8	*Thank you Ma'am* Grade Level: 7	119-4	130-5	111-4	120-4.3

Numbers reported are the number of syllables then the number of sentences counted in 100 word section of text.