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Talking To Learn: A Formative Experiment On Constructing Meaning Though Collaborative Classroom Interactions

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TALKING TO LEARN: A FORMATIVE EXPERIMENT ON CONSTRUCTING MEANING
THROUGH COLLABORATIVE CLASSROOM INTERACTIONS

BY

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*Talking to Learn: A Formative Experiment on Constructing Meaning through Collaborative
Classroom Interactions*

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ABSTRACT

As a result of reform efforts, national standards and assessments set the stage for teaching and learning in many classrooms. This establishes a particular classroom environment and often leads to behaviorist instructional methods, such as recitation. Utilizing a formative experiment design, this research integrated constructivist modes of learning and explored how these modes could be adjusted to help six struggling readers construct meaning. This study took place in a third grade classroom during the teacher's daily scheduled comprehension instruction time. The classroom environment, as perceived by the teacher, as well as the effects of national standards and assessments on comprehension instruction were also examined. Finally, this study investigated the self-identity of the struggling readers in this class and how their identity related to their participation. Qualitative data were collected over the course of twelve weeks and six mixed-ability discussion groups. Analyses revealed that three factors impacted teaching and learning: student variables, such as reading and language ability; the teacher's perceptions and pedagogical stance; and, school and district mandates derived from national standards and testing. The data gleaned from this study provides insight about how teachers can use discussion to help students negotiate meaning about text. For students who struggle, these social modes of thinking can assist in moving from surface-level understanding to deeper thinking.

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Finally, I owe sincere thanks to my husband and best friend, John. It was his encouragement and support that kept me moving forward through all of the trials and tribulations. Thank you for helping me achieve a life-long dream.

DEDICATION

This work is dedicated to the four most influential men in my life – John, Mason, Bailey, and Max. Your love and support means the world to me.

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CHAPTER 1

INTRODUCTION

Today's classrooms are comprised of students with varying academic abilities in reading. Although many factors may contribute to academic differences, teachers often conceptualize this complex issue in different ways. Not all educators agree on what makes some readers struggle or what can be done about it. It is my goal to help teachers negotiate the complexities surrounding teaching the struggling reader from a constructivist perspective.

One factor that contributes to success in reading is the acquisition of higher-level thinking skills required for comprehension. An example of this would be modes of questioning that take place between teacher and students during a classroom discussion. Prior to beginning my research on how talk can be used as a tool for supporting struggling readers in building comprehension, I wanted to get a general idea of teacher perceptions in this area, so I began by informally interviewing a teacher.

During this interview, I asked a third grade teacher, Tanya (all names are pseudonyms), to consider the type of questioning that takes place in her classroom and whether or not she tries to focus on higher-level thinking questions. This was her response:

I do, I mean sometimes whole group I will throw them in a little bit. But, I would say I do more with the average kids and the above average, because the below average, sometimes they can't answer literal recall questions, you know. I'm in third grade and I have kids that read 5 words a minute. So, obviously, they're going to get it whole group, higher order thinking, but I'm going to focus more on being able to read.

This response, specifically addressing questioning, a common classroom practice, particularly resonated with me because it provided me with some defining *a-ha moments*. I then asked Tanya about the use of discussion as a way of helping students construct meaning. Her response was as follows:

...I do that more with the average or the above average because they can really understand what you are asking. You know, like if it's the below average it goes right over their heads. So, in a small group, and I'm not going to say all the time, but it's kind of like an extra, you know, if we have time for it.

I continued the interview by asking Tanya whether or not she feels giving kids opportunities to figure things out through peer discussion groups would be viable. She responded by saying:

I do, and usually like the higher kids can do it, even the average kids, but the below average, the ones that are just struggling with reading it, when they're done with even the paragraph, they can't even tell you what they read about. Because they're concentrating on reading every word correctly. So, I guess I try to let them, or give them opportunities for higher order thinking, but the struggling readers, it's really hard for them even to read the text, let alone answer a basic question, and then I'm going to give them a higher order thinking question...they're so lost.

Sometimes the nonfiction articles are really hard for them to understand. So that's why I try to read the text together and then kind of talk about it a little bit, so they'll have a little background. So then when they partner-read it a second time they can answer questions, so they're a little bit more familiar with it.

Tanya's candid responses spoke volumes about the everyday struggles of teachers who are working with struggling readers. Her responses revealed that time, difficulty decoding and recalling, and challenging text, were just a few of the everyday struggles diverting her from the intent to provide enough support so that all students, including struggling readers, are empowered with literacy. These struggles created a clear disconnect between her beliefs and her classroom practices.

The purpose of this study was to investigate how understanding was constructed for struggling readers in an elementary classroom through collaborative classroom interactions. And, consequently, how such interactions affected the readers' self-identity and the classroom environment. As we raise the bar through the high expectations set forth for all students by the Common Core State Standards, as well as increased accountability on teachers via high stakes testing, it is more critical than ever that we address the needs of those that struggle. However, it is also important to understand how such forms of accountability impact classroom practices.

Statement of the Problem

In schools today, teachers rely heavily on the results of standardized measures to gauge their students' ability to construct meaning. This establishes a particular classroom environment; one in which it is often assumed that a standardized test is the ultimate indicator of knowledge, therefore, those that score higher are more successful. This type of classroom environment has its foundation deeply set in behaviorism. As Tracy and Morrow (2012) note, behaviorism in reading is based on the premise that making meaning is a component part of the task of reading. As a result, the belief is that comprehending a text can be measured by how well a student masters subskills. For example, choosing the correct response on a multiple choice test is

assumed to be indicative of comprehension. Even though, as these authors note, behaviorism was the dominant perspective from 1900 to the 1950's, it is still prevalent today in the form of high-stakes assessments and national standards.

The No Child Left Behind (NCLB) (2002) educational reform policy enacted by the federal government in 2001 changed the research and policy climate in schools by calling for *evidence-based pedagogy* that results in quantitatively measurable student achievement. Policies such as this were designed to improve academic achievement for all students by exerting pressure on schools to raise scores on standardized tests. Accountability for student performance was meant to be the impetus for reform (Gavelek & Bresnahan, 2009).

Testing, to assess the degree to which standards are met, is one example of a behaviorist principle that is dominating a significant amount of educational funding and instructional time. According to the National Commission on Testing and Public Policy (1990), American elementary and secondary students spend the equivalent of 20 million school days each year taking tests. The cost of purchasing, scoring, and related services for state and local assessments is \$700 million to \$900 million dollars annually. This number does not include published curriculum and materials produced to fit the tests. No other country in the world does such extensive achievement testing. But, it is important to question what this extensive amount of testing is measuring and how the test data is being utilized by teachers in the classroom.

Educators may feel compelled to stick to instructional methods similar to recitation as a result of many factors, including: the emphasis placed on testing; residual effects of the traditional role of "teachers as evaluators"; and, the need to feel as if they are managing and controlling the class (Alvermann, O'Brien, & Dillon, 1990; Barnes, 2008; Cazden, 2001).

Recitations can be described as “recurring sequences of teacher question plus student answer, where students “recite” what they already know or are coming to know through the questioning” (Dillon, 1984, p. 50). This instructional format allows teachers to cover or review textual material in preparation for the extensive amount of testing done in today’s typical classroom. However, when educators rely heavily on methods of recitation, they miss opportunities in which students dig deeply into issues and construct meaning jointly through social interaction.

In addition to the pressures of high stakes testing, the bar is being raised as states elect to be a part of the Common Core State Standards Initiative. According to the National Governors Association Center for Best Practices & Council of Chief State School Officers (2010), currently, 45 states, the District of Columbia, four territories, and the Department of Defense Education Activity have adopted the Common Core State Standards (CCSS). This initiative calls for increased rigor in reading by way of explicit focus on higher level thinking skills required by increasingly complex texts. As teachers begin to incorporate the Common Core State Standards, it is critical that they provide students with additional supports for tackling challenging materials, especially struggling readers. The expectation to read, comprehend, and write about increasingly complex texts as students progress through school may prove to be a struggle for some.

High quality, collaborative classroom interactions could serve as the device that provides teachers and students with a manageable plan for attacking complex texts. As students encounter multiple sources of information, collaborative interactions are a way to help them make sense of text as they navigate through information about a topic. However, this is a pedagogical shift for many teachers, which will require time, practice, and guidance.

From a constructivist perspective, meaning is made when the reader integrates new knowledge they acquire from the text with prior knowledge. More specifically, constructing meaning from text includes reading and the integration of experiences, interests, background and culture, language, cognitive abilities, and knowledge (Gavelek & Bresnahan, 2009). Based on this perspective of constructing knowledge, this study suggests the implementation of social modes of discourse, which I refer to as collaborative classroom interactions, to go beyond what is measured by standardized assessments by: actively engaging students, extending their thinking about text, provoking and invoking thought, and improving overall construction of meaning of and across complex texts, while positively impacting the classroom environment.

It was important to study the impact of high quality, collaborative classroom interactions on struggling readers so that this may potentially be used as pedagogy for fostering the construction of making meaning through texts. It is essential that teachers are aware of the social interactions taking place in the classroom and their cognitive and affective impacts. This may be particularly important for struggling readers identified as falling in the achievement gap.

Research Purpose and Questions

This study builds a case for using high quality, collaborative classroom interactions, through which teachers can help students, particularly struggling readers, as they make sense of complex texts; and, perhaps in the process, establish a positive classroom environment which could potentially change behavior, improve classroom management, manage time, while addressing the needs of all learners in the classroom. To do so, I explored how students used talk as a tool to build understanding in small groups, with the assistance of peers, and what types of talk were used. Using a formative experiment approach involving qualitative methods, the goal

of this study was to help struggling readers deepen understanding of text by exploring social modes of discourse that began with group discussions and moved towards discussions that took place in a small group setting. The following research questions guided this study:

- 1) How was the construction of meaning impacted, for struggling readers in an elementary classroom, as a result of collaborative classroom interactions?
- 2) How did the reading self-identity of struggling readers change as a result of collaborative classroom interactions?
- 3) How was the teacher's perception of classroom environment impacted as a result of collaborative classroom interactions?
- 4) How did national standards and testing impact classroom comprehension instruction?

Defining Terms

Many terms have been used synonymously to date to describe discussions that take place in the classroom. Various terms have been used by researchers and include generic terms such as *discussion groups*, to more specific language such as *dialogic teaching* (Alexander, 2006), *classroom discourse* (Cazden, 2001), *grand conversations* (Eeds & Wells, 1989), *guided construction of knowledge* (Mercer, 1995), *conversational discussion groups* (O'Flahavan, 1989), and *text-based discussion* (Kucan & Palincsar, 2013). For this study, I have chosen the term *collaborative classroom interactions* because it encompasses not only discussion, but also the need for collaboration within the classroom, as well as all social interactions and exchanges taking place.

Collaborative classroom interactions can include written and oral discourses. When implemented effectively, the teacher does not assume the role of “gatekeeper of knowledge”, but rather acts as a participant in the meaning-making process. Interactions include teacher and students, and student to student in small collaborative groups. Participants include those participating in the act of constructing meaning. According to Barnes (2008), “When learners ‘construct’ meanings they are manipulating what is already available to them from various sources, and exploring its possibilities, and seeing what can and cannot be done with it” (p. 9).

A somewhat synonymous term, *classroom discourse*, is most simply defined by Cazden (2001) as the language for learning. Cazden (2001) explains that, through communication, students are given an opportunity to demonstrate learning, while revealing to the teacher background information about their attitudes and personal identity. When effectively utilized, conversations are co-constructed by participants, in which reciprocity exists between teacher and students. Classroom discourse does not necessarily measure student achievement, but is rather a medium for instruction, on which teacher pedagogy should be built (Nystrand, 2006). This language, or classroom discourse, is the foundation on which collaborative interactions are built. Simply put, my reference to collaborative classroom interactions translates to an environment in which students have been taught to think and talk purposefully (Johnston, 2004; Nichols, 2006).

Constructing meaning refers to understanding a text through the integration of experiences, interests, background and culture, language, cognitive abilities, and knowledge (Gavelek & Bresnahan, 2009). In reading, this translates to reading comprehension. Reading comprehension is defined by Harris and Hodges (1995) in *The Literacy Dictionary* as:

The construction of meaning of a written or spoken communication through a reciprocal, holistic interchange of ideas between the interpreter and the message in a particular communicative context. Note: The presumption here is that meaning resides in the intentional problem-solving, thinking processes of the interpreter during such an interchange, that the content of meaning is influenced by that person's prior knowledge and experience, and that the message so constructed by the receiver may or may not be congruent with the message sent. (p. 39)

Many definitions exist for struggling readers. In some cases, this label is placed on children who do not meet standards on standardized or criterion-based assessments. However, these measures may not consider student strengths in various modalities of learning. Synonymous terms include *at-risk readers*, *poor readers*, and *remedial readers*. For these purposes, I chose to define struggling readers based on The Rand Report (2002). This report identified three key components of the meaning-making process: the reader, the text, and the activity, all set within the sociocultural context. A reader, then, who has reduced capacity, ability, motivation, cognition, or background knowledge, to effectively interact with text for the purpose of making meaning, could be considered a struggling reader.

Although students learn in different ways, and all students, including struggling readers, make meaning as they read, their understanding of a text may not match the teacher's expectations (Smith, 1998). As a result, they are often distanced from classroom activities (Langer & Close, 2002). Langer and Close (2002) assert that struggling readers may be less aware of purposes for reading, and not use prior knowledge to build understanding of the text. Furthermore, they may not make connections to text, or make prediction about what's coming.

However, we can build capacity for learning by identifying and targeting specific learning strengths.

Modes of Collaborative Classroom Interactions – Tools for Constructing Meaning

There are various modes of classroom interactions, which can be used to reach a student's higher-level processing abilities, while taking into consideration sociocultural influences and the situated nature of reading, which impacts student learning.

Based on the definition above, reading is highly interactive and requires construction of knowledge and problem-solving. In the classroom, it is essential to provide students with opportunities to work collaboratively to problem-solve and extend their thinking through group inquiry. Inquiry is social in nature and provides students with an opportunity to investigate and explain real-life problems (Hamm & Adams, 2002).

Questioning is a common mode in which teachers interact with students. However, sometimes teachers' questioning can fall into the familiar "Ping-Pong" pattern, in which a teacher asks a question, a student responds, and the pattern continues. In contrast, more effective modes of questioning include open forums and open questions. Using open forums and open questions for group discussions serves many purposes. Alvermann, O'Brien, and Dillon (1990) described open forums as, "discussions in which students freely interject opinions, elaborated comments, and questions" (p. 307). Open questions during open forums allows for open exchange. First, it levels the power dynamic (Johnston, 2012), so the teacher is not the "gatekeeper of knowledge." Second, since there is no right or wrong answer, the fear of judgment is removed (Johnston, Ivey & Faulkner, 2011). Additionally, it allows students the

opportunity to explain their thinking. This also gives students multiple perspectives to further their own thinking (Johnston, Ivey & Faulkner, 2011).

All modes of collaborative classroom interactions require listening (Johnston, Ivey & Faulkner, 2011). Genuine listening on the part of the teacher demonstrates caring about student's thoughts, opinions, and perspectives. It also models listening as an expectation for peer interactions.

Along with the various social modes of discourse and equally important is the cultivation of a classroom environment that allows for group inquiry through discussion. Creating a safe environment for taking risks is a necessary condition for collaborative classroom interactions.

Significance of the Study

In education today, the stakes are higher than ever. Teacher accountability, most notably visible through student performance on high-stakes assessments, has constrained the options for working with struggling readers. With higher expectations for deepened meaning of complex texts based on the Common Core State Standards, there is an urgent need by both teacher and students for a revised pedagogy.

This investigation is important in helping teachers understand how students construct meaning from text and how this meaning construction can be influenced by the student, the text, and peers during group discussions. Because so many sociocultural variables are involved in the meaning making process, we cannot reduce the effectiveness of this process to oversimplified scores on a standardized assessment. Furthermore, reliance on testing forces teachers to view a child in terms of their individual academic ability, extensively diminishing the problem-solving capabilities of a group (Johnston, 2012).

Formative experiments start with a pedagogical goal. The researcher then adapts or changes factors in order to reach that goal (Fisher, Frey & Lapp, 2009; Reinking & Bradley, 2008; Reinking & Watkins, 2000; Newman, 1990). This study included collaboration between researcher and teacher to explore an increasingly collaborative classroom environment in which group discussions were used to help struggling readers constructing meaning of text. This is discussed in detail in Chapter 3.

Finding of this study can influence pedagogy, perhaps beyond the construction of meaning through text. A classroom environment built on positive classroom interactions has the potential of changing behavior, improving classroom management, managing time, while addressing the needs of all learners in the classroom, not just the “average” or “high kids”. Many of these factors were identified by Tanya as issues hindering her from meeting the needs of the struggling readers in her third grade classroom and causing a disconnect between her beliefs and practices. Collaborative classroom interactions can serve as a springboard for expanding thinking about text (Alvermann et al., 1990), expressing ideas based on one’s own background and identity, and allowing students to get multiple perspectives on a topic, while constructing meaning.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This study investigated how understanding can be constructed for struggling readers in an elementary classroom through collaborative classroom interactions. Additionally, it explored the effects on the struggling reader's identity and the teacher's perception of the classroom environment. Finally, through this research, I was able to examine the impact of standards and testing on classroom comprehension instruction. Using formative experiment, the pedagogical goal of this study was to improve comprehension for struggling readers using social modes of discourse, and in doing so, explore how students used talk as a tool to build understanding in small peer groups.

Although the use of discussion groups to improve comprehension has the support of many literacy researchers (Almasi, 1995; Berne & Clark, 2006; Cazden, 1981; Eeds & Wells, 1989; McGee, 1992; McMahan & Raphael, 1997; Roser & Martinez, 1995; Wiencek & O'Flahavan, 1994), it is questionable whether such discussion serves as a primary method of building comprehension in practice. Gaining prevalence in the 1990s, a considerable body of research exists on peer-led discussion groups, and includes studies involving adolescent readers, second-language learners, and special education students (Almasi, 1995; Berne & Clark, 2005; Berne & Clark, 2006; Boyd, 1997; Brock, 1997, Goatley, 1997; Leal, 1992; McMahan & Goatley, 1995).

Teachers can use modes of discourse to foster a learning environment in which students read, write, and think about important topics, themes, and issues. Even though standardized measures may be mandated by a district or the state, it is important for teachers to consider how

to move beyond heavily relying on them to drive instruction and gauge their students' reading comprehension skills, while meeting the demands of the Common Core State Standards.

This study draws on a broad spectrum of theory and research, including: social learning perspectives; identity theory; and, reader response theory. In this chapter, first, I provide a historical overview of the topic by discussing the guiding principles that preceded, informed, and shaped it, beginning with reading comprehension. Next, to frame this investigation and ascertain the impact of these theoretical perspectives on talk and comprehension, these perspectives will be examined more closely. Finally, I will examine previous research on talk, comprehension, and the impact of classroom environment, including research that involved different modes of collaborative classroom interactions, and how they were used as tools for constructing meaning.

Reading Comprehension Instruction: A Historical Overview

The influence of early theories on comprehension instruction. In order to understand what we do in classrooms today, in terms of reading comprehension, it is important to examine how we got here, by looking back at the history and evolution of reading comprehension instruction.

Prior to 1975, comprehension skills were established as a way of deciding what would be taught and what would be tested, usually in the form of teacher questions (Durkin, 1978-1979). In 1925, William S. Gray deconstructed comprehension into a set of teachable skills. And, later, in 1944, the work of Frederick Davis resulted in nine skill categories, which fit into two domains: word knowledge and reasoning. These comprehension skills consisted of a set of implicitly taught linear tasks, which moved from literal to inferential. The belief was that sequential skills, from lower order to higher order, would result in comprehension. Evidence of mastery was based on the students' ability to answer questions. This ability was heavily reliant

on oral recitation and memorization. Thus, the multiple choice test emerged as a scientific measure which attempted to eliminate subjectivity.

Although behaviorism was the dominant theory guiding reading comprehension instruction and assessment, the work of Edmund Burke Huey (1908) and Edward Thorndike (1917) took a constructivist turn. Thorndike (1903, 1917), an educational psychologist and behaviorist, explained learning in terms of observable behaviors, which included factors necessary for “correct reading”. However, he viewed comprehension as an active and complex thought process that involved inquiry. Thorndike (1917) believed that reading was reasoning and required an analysis and organization of the text. Likewise, Huey (1908) argued that reading required making sense of the text, rather than accurately recalling information. Although these constructivist ideas began in the early 1900s, they did not gain prevalence until the 1970s. Interestingly, although some researchers advocated for the need to move away from skill-based comprehension instruction at the beginning of the 20th century, a political agenda of quantifying comprehension ability and removing the teacher as the judge of quality in student responses dominated the field of education even then (Pearson, 2009).

Later, in 1959, psycholinguistics, most notably the work of Noam Chomsky, pushed educators to question behaviorist views. The trend beginning in the 1960s was a changing perspective, away from the behavioristic view of reading to a focus on the human mind. This resulted in Philip Gough’s (1972) cognitive processing model, which depicted the reading process as a series of stages. This was a bottom-up model through which Gough (1972) explained reading comprehension as the result of decoding skill and language comprehension. Kenneth Goodman (1965, 1967) and Frank Smith (1971) also considered reading to be a language process. They added the reader’s reliance on cuing systems to Psycholinguistic

Theory. Goodman (1965) coined the term *miscues* to describe differences in what the text actually says and the reader's response. Miscues allow the teacher to get a glimpse into the mind of the reader and better analyze their thinking processes.

One of the seminal works of this time period was *Why Johnny Can't Read-And What You Can Do About It* by Rudolf Flesch (1955). This book argued for a phonics-based approach, as opposed to the predominant look-say whole-word method.

Dominant influences on reading comprehension after 1975. In the 1970s beliefs about reading comprehension began to take shape through enmeshed ideas from cognitive perspectives and psychology. The goal of psychologists at this time was to explain how readers understood the structure of the text. Story grammars and text structure came to be the focus, not the reader (Rumelhart, 1975). This, however, did not take into account what the reader brings to the text (Rosenblatt, 1978).

From considering the combination of information processing and reader as an individual constructor of knowledge, Schema Theory was born. Interestingly, the roots of Schema Theory trace back to Gestalt psychology as early as 1912, with the term "schema" being used by Sir Frederic Bartlett in 1932 (Rumelhart, 1977). However, Schema Theory did not emerge until the 1970s, through the work of Rumelhart (1975, 1977, 1981). Schema Theory depicts how knowledge is organized and stored in memory. According to Schema Theory, interpretation of text and learning is dependent on what we already know. Prior knowledge or schema was found to be a better predictor of reading comprehension than standardized test scores (Johnston & Pearson, 1982). This theory continued to gain momentum throughout the 1970s and 1980s and was one of the most popular reading theories of its time. One reason may be that Schema

Theory included what earlier theories left out; it defined reading comprehension in terms of involvement between the reader, the text, and the context, strengthening a constructivist view of reading.

This era continued with the work of Flavell (1976) and Brown (1978) and the idea of strategic reading. Their work focused on the reader as a problem-solver through a repertoire of metacognitive strategies. This required direct, explicit instruction from the teacher and the reader to independently think about their thinking, choose and apply a strategy, and, thereby, “fix” a comprehension issue they come across. Motivation also plays a significant role in strategic reading. Students must see the value, significance, and usefulness of an action in order to be motivated to use it (Paris, Lipson & Wixson, 1983).

Most notably, from the 1980s on, was the eminence of social learning perspectives on reading comprehension. Vygotsky’s(1978) *zone of proximal development* became a prominent learning construct. Social learning perspectives, which place emphasis on the roles of culture, society, and historical factors in reading development, opened doors to new methods of inquiry (Vygotsky, 1978). In particular, qualitative methods of inquiry gained acceptance and popularity. Sociocultural researchers consider reading to be a social process that cannot be separated from the environment. Tracey and Morrow (2012) explain, “The premise of Vygotsky’s work is the belief that children learn as a result of their social interactions with others” (p. 127). From this perspective, then, attempts to quantify reading comprehension abilities through standardized measures seem futile because they lack social interactions.

Building on Durkin’s (1978-1979) findings, which revealed that less than 1% of instructional time was being spent on comprehension instruction, the seminal work of Dole,

Duffy, Roehler and Pearson (1991) combined the cognitive view of reading comprehension with the ever-present heavy psychology influence on education during the early 1990s. They introduced us to teaching readers to actively construct knowledge through *strategy instruction*. According to Dole, Duffy, Roehler and Pearson (1991), “In addition to knowledge, expert readers possess a set of flexible, adaptable strategies that they use to make sense of text and to monitor their ongoing understanding” (p. 241-242). A major difference between skills and strategies is intentionality. Strategies involve the deliberate control of the text on the part of the reader by deciding how and when to use a strategy to increase understanding, whereas skills are based on automatic application of a task. These strategies, which focus on the construction of meaning, include: determining importance, summarizing, drawing inferences, generating questions, and self-monitoring.

Au and Kaomea (2009) provide insight into viewing reading comprehension from a critical perspective. Forming the nucleus of their perspective is Paulo Friere’s (1985) view of reading and reading comprehension, which centers on using literacy to read, reread, write, and rewrite the world. Having the ability to read the world allows the reader to take a critical stance about what they are reading, instead of just accepting it as truth (Friere, 1985). Au and Kaomea (2009) argued that literacy can be both empowering and disempowering to diverse cultural groups. To be empowered, one must be critical about what they are reading. However, controlling print can be used as a means of cultural denigration in order to allow political gains and economic power (Au & Kaomea, 2009).

Connecting past to present – Shaping reading comprehension instruction in today’s classroom. Although we see bits and pieces of all of the lenses discussed above in today’s classrooms, it is more critical than ever for educators to consider the theoretical lens through

which they view reading comprehension instruction. Their lens directly translates to implementation in the classroom, which can make or break learning. In terms of reading comprehension instruction, perhaps it is time to reevaluate standardized practices. Within the scope of constructivism, meaning is made when the reader integrates new knowledge they acquire from the text with old knowledge already in their head (Gavelek & Bresnahan, 2009).

From the 1960s to the present, the work of John Dewey, which is highly constructivist in nature, continues to impact the classroom and research. Dewey's (1916) *Inquiry Learning* is a problem-solving model that encourages the use of small, social groups in which collaboration is key. Though most educators know the *Dewey* name, it may be that standardized measures have forced teachers away from such models. In other words, educators heavily rely on the behaviorist techniques involved when implementing standardized practices at a time when constructivism may be needed most.

Decades ago, Cazden (1981) argued that the term "classroom interaction" was limited to discussions which involved the teacher. This argument may still be plausible today. Teachers may point out time, accountability, and difficulty with decoding and recall as some of the factors moving them away from implementing inquiry and discussion models. And, coming on the heels of past initiatives, such as NCLB, it is not surprising to see a re-emergence of behaviorism, with literacy instruction becoming limited to what can be measured on multiple-choice tests.

As we raise the bar through the high expectations set forth for all students by the Common Core State Standards, it is more critical than ever that we find ways to better address the needs of those students who struggle. Constructivist models of inquiry can be used as classroom pedagogy for this purpose. Importantly, it should be noted that construction of

meaning, from a constructivist viewpoint, is an internal process, and, therefore, not necessarily an observable phenomenon (Tracey & Morrow, 2012). Thus, standardized practices for teaching and testing are not always suitable because they require observable measurement.

Theoretical Perspectives

Discourse has always been part of the classroom as a means of transmitting ideas. However, early in the history of education, it was the teacher who did most of the talking, while the students remained seated and quiet. Soon thereafter, however, teachers realized that talk was a necessary component in education. In order for learning to take place, language must not only be used as a communication system for teaching in the classroom, but also as a means for active participation on the part of the student (Barnes, 1976; Cazden, 1981). Teachers began using student's oral responses to assess knowledge. Continued research on the topic, beginning with Durkin's seminal work in 1978-1979, which brought light to the topic, led to evolved theoretical implications that language was essential to learning.

This investigation was framed by the theories of Barnes (1976, 1992, 2008), Gee (2000), Rosenblatt (1978, 2004), and Vygotsky (1962, 1978), as well as other sociocultural theorists. These theories and their relevance to talk and its position in the context of reading comprehension are discussed below. Additionally, this work was informed by the principles of pragmatic inquiry, which seeks to provide answers to real problems that struggling readers experience (Johnson & Onwuegbuzie, 2004). Within the realm of pragmatism, this study utilized a group inquiry approach, with embedded social learning considerations.

A Social Learning Perspective

Vygotsky (1978) identified three schools of thought on development and learning. The first assumes that child development is separate from learning. The second assumes that child development is a prerequisite to learning. The third combines the two, assuming child development and learning are related and interactive, but that the influence of learning is not specific; thus, learning one specific skill enhances all general abilities.

Vygotsky (1978) rejected all three theoretical positions, to establish what he considered to be a more adequate view, which is known as the *zone of proximal development*. The zone of proximal development is defined as, “*the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers*” (p. 86). Understanding students’ zones of proximal development permits the teacher to go beyond what has already been developmentally achieved by the student and reach for that which is slightly beyond his or her development, or the next step in the developmental process. Once a student can problem-solve to complete a task independently, it means those developmental functions have matured. This premise forms the basis for utilizing collaborative classroom interactions. Based on the zone of proximal development approach, it is imperative for struggling readers to have opportunities to work with more capable peers to construct meaning. Small group discussions can act as a vehicle for comprehension to further the developmental level of those who struggle.

Many students in grades 3 through 8 struggle to overcome the hurdle known as reading comprehension. This includes understanding the gist, connecting it to their background knowledge, and analyzing the text to identify its structures (Guthrie, 2004). An issue with strategy instruction, which was discussed above, is that teachers teach strategies in isolation, as if

comprehension occurs in a vacuum, similar to the way in which we teach formal skills.

Although strategy instruction is a key ingredient for helping students extract meaning from text as they read, it alone is not sufficient for those who struggle because strategy instruction does not require social exchanges (Guthrie, 2004).

Individual teachers are heavily influenced by the social world in which they work (Vygotsky, 1934/1986). And, thus, individual students are heavily influenced by the social world in which they learn. This equates to an immense emphasis on the importance of classroom environment. Dewey (1916) argued, “We never educate directly, but indirectly by means of the environment” (p. 22). Therefore, the environment should be designed to emphasize the construction of knowledge through social modes of inquiry.

Snow and Sweet (2003) consider the larger sociocultural context that they say shapes and is shaped by the reader. Readers have different levels of success with different activities. This is dependent on the text, the activity, the reader, and the broader sociocultural context that supports them. The reader’s capacity, abilities, background knowledge, experiences and interests define the purposes for reading, processes available and involved, and the consequences of reading. In the RAND Reading Study Group report, Snow (2002) defines reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p. 11). Sometimes, however, interaction and involvement may require scaffolding to help students delve into the higher level thinking required to construct meaning of complex texts. Perhaps such scaffolding could not only be done by the teacher, but it could also be done by peers.

Mercer (1995) describes talk as a “social mode of thinking” (p. 4). Thus, social exchanges within the classroom environment about text are a necessary component for improved comprehension (Guthrie, 2004). However, these interactions are often the missing ingredients in comprehension instructional practices. When discussion is not a part of practice, students lose the opportunity to clarify their understanding, share strategies, questions and opinions, and integrate new information into their background knowledge (Guthrie, 2004). Since students bring with them unique and different backgrounds, perspectives, opinions, and experiences, social exchanges allow them to learn from each other. From this perspective, individual differences are paramount to learning.

According to Vygotsky (1962, 1978), conversations provide a window into our thinking and are based on social interactions. Vygotsky (1962, 1978) posits that learning can only occur as a result of environmental interactions with others and as a result of collaboration with peers. These conversations provide students with opportunities to socially construct knowledge (Guthrie & Wigfield, 2000). However, in order for teachers to get a clear picture of text comprehension or for comprehension to be observable, students must be taught how to conduct discussions. This may not come easy for struggling readers.

Building on the work of Vygotsky, Lave and Wenger (1991) describe learning as “...increasing participation in communities of practice concern[ing] the whole person acting in the world” (p. 49). From this perspective, learning is a situated activity in which “learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community” (p. 29). This assumes that learning is ultimately the result of social interaction and

collaboration with peers. This results in the development of one's identity (discussed further below), as a consequence of the social world in which they are situated.

One of the first researchers to build a case for talk among students was Douglas Barnes (1976/1992). Also drawing from the work of Vygotsky, Barnes posited that students should collaborate to think aloud about text. He argued that talk is essential in building understanding because of its flexible nature (Barnes, 2008). This makes it easier for students to work through their thinking and change what may be inadequate. He called this kind of collaboration *exploratory talk*. Exploratory talk is tentative in nature and gives students a chance to talk about ideas for the purpose of further developing them, rather than just sharing answers.

Exploratory talk is thinking aloud among peers about text, or what Barnes (1976) refers to as "groping towards a meaning" (p. 28). Exploratory talk is "...usually marked by frequent hesitations, rephrasings, false starts and changes of direction" (p. 28). This type of exploration of ideas allows students to build on what they know and assimilate new knowledge to old knowledge. This is done without the presence of a teacher. This positions the responsibility of group inquiry in the hands of the group and removes the teacher from the usual position of authority. So, the group assumes the responsibility of formulating hypotheses and evaluating them. Barnes (1976) argues, "This they can do in only two ways: by testing them against their existing view of 'how things go in the world', and by going back to the 'evidence'" (p. 29). The text, of course, serves as the 'evidence'. Barnes' work primarily focused on secondary students, however, more recent research revealed that this approach can also be effective in the elementary classroom, with scaffolded support (Almasi, 1995; Eeds & Wells, 1989; Evans, 2002; Leal, 1992; Maloch, 2002; McGee, 1992; McMahan, 1992; McMahan & Goatley, 1995; O'Flahavan, 1989).

A second form of talk proposed by Barnes is also noteworthy. Originally termed “final draft” speech, Barnes later referred to this more polished version of talk as “presentational” (Barnes, 1976/1992; Barnes, 2008). During presentational talk, the student focuses on adjusting his or her language to meet the needs of the audience, whereas exploratory talk is about sorting out his or her own thoughts to make meaning. Barnes referred to presentational talk as “final draft language”, a phrase, which, in and of itself implies assessment is involved. This type of polished speech does not offer students an opportunity to deepen understanding, which may be particularly detrimental for struggling readers.

According to Mercer (1995), collaboration and conversation are representative of the joint pursuit of learning. Language as a tool can be used to develop knowledge and understanding. To illustrate talk as a tool, I turn to an excerpt from *Opening Minds* (2012), in which two students are discussing the book *A Picnic in October* by Eve Bunting. In this story, a boy misbehaves on a family trip to the Statue of Liberty, where they picnic to celebrate his grandmother’s immigration. By the end of the story, the boy changes his feelings about the trip. Here is their conversation:

Manny: No, no, you see, he was rude, but he changed.

Sergio: Rude people don’t change. He was making fun of everyone; he pretended to throw up...

Manny: That’s sick!

Sergio: Yeah, but it was because he didn’t want to go, he was like mad that they made him...and embarrassed too, like me when my mom makes me go...

Manny: Yeah, at first, but look here at the end, see (*flips the pages*)—they're leaving, ...here it is...see, he looks, he looks at the other family—it's like he gets it!

Sergio: Let me see again (*grabs book, studies the pictures on the pages Manny showed him, and whisper-reads the words on the pages*). Oh—you mean like now he gets why the Grandma thinks the statue is a big deal?

Manny: Yeah, now he gets it.

Sergio: So now it's in his heart, too?

Manny: No—well OK, yeah, I guess it could be in his heart, but now he really gets that it's in his grandma's heart. (p. 5)

This excerpt serves as an exemplar for utilizing perspective to negotiate meaning. At first, the boys disagree in their analysis of the character. After listening to each other's interpretation, however, together they are able to develop a deeper understanding of the story. Their perspectives have changed as a result of their collaborative conversation. This clearly illustrates language as a tool for developing understanding.

Building on the earlier work of Barnes, Mercer (1995) describes three modes of social talk:

1. The first way of talking is **Disputational talk**, which is characterized by disagreement and individualized decision making. There are few attempts to pool resources, or to offer constructive criticism of suggestions. . . Disputational talk also has some characteristic discourse features – short exchanges consisting of assertions and challenges or counter assertions.

2. Next there is **Cumulative talk**, in which speakers build positively but uncritically on what the other has said. Partners use talk to construct a ‘common knowledge’ by accumulation. Cumulative discourse is characterized by repetitions, confirmations and elaborations...
3. Last is **Exploratory talk**, in which partners engage critically but constructively with each other’s ideas. . . Statements and suggestions are offered for joint consideration. These may be challenged and counter-challenged, but challenges are justified and alternative hypotheses are offered. Compared with the other two types, in exploratory talk *knowledge is made more publicly accountable and reasoning is more visible in the talk*. Progress then emerges from the eventual joint agreement reached. (p. 104)

These three analytic categories of talk serve as *distinctive social modes of thinking* (Mercer, 1995). This provides a backdrop for understanding social modes in which talk can be used to guide students in collaboratively constructing meaning. Future research should examine how teachers can guide struggling readers through the progression of *disputational* talk to *exploratory* talk to enhance their comprehension of texts read.

From Social Learning Perspective to Identity Theory

Gee’s (2000, 2001) identity lens, begins with Vygotskian principles, draws from the reader’s social and historical roots, and adds the situated nature of the act of reading. When discussing identity theory, Gee (2000) uses the term “Discourses” with a capital “D” to describe “a certain kind of person” or having a specific identity. For example, typically, one’s primary Discourse comes early in life from the family. This becomes an integral part of the individual’s identity. Secondary Discourses are formed through interactions with outside groups, such as

school, church, or teams that an individual is associated with. It is the upbringing, along with primary and secondary Discourses, along with knowledge that determines how a student approaches, interacts with, and ultimately makes meaning from text.

Gee (2001) describes the reading process as being situated, and not an isolated activity that can be done for a general purpose. Embedded within this process is the student's upbringing and history, which defines their identity. He argues that readers approach different texts in different ways, for different purposes. Additionally, a student draws upon his or her upbringing (primary Discourse) when making and communicating verbal and non-verbal meanings, and from Discourses of different groups with which an individual is affiliated (secondary Discourses).

In the classroom, the teacher has a powerful influence on a student's construction of meaning through the environment she establishes in the classroom. From this perspective, it is the teacher who can directly affect the students' Discourse, that being their classroom identity.

In assessing the reading abilities of struggling readers, one must consider individual history, language, and culture. According to McCarthy and Moje (2002), these factors position a student in a particular way, in terms of literacy, creating an identity. Since identity can be socially constructed, it is essential that teachers consider how classroom interactions can and will effect one's identity. Teaching students to interact collaboratively provides an opportunity for students to link secondary Discourses, as described by Gee (2000), such as peer discussion groups in school with different cultural models, to their primary Discourses, which can result in a co-construction of meaning, and thus building a positive literacy identity. On the other hand, however, silence due to the lack of opportunities for social interactions allows a student to

maintain their identity as a reader, which, for struggling readers, may be negative (Gee, 2002). Students can use silence to protect an identity and avoid being exposed as a weak reader (Hall, 2007). However, this can often be misinterpreted as a cognitive or motivational issue.

Cultural identity can also play a part in how a student participates in classroom talk. For example, Native American cultures may find the demonstration of knowledge in front of the whole class to be embarrassing, and Asian cultures may be naturally quieter (Mercer, 1995). Equally interesting, all students may not get the same opportunities to participate in classroom talk due to differences in gender. According to Mercer (1995), research shows that teachers tend to interact more with boys, as a result of their attention seeking behaviors. Although the teacher may not do this intentionally, it still dominates practice. This access to talk is a vast issue in and of itself, and, although not the focus here, its role in identity is noteworthy.

Consequences of interactions can change how all students view themselves and their literacy practices. This premise is closely aligned with Vygotsky's (1978) layout of development of the individual's mind as a result of interaction with society, although he does not explicitly use the term *identity* (McCarthy & Moje, 2002).

A student may view his or herself in many ways depending on the situation. These self-identities are constantly changing and evolving as a result of sociocultural experiences. In the classroom, for example, the classroom community as a whole shapes a student's individual identity (Lewis, Enciso & Moje, 2007). Interactions, both conflicting and agreeable provide students with the opportunity to build agency from classroom community discourses. When struggling readers have opportunities to work with peers that are at or above grade level, they are able to see others struggle through text and ideas. This may help in eliminating self-identity, or

self-perception, as a poor reader and result in a difference in engagement with text and a willingness to take risks (Hall, 2012). For example, in a study with middle school students, Hall (2012) found that the way struggling readers participated in small, mixed-ability discussion groups changed over time. Initially, the struggling readers' talk during the discussion groups only accounted for 5% of the total group's talk. They rarely volunteered ideas and used silence to prevent exposure as a poor reader. When they did contribute to the discussion, it was often one word answers or an "I don't know" response. In the example below, the group was discussing strategy use in understanding a text about Roman gladiators. Melissa, a struggling reader, remained silent until Sarah, an average reader, addressed her directly:

Sarah: Melissa, what strategy helped you the most?

Melissa: I don't know.

Sarah: What did you write on your paper?

Melissa: I thought, I thought what y'all said was good. The predictions and prior knowledge stuff is good.

Justin: You know what else might help?

Sarah: What?

Justin: Rereading. I read some of this stuff two or three times. (p. 320)

This excerpt clearly illustrates Melissa's reluctance to participate, even when prompted by peers during this discussion. However, beginning with the sixth discussion, the struggling readers increased their talk about the text and strategy use, and provided more explicit participation. Their amount of talk nearly tripled in the last six sessions, moving from 5% to

14%. For example, during the eleventh discussion, Elizabeth, a struggling reader, and Isabella, an average reader, discussed a piece of text about Robin Hood:

Isabella: Robin Hood is described as both a hero and an outlaw. Can someone be both?

Elizabeth: I have a good answer to that.

Isabella: Yes?

Elizabeth: He broke the law. He broke the law to help people so he's a hero. But he broke the law so that's also bad. Some people won't like him for that.

Isabella: I said no. You can't be both. You either like him or you don't.

Elizabeth: But it said in the reading that people admired him because he did the right thing. See? Look here.

Isabella: I see it.

Elizabeth: So don't you think that kinda says you can be both? Like have you ever done something where you broke a rule but it was for the right reason? Don't people have to do that sometimes? Like to help each other out?

Isabella: I guess. (p. 321)

During this discussion, Elizabeth defended her argument and helped Isabella understand her perspective through the use of prior knowledge. As illustrated in this example, Hall's (2012) findings indicate that the identity of struggling readers need not remain one in which silence protects exposure. With the right opportunities to observe and learn from peers, and environment, one which encourages the reading development of all students, struggling readers

can become comfortable enough to productively engage in meaningful discussions and develop an identity as a good reader.

The role of motivation. In addition to sociocultural factors, motivation is a primary determinant in engaged reading. As Guthrie and Wigfield (2000), leading researchers into the role of motivation in comprehending texts, have contended, “engaged readers can overcome obstacles to achievement, and they become agents of their own reading growth” (p. 405). From their perspective, engagement is the key to distraction-free reading that is focused on making meaning. Furthermore, motivation connects engagement and achievement. Collaborative classroom interactions about text can increase motivation, thereby fostering engagement.

So, how does a teacher determine whether or not a student is motivated? To do so, teachers must interpret and understand the decisions a student makes. According to Hall (2007):

One could assume that students who decide not to apply comprehension strategies or engage in behaviors that could increase their understanding of text are unmotivated.

However, little is known about how students make decisions about reading and reading instruction. Rarely do researchers ask struggling readers to speak about the decisions they make concerning text. (p. 133)

For teachers, it is important to understand the decisions struggling readers make in order to accurately interpret whether or not motivation is an issue because this can guide future instruction (Hall, 2007). Understanding decisions a student makes by interpreting the messages being sent also creates an occasion for the teacher to consider the individual identity that the struggling reader is trying to promote and establish agency-building opportunities. For example, the teacher should seek to understand how a student chooses to participate in class (i.e.

volunteers discussion responses, asks questions to clarify understanding), how a student approaches text (i.e. employs comprehension strategies), and how a student tackles assignments (i.e. works alone or discusses the assignment with others, asks for help when needed), all which determine a specific identity they are trying to create (Hall, 2007). This helps in determining whether or not the student is motivated or if the issue is individual perceived identity.

Reader Response Theory

Louise Rosenblatt (1978, 2004) argued that each reader responds to the reading based on their background, and that each individual response falls somewhere along a continuum, which uncovers their stance as a reader, from *effereent* to *aesthetic*. Individual background, the context, and how it impacts the individual reader's construction of meaning is foundational to Rosenblatt's Transactional/Reader Response Theory.

From this perspective, reading is a transaction in which the reader constructs meaning by bringing their background knowledge, and using it to extract meaning from the text while reading. Thus, each text offers a different meaning to each reader. Furthermore, the teacher is also transacting with the text while reading. Her interpretation may be different than that of the students. However, it should not be assumed that the teacher's interpretation is correct, and only to be discovered by the students (Eeds & Wells, 1989).

The purpose for reading can determine the stance a reader adopts for a particular text; and, the reader's actions during reading may be very different depending on their purpose. Rosenblatt (1978) describes *effereent* reading as, "what will remain as the residue *after* the reading-the information to be acquired, the logical solution to a problem, the actions to be carried out" (p. 23). In contrast, *aesthetic* reading involves the reader's focus *during* reading. This is

done by bringing memories, feelings, attitudes, and experiences to the interpretation of text. In other words, meaning is constructed by the reader as a result of immediate transactions with the text while reading. Although different texts may lend themselves to either efferent or aesthetic reading, according to Rosenblatt (1978), the same text may be read efferently or aesthetically, depending on the goal of the reader. It is important to note that close reading of text, as emphasized in the Common Core State Standards, would lead a reader to take an efferent stance.

Rosenblatt (1978) points out that, commonly, there is a heavy reliance on the text when considering the construction of meaning, and, although the text is an important piece in comprehension, she eloquently states, “The text is merely an object of paper and ink until some reader responds to the marks on the page as verbal symbols” (p. 23). Thus, the text acts as a blueprint for meaning, but it is up to the reader to do the construction.

The implications of reader response theory point to the idea that students need opportunities to transact with or “live through” the text as they read, which is very different than reading to extract information. This view implies that meaning is changing and evolving as the student reads. Active participation in the act of reading is an essential element for constructing meaning. The reader’s interpretations of text have the potential of becoming more meaningful as a result of discussion with peers (Almasi, 1995).

Research on Talk and Comprehension

Over the past several decades, research and theory has provided us with compelling evidence as to the importance of the role of talk among teachers and students in fostering learning (Almasi, 1995; Alvermann et al., 1990; Cazden, 2001; Maloch, 2002; McGee, 1992; McMahan & Goatley, 1995; Mercer, 1995). Although talk as a topic has received some attention

in the field, it is questionable whether or not teachers consider it as a primary resource for improving reading comprehension. It seems as if teachers are aware of its importance, but may not necessarily know how to implement it in the classroom (Alvermann et al., 1990). Research on how talk has been implemented in the classroom is discussed below.

Teaching Students to Talk

Many researchers agree that scaffolded support from the teacher involving the *how* and *what* of discussion is essential (Langer & Close, 2001; Maloch, 2002; O’Flahavan, 1989; Wienczek & O’Flahavan, 1994). This requires a significant shift in roles on the part of both teacher and students. Therefore, it is necessary to provide students with models to use in shaping their thinking. Without scaffolded support, students’ discussions may be off-task or ineffective (Langer & Close, 2001).

Modeling through think-alouds. Teacher talk plays an important part in teaching students to talk. Before we can expect students to discuss the cognition involved with reading comprehension, teachers must first model their thinking (Cazden, 2001; Davey, 1983). *Think-alouds*, or verbalizing thoughts about the text, build students’ capacity for understanding and participating in conversations about text, from a metacognitive perspective. Additionally, a teacher’s use of academic language during a think-aloud fosters language development and lays the foundation for use by students. Modeling both academic and everyday language provides an opportunity for students to compare the use of each. Through a think-aloud, the teacher has an opportunity to model her inquiry into the text, discuss and model strategy use while reading, and demonstrate application of academic language, which can later result in improving the quality of student talk during peer discussions.

Approaches to peer discussions. Teaching students how to have authentic discussions that include sharing their own ideas and responding to the thoughts of others is vital. If we want students to extract meaning from small group discussions, we must first teach them how to engage in high-quality, genuine discussions about a given topic. Because struggling readers may lack an understanding of knowledge they are seeking while reading (ie. purposes for reading, connections, making inferences, etc.), it is even more essential that we teach them how to talk. In other words, struggling readers may have difficulty with making meaning from reading the text independently, but can construct meaning based on the thinking of their peers (Langer & Close, 2001). Perspectives of peers can serve as models for how to think about the text. From this, struggling readers can gain reading strategies, learn how to question, problem-solve about content, and discover possibilities for understanding (Langer & Close, 2001). Through these discussions, struggling readers can perform at the same level of proficiency as their peers (Langer & Close, 2001). Many approaches for implementing discussion in the classroom have been published.

Palincsar and Brown (1984) introduced *reciprocal teaching* as a method stemming from social learning perspectives. This method features cooperative learning through teacher modeling, scaffolding, and the use of four strategies: questioning, clarifying, summarizing, and predicting. These strategies are used as an infrastructure for peer discussion groups, during which students have opportunities to take the lead. In a seminal study by Palincsar and Brown (1984), they found that, when first guided by an adult, students' interactions with text led to high quality summaries and questions. They also found that reciprocal teaching "led to sizable gains on criterion tests of comprehension, reliable maintenance over time, generalization to classroom comprehension tests, transfer to novel tasks that tapped the trained skills of summarizing,

questioning, and clarifying, and improvement in standardized comprehension scores” (p. 117). Although the focus here is not on improving standardized test scores, it would seem that overall comprehension improved as a result of reciprocal teaching, regardless of how it was measured. The work of Palincsar and Brown has paved the way for many educators and researchers to continue investigating and creating collaborative approaches to comprehension instruction.

Using an approach similar to that of reciprocal teaching, in which teachers can scaffold instruction so that all students are involved in all discussions, Langer and Close (2001) suggest scaffolding in four ways: tapping understanding, seeking clarification, inviting participation, and orchestrating discussion, all of which should first be modeled. They go one step further by including ways to incorporate additional support for struggling readers specifically. These include:

1. Involve all students in all aspects of class discussion.
2. Help students focus on ideas by providing guiding questions that will deepen the discussion (avoid questions with yes, no, or one-word answers).
3. Provide direct instructional scaffolding with guided activities that help students develop envisionments. (p. 13)

Langer and Close (2001) describe *envisionments* as “stepping into” the text to build understanding based on clues students piece together about the characters, setting, story, and prior knowledge. This is consistent with Rosenblatt’s (1978) argument that understanding requires active transactions between the reader and the text.

Questioning – Going Beyond Literal Recall

An important mode in which classroom interactions can be initiated is questioning. Questioning is a common approach to checking comprehension in many classrooms. Very often, teachers will use questioning in a three-part sequence referred to as *Initiation* by the teacher, *Response* from the student, and *Evaluation* or *Feedback* by the teacher (IRE or IRF) (Cazden, 2001). This traditional method of questioning often results in *recitation*, as opposed to *inquiry* or *discussion* (Alvermann et al., 1990; Cazden, 2001; Dillon, 1984). Recitations, as described by Alvermann et al. (1990), are, “stilted exchanges in which students’ responses to questions are assessed, and issues are seldom explored” (p. 306). This instructional format allows teachers to cover or review textual material in preparation for the exuberant amount of testing done in today’s typical classroom and only allows for right or wrong answers, which significantly limits discussions and hampers exploratory talk. Being able to recite or recall answers is very different from teacher and student or student and student co-constructing meaning as a result of discussions about text.

Some teachers may feel compelled to stick to instructional methods similar to recitation as a result of the emphasis placed on high-stakes testing. However, when educators rely heavily on methods of recitation, opportunities in which students dig deeply into issues and construct meaning jointly through social interaction are missed. Recitation, by nature, also prevents the kind of thinking required by the CCSS, which will negatively impact students, in general, and struggling readers, in particular. It may be difficult to move teachers from their natural inclination of using traditional recitation methods to open forum discussions, in which students can freely comment, question, and give opinions.

Interestingly, most teachers would agree that collaborative classroom interactions, as opposed to pure recitation, are important to building comprehension. However, actual

implementation is lacking. In a study, Alvermann et al. (1990) characterized discussions of content area material in middle school classrooms. They found that teachers interviewed defined effective classroom discussions as those in which teacher and students are actively engaged participants in meaning making and sharing information. However, observations of their classrooms proved that most used the recitation format, which contradicted their definitions. In addition to the pressures of covering material for test preparation, it may also be difficult for teachers to relinquish control. Effective classroom discussions involve many shifts in control between teacher and students. Establishing an equal power dynamic which allows for shifts in control may require a paradigm shift by teachers.

A first step for teachers may be to analyze what is actually taking place in their classrooms and their patterns of questioning. According to Moore and Hoffman (2012) professionalism in teaching involves reflectively analyzing your own classroom discourse to create purposeful interactions with students. This type of analysis allows for change from ineffective instructional practices, such as IRE, and too much teacher talk, to effective modes of discourse, such as discussions involving open-ended questions and an appropriate ratio of teacher to student talk. Moore and Hoffman (2012) argue that reflectively analyzing discourse allows educators to adapt lessons to allow for students' active engagement, include thought-provoking discussions, and incur greater academic achievement. Their studies involved analyzing the level of processing involved in classroom discourse, and the authenticity of questions. Their findings suggest that authentic, higher-level classroom discourse requires nontraditional lessons that do not strictly follow the IRE method. Traditional lessons following the IRE format limit active engagement and the complexity of classroom discussions, and ultimately, stifle higher-level thinking. Though not the focus of this study, discourse analysis is

an important step for teachers to become aware of how often they are requiring students to actively engage in authentic discourse, and then adapt their lessons accordingly.

Eeds and Wells (1989) studied teacher dialogical behaviors within a group, to establish whether or not transactions were taking place, or if teachers were reverting to traditional recitation methods, as well as the dialogical behaviors of students in the group. In discussion groups, novice teachers were advised to avoid traditional recitation and efferent reading by working with students to interact with text. Although some students habitually reverted to efferent behaviors, the teachers' willingness to be part of the discussion groups proved to take the groups, for the most part, beyond literal recall. They found that the group discussions supported struggling readers in constructing meaning by evoking rich interactions with the teacher and peers. Participating students revealed that they were capable of: articulating meaning and altering it as they heard other students' perspectives; sharing personal stories based on the reading or the discussion; participating as active readers; and, providing insight about the authors message and evaluating the text.

According to Applegate, Quinn, and Applegate (2002), a focus on literal recall types of questioning has led to children viewing reading as a painful, boring, mechanical, laborious, and as being an overall negative task. These types of literal questioning tasks, which focus on assessment, are far removed from the critical analysis that takes place during discussions. Applegate et al., (2002) argue that using low-level literal recall questioning conveys low expectations and a particular message about the nature of reading. To avoid this, they argue that questions must call for the reader to draw conclusions and responses that draw on their experiences and background knowledge. The implications of their studies on this topic are that open-ended questions involving discussion "can take the reading teacher where multiple-choice

items cannot: to the children's ability to use their experiences to construct meaning in response to text" (p. 178). Furthermore, children need to internalize the idea that reading involves more than just storing and retrieving information from text, and requires engagement through high-quality discourse. Recommended activities include literature circles, in which teachers have opportunities to scaffold and model in order to promote this type of engagement.

Types of Talk

Many researchers agree that discussion-based inquiry makes a major difference in the construction of meaning in the classroom. For example, Allington, Johnston, and Day (2002) found that the major difference between exemplary fourth grade teachers and others was the nature of talk that took place in their classrooms. First, more talk took place, between teacher and students, and students with each other. The teachers used real conversations to learn about their students, and talk was respectful and productive. Students were given opportunities to engage in discussions, through which they explored their own ideas, as well as each other's. Such discussions were set up so that there were no "right" or "wrong" answers, but instead, students were encouraged to further their thinking. This type of classroom environment uses discourse strategically by using talk as a resource to improve comprehension.

Once discussions are taking place in the classroom, it is important for teachers to consider the authenticity and quality of discussions that are taking place. In a study by Soter, Wilkinson, Murphy, Rudge, Reninger, and Edwards (2009), the researchers investigated which discourse features served to promote high-level learning and comprehension during group discussions. They found that students engaged in high-level thinking and reasoning when the activities were critical-analytical and expressive in nature. Examples of these types of activities

are book clubs and literature circles. During such activities, there was a high incidence of authentic questioning and higher level thinking skills (such as analysis, generalization, and speculation), elaborated explanations, and exploratory talk. In these situations, discussions were structured and focused, but not dominated by the teacher, as was the case in activities where an efferent stance was taken (such as Questioning the Author and Instructional Conversations). Instead, control of discussions was shared by teacher and students, and opportunities were present for the teacher to model and scaffold.

In the classroom, it is essential to provide students with opportunities to work collaboratively to problem-solve and extend their thinking through group inquiry. Inquiry is social in nature and provides students with an opportunity to investigate and explain real-life problems (Hamm & Adams, 2002). In a study by Dickson (2005), the type of student talk that occurred in a fourth grade classroom was investigated. In this study, the greatest occurrence of student talk was collaborative talk, such as that of group inquiry. Interestingly, the majority of student talk in this case was productive and on-task – there was very little idle chatter. Although other types of talk were monitored in this study, I use the greatest occurring type to illustrate the impact of problem-solving activities, such as group inquiry.

It is evident that many types of talk exist in the classroom. It is up to teachers to determine and be self-consciously aware of the ways in which their talk can guide construction of meaning. According to Mercer (1995), intentional, goal-oriented talk, should do one of three things:

- (a) *Elicit relevant knowledge from students*, so that they can see what students already know and understand and so that the knowledge is seen to be ‘owned’ by students as well as teachers;
- (b) *Respond to things that students say*, not only so that students get feedback on their attempts but also so that the teacher can incorporate what students say into the flow of the discourse and gather students’ contributions together to construct more generalized meanings.
- (c) *Describe the classroom experiences that they share with students* in such a way that educational significance of those joint experiences is revealed and emphasized. (p. 25-26)

However, when this is applied to the whole group setting, we must be cautious not to get caught in the IRE trap.

This section includes studies to provide exemplars of research on how effective discussion and collaboration have been implemented in classrooms. Although what works may vary from classroom to classroom and be dependent on the particular group of students involved, the modes of talk that are effective remain consistent. It is important to note that all of the researchers discuss the importance of first cultivating a classroom environment that allows for these types of talk in order for effective implementation to occur, which will be discussed further in the next section.

Setting the Stage with Classroom Environment

In his seminal work *Democracy and Education*, Dewey (1916) wrote, “Any education given by a group tends to socialize its members, but the quality and value of the socialization

depends upon the habits and aims of the group” (p. 95-96). In education, this translates to the traits representative of the community of learners that is formed as a result of the classroom environment. This means that a specific discussion outline, approach, or plan may not alone be enough. In order to construct meaning from conversations, a collaborative classroom environment must first be established. The classroom environment establishes invisible guidelines of conduct among its community of learners. When the classroom is set up to be a socially caring, supportive, encouraging, and overall positive environment, the chances for success rise for all students. This includes establishing how a student interacts with their peers. Thus, establishing a positive classroom environment, one in which cultural differences, between teacher and student, and, student to student, are accounted for, is essential.

Cazden (2001) points out schools are social institutions, in which, the student – teacher relationship needs to be constructed and cultivated in order for learning to occur. Sometimes we must dig deeper and examine the cultural implications of our student’s construction of meaning prior to reacting to their responses. Before reflexively assuming that our view of a text is correct, we must sometimes make cultural inferences or ask a student to elaborate on their thinking (Cazden, 2001). In other words, a democratic classroom moves us away from the idea that the teacher is always right.

Dewey’s (1916) inquiry learning model also focuses on the importance of the classroom environment and the establishment of a democratic society in which students collaborate, reason, and participate in decision-making. In such environments, the teacher guides and supports, but the student is an active participant in learning and constructing meaning.

Building a democratic classroom requires social problem-solving (Johnston, 2004). Initially establishing a learning environment in which all students feel safe taking risks and participating in discussion is essential (Johnston, 2004). Students need to feel valued and supported as they develop the ability to talk about their thinking as they work towards a common goal. The result is the creation of a democratic learning community (Johnston, 2004; Nichols, 2006). Such classrooms have an emphasis on collaboration, student-centered activities, independence, reciprocity between teacher and students, and ultimately learning. These environments revolve around the idea that the whole is greater than the sum of its parts. Johnston (2004) writes:

As individuals we can evolve only within the limits of our social environment and the discursive tools it offers us. Evolving as a society requires that we as individuals become able to use the social tools available to us to expand those limits. As adults, we must be able to use distributed thinking to overcome the limitations of our own experience and logic. We must learn to use the diversity of experience and perspective and intellectual resources to solve the problems that arise in democratic living, but also to ratchet forward our own intellectual development. (p. 73-74)

The teacher's interactions with students are equally, if not more important than peer interactions. The teacher sets the tone for all classroom discourses that will take place. It is essential for the teacher to establish an environment in which there is an equal power dynamic (Johnston, 2012; Johnston, Ivey & Faulkner, 2011). This dynamic allows for shifts in control during discussions. In other words, the teacher is not always in control of the discussion and the students are not the only ones who experience problems with understanding the text. The teacher can establish an equal power dynamic between herself and students by pointing out and

discussing problems she has in her understanding of the text (Johnston, 2012; Johnston, Ivey & Faulkner, 2011). This solidifies the idea that encountering problems in text is normal. And, for example, asking the students how they would respond to the situation in text if they were the main character implies the teacher's feeling that they would act strategically (Johnston, Ivey & Faulkner, 2011).

The teacher must establish an environment that allows for active student participation. The communication system that is established as part of the environment affords students control over group behaviors such as who asks questions, what evidence is relevant, and what is considered to be an acceptable answer (Barnes, 1976, Cazden, 1981). When students have a vested interest in the environment in which they learn, positive collateral effects can ensue. These effects on classroom environment may serve as a secondary purpose for implementing collaborative classroom interactions. Once a democratic classroom is built, and social modes for learning are implemented, the result could potentially change behavior, improve classroom management, manage time, while addressing the needs of all learners in the classroom. These effects are also important in establishing a positive self-identity for struggling readers.

Relevance to the Common Core State Standards

In today's educational climate, standards play an instrumental role in what takes place in classrooms. Although speaking and listening have always been a part of educational standards, they have never received the attention they are currently getting. What is different or new about the Common Core State Standards for Speaking and Listening is that they require student-to-student interaction (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). The Common Core State Standards' Anchor Standards for

Speaking and Listening for grades 3-6 require conversations and collaborations adapted to a variety of contexts:

Anchor Standard 1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010b, p. 22)

As students move up in grade, the expectations become increasingly complex, based on grade-level descriptors. This assumes that students enter the classroom knowing how to prepare and participate in a conversation with peers. However, we know that is most likely not the case. Expressing ideas and building on the ideas of others requires teacher guidance and opportunities to practice. Furthermore, the expectation is that students will interact with diverse partners in diverse groups, not just those they feel comfortable with (Fisher & Frey, 2013).

Recent approaches to discussion were designed to help teachers meet the demands of the Common Core State Standards (e.g. Kelley & Clausen-Grace, 2013; Kucan & Palinscar, 2013). They indicate a specific plan for using text-based discussion as a means to reaching standards. For example, Kelley and Clausen-Grace's (2013) discussion approach provides explicit connections between their framework and the Common Core State Standards globally and grade-level standards specifically. However, more research is needed to determine how such standards-based approaches can be adapted to support the struggling reader.

Summary

This chapter has positioned talk in the broader context of reading comprehension, and situated the literature in a historical and theoretical context. The discussion surrounding the

evolution of reading comprehension presents a clear picture of dominant theoretical influences that got us where we are today in considering teaching and learning about what is arguably the most important component in literacy development. From behaviorism to constructivism, we have connected the past to the present to make informed decisions about how to approach reading comprehension by examining what has worked and what has not. Many lenses exist for approaching this topic. Importantly, educators need to be aware of the lens they choose and guiding principles that are attached. Consequently, the lens through which we view teaching and learning of reading comprehension will highly influence practice.

Social learning perspectives dominate the current educational landscape by taking into consideration the many variables that effect learning and build on the social world in which we live. Social learning perspectives give credence to talk as a mode of socially constructing knowledge. Vygotsky has paved the way for successors to continue research on the important role of language and its capacity for constructing meaning, from a social learning perspective. Sociocultural influences, along with the many factors that position students to adopt a particular identity, and the role of motivation shed light on the complexity of issues that are involved when trying to address comprehension issues in today's classroom. Furthermore, Rosenblatt (1978) helps us understand the significance of a reader's actions during reading and how they connect to the construction of meaning. Although cognitive processing is essential to, and perhaps the beginning in building understanding, history reminds us that it should not be the end or the only process considered when analyzing and addressing students' comprehension deficiencies.

The studies included in this chapter illustrate the positive impact talk has had on learning. Many approaches have emerged in the last 30 years to help teachers include purposeful discussions in their toolbox for ways to improve comprehension, yet it remains in the shadows of actual

classroom practice. Palincsar and Brown's (1984) seminal study shined a spotlight on student-led discussion groups as a way to foster interaction with text through the use of strategies. However, new standards and the pressures of high stakes testing may inhibit teachers from getting beyond literal recall by incorporating opportunities to interact with text, despite their intentions.

Considering the types of talk taking place in the classroom can position teachers to move forward and improve their practice in this regard. The exploration of ideas through group inquiry taking place in a positive, respectful environment is a common thread across this literature. This type of environment can consequently cause students to think critically and analytically in order to problem-solve and extend their thinking based on peer discussions. Awareness of the types of talk taking place in the classroom allows the teacher to become intentional and goal-oriented. In sum, this literature elicited evidentiary support for the use of collaborative classroom interactions as a method for improving comprehension for struggling readers, which was explored in this study.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter identifies the theoretical and methodological assumptions that serve as the foundation of this study and provide a basis for the chosen research design and methods in order to create a model for effectively implementing collaborative classroom interactions as a means of constructing understanding for struggling readers in an elementary classroom. This chapter positions formative experiment, employing qualitative methods, as the methodology best suited for the research goals. Herein, a conceptual framework positioned under the umbrella of pragmatism is detailed, along with data collection and analysis techniques and strategies.

Purpose of the Study

The purpose of this study was to investigate how understanding can be constructed with struggling readers in an elementary classroom through collaborative classroom interactions. This study also sought to understand how such collaborative classroom interactions consequently impact the student's reading identity and the classroom environment. The questions guiding this research were:

- 1) How was the construction of meaning impacted, for struggling readers in an elementary classroom, as a result of collaborative classroom interactions?

- 2) How did the reading self-identity of struggling readers change as a result of collaborative classroom interactions?

- 3) How was the teacher's perception of classroom environment impacted as a result of collaborative classroom interactions?

4) How did national standards and assessments impact classroom comprehension instruction?

This study utilized a formative experiment with qualitative research methods. It explored social modes of learning that take place in a natural classroom setting and how these modes can be adjusted to build comprehension for struggling readers. Denzin and Lincoln (2008) define qualitative research as:

...A situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (p. 4)

This definition fits the context of this study, which made qualitative methods a good fit for this study's purpose and to address the research questions.

Conceptualization of the Study through Pragmatism

The formative experiment design is closely aligned with pragmatic perspectives. According to Cherryholmes (1992), the pragmatic philosophy:

Seeks to clarify meanings and look to consequences. For pragmatists, values and visions of human action and interaction precede a search for descriptions, theories, explanations,

and narratives. Pragmatic research is driven by anticipated consequences. Pragmatic choices about what to research and how to go about it are conditioned by where we want to go in the broadest of senses. Values, aesthetics, politics, and social and normative preference are integral to pragmatic research, its interpretation, and utilization. (p. 13)

This is parallel to the rationale and perspectives of formative experiment. In defining formative experiments, Reinking and Bradley (2008) include seven basic tenets, which provide a basis for its use:

1. Formative and design experiments are grounded in developing understanding by seeking to accomplish practical and useful educational goals.
2. They are focused on less controlled, authentic environments instead of tightly controlled laboratory-like settings.
3. They use and develop theory in the context of trying to engineer successful instructional interventions. Thus, they dwell in the realm of engineering science rather than social science.
4. They entail innovative and speculative experimentation.
5. They are interdisciplinary, employing multiple theoretical and methodological perspectives and orientations.
6. They seek understandings that accommodate many complex, interacting variables in diverse contexts.
7. They seek generalizations from multiple examples rather than from random samples and controlled experimentations. (p. 10-11)

Pragmatism provides an instrumental philosophical foundation on which formative experiment can be built. Thus, the rationale and perspectives of formative experiment are closely aligned to the pragmatic tradition.

Pragmatic Roots

The work of classical pragmatists Peirce (1878) and James (1907) set the stage for understanding the practical consequences of our interpretation of ideas, concepts, and beliefs, better known as the pragmatic method (Johnson & Onwuegbuzie, 2004). In other words, in order to understand and make decisions about phenomena and consider responsive actions, we must consider their real-world consequences. This was known as “cash value”, a phrase coined by James in 1907 (Johnson & Onwuegbuzie, 2004). Examination of practical consequences will then lead us to discover the appropriate actions, which can lead to gaining a better understanding of the phenomenon. Dewey took the work of Peirce and James one step further by connecting the pragmatic method to his philosophy of education (Johnson & Onwuegbuzie, 2004).

The work of John Dewey, also considered to be a classical pragmatist, has had a profound effect on educational inquiry for more than a century. Dewey’s pragmatic approach featured problem-solving as the nexus of his educational philosophy. Inquiry learning was his method for solving a problem or resolving an issue using an experiential approach and resulting in educational growth (Tracey & Morrow, 2012). Dewey was considered to be the founder of “progressive education” in which an open mind interacts with the world and uses past experiences to solve problems (Johnson & Reed, 2012). It was through this philosophy that he connected democracy to education. This philosophy rejected the either/or thinking set forth by Plato and Aristotle, which was based on the premise that knowledge is either innate or given to

us (Johnson & Reed, 2012). Instead, democracy stood for the collective efforts of a group – not the will of one person.

According to Johnson and Onwuegbuzie (2004), pragmatism “...offers a practical and outcome-oriented method of inquiry that is based on action and leads, iteratively, to further action and the elimination of doubt; and it offers a method for selecting methodological mixes that can help researchers better answer many of their research questions” (p. 17). Formative experiment as an approach to literacy research, is firmly set in this type of pragmatic thinking.

Formative Experiment as an Approach to Literacy Research

The use of formative experiments, sometimes termed *design-based research* (DBR), in educational research, was first rationalized by Ann Brown (1992), Alan Collins (1992), and Denis Newman (1990, 1992). Although not as widely used as conventional research methodologies, this design approach seems to have a natural fit in language and literacy research because of its unique position, that of a bridge which links the gap between research and practice (Reinking & Bradley, 2008). This emerging methodological approach allows theory to be tested in the classroom setting, giving it a clinical feel. Formative experiments consider the complex nature of classrooms by taking into account the many interacting variables that exist (Tracy & Headley, 2013). Although its arrival in the realm of education is relatively recent, pioneers of formative experiment during the early 90s, moved away from conventional experimental methods to embrace this approach’s allure of investigating real-life learning in a social context (Brown, 1992).

All formative experiments start with a pedagogical goal and are done in an authentic classroom environment (Reinking & Bradley, 2008). Throughout the study, the instructional

intervention is formatively modified “...in response to data suggesting factors that enhance or inhibit the intervention’s effectiveness, efficiency, and appeal” (Reinking & Bradley, 2008, p. 15). Researchers who conduct formative experiments seek to inform practice through work that is grounded in more of a pragmatic and qualitative stance, and less aimed at formalized workability or being causal in nature (e.g. Newman, 1990; Reinking & Watkins, 2000; Tracy & Headley, 2013). Ultimately, the goals of formative experiments are to advance theoretical understanding and develop and test an intervention which will improve practice in an authentic educational context (Anderson & Shattuck, 2012; McKenney & Reeves, 2013). In education, an intervention can be defined in several ways. Many educators may associate the term *intervention* with the federal *Response to Intervention* (RTI) initiative present in schools today. Within the RTI framework, an intervention is defined as intensive reading instruction provided by an expert (Allington, 2009). In formative experiments and for the purpose of this study, an instructional intervention can be defined as:

...a single, specific teaching/learning activity, instructional strategy, or type of lesson or lesson framework usually implemented with the time frame allotted for a particular subject area during the schoolday, although the activity may carry over incidentally or strategically to other subject areas (Reinking & Bradley, 2008, p. 100).

Defining Characteristics

According to Reinking and Bradley (2008), defining characteristics of formative experiments include being:

1. Centered on an intervention in an authentic instructional context.

2. Theory driven. However, the role of theory differs from that of conventional methodologies. Formative experiments are aimed at “...theoretically understanding the conditions that enhance or inhibit an intervention’s effectiveness and at generating pedagogical understandings that generalize beyond specific instances and specifically that can inform practitioners” (p. 19).
3. Based on educational goals. The goal of formative experiments is often aimed at addressing intractable instructional issues.
4. Adaptive. Researchers conducting formative experiments will adapt the intervention during implementation in response to variables in the classroom. Thus, implementation at the beginning may be significantly different than implementation at the end. Although fidelity in instructional implementation does not have a role in formative experiments because they allow for ideas to emerge from the data, researchers must remain faithful to the methodology.
5. Transformative. Formative experiments have the potential to positively transform the instructional environment.
6. Flexible in methods. There are not particular data collection and analysis methods specific to formative experiments. Instead, any methods that can be justified for the experiment or how it might refine theory may be included. Data collection and analysis methods may be adapted during the study. However, this should not imply ambiguity. Methods are used to test theory in practice for the purpose of informing practice or refining theory.
7. Pragmatic. “Researchers who gravitate toward this approach focus on creating conditions that allow promising interventions to work, and they seek theory that can

be directly useful to practitioners. They are not interested in debating philosophical question about ultimate meanings” (p. 22).

As with all research, formative experiments contain limitations. First, as discussed in number four above, since fidelity in instructional implementation does not play a role, this approach may not be suitable for studies in which fidelity is of greatest importance (Tracy & Headley, 2013). Furthermore, the flexible nature of formative experiments may be construed as methodological ambiguity. Although without explicit guidelines or standards for implementing its methodology, a major purpose of formative experiment is to employ methods that create an alignment between theory and practice (Reinking & Bradley, 2008).

Generalization of Findings

Formative experiments have the potential for generalized results. However, generalizations may take on a different meaning than that of conventional research methodologies (Reinking & Bradley, 2008). In all research, in order for findings to be considered generalizable, there are general standards that must be applied. According to Firestone (1993), there are at least three categories for generalizing data. These are:

1. Extrapolation from sample to population
2. Analytic generalization or extrapolation using a theory
3. Case-to-case translation

These categories can all be applied to formative experiments. However, when generalizing, Reinking and Bradley (2008) argue that the questions that need to be asked are:

1. For whom?

2. For what purpose?
3. Under what circumstances?

This makes formative experiment generalizations particularly useful for teachers seeking to implement the studied intervention in their classrooms. These generalizations can be achieved through replication, during which "...generalizations and theoretical findings that transcend the complex variability across classrooms and the teachers and students that inhabit them" (Reinking & Bradley, 2008, p. 42) may be discovered. Furthermore, Reinking and Bradley (2008) argue that, "...generalizations in scientific experiments treat variability as a collection of random factors. In formative...experiments, generalizations are derived from a careful consideration of that variability" (p. 42).

Methodological Rigor

As with all research, standards should be applied to determine whether the study is strong or weak. Reinking and Bradley (2008) utilize seven standards which provide a foundation for establishing methodological rigor in formative experiments. These are:

1. A rigorous research design. To achieve conceptual rigor, the researcher should articulate how the intervention will make a difference in reaching the pedagogical goal. Most or all of the defining characteristics of formative experiment discussed above should be met.
2. Open to multiple sources of data and consideration of multiple factors that may influence implementation. Factors can include cultural backgrounds of the teacher and students, instructional schedule, classroom arrangement and environment. Additionally, flexibility in data collection and analysis is necessary based on emerging findings or changing classroom conditions.

3. Data can be triangulated. The corroboration of data from diverse sources and using diverse methods is necessary to support conclusions.
4. Allows sufficient time for research. Allotted time for the study must allow for an in-depth investigation. Sufficient time is also needed to test and refine theoretical understandings.
5. Interdisciplinary perspectives and multiple theoretical explanations. The point of formative experiment is not to produce evidence to confirm or disconfirm a theory. On the contrary, many broad theoretical perspectives may guide implementation. Therefore the researcher should not be committed to one theory and should have broad interdisciplinary knowledge.
6. Appropriate research site. Instructional conditions should be good, and not highly unusual. In other words, there should not be exceptional odds for failing or succeeding at the chosen site.
7. Educational practices are not romanticized. It is essential to avoid an interpretation of data that only presents desired results or a particular view of practices. Researchers should resist relying on just a few favorable or interesting pieces of data, and, instead, consider more data from a broader view. Furthermore, adaptive changes or modifications during implementation may be necessary to produce intended effects.

Role of the Researcher

Along the same lines as other qualitative research, it is practical for researchers of formative experiments to assume the role of participant observer. In order to learn about a classroom, it is important to gain hands-on experience by becoming involved in classroom activities (Creswell, 2002). According to Creswell (2002), “A participant observer is an

observational role adopted by researchers when they take part in activities in the setting they observe” (p. 200). This allows the researcher to get an inside perspective on what is taking place.

As researcher, it is important to build a collaborative relationship with the teacher, while serving as a change agent (Reinking & Bradley, 2008). As such, the teacher and I worked closely to implement instructional strategies aimed at reaching the goals of this study. Because this research required me to be fully immersed in the classroom environment, Reinking and Bradley (2008) point out the following methodological dilemma which needs to be carefully considered in such situations:

How to avoid allowing one’s participation to unduly influence the ecology of the classroom or the effects of the intervention. Doing so requires walking a thin line between constructive, empathetic, collaborative support and directing activities that are essential to producing whatever effects the intervention might evoke. (p. 79-80)

A collaborative teacher-researcher relationship should not imply equality between roles and involvement, however. Instead, this research followed Cole and Knowles’ (1993) model, which is dependent on mutually agreed upon involvement based on the strengths of each, as well as available time. They term such collaborative research as *teacher development partnership* research. Table 3.1 below provides a matrix for determining responsibilities and involvement of a teacher and a researcher in teacher development partnership research, which was used in this study.

Table 3.1: Cole & Knowles’ (1993) Matrix for Considering Relationships and Responsibilities in Teacher Development Partnership Research

	Planning and Preparation (purpose, procedure, access, roles, logistics of time and place)	Information Gathering (participation, observation, interviews, taping, written accounts)	Interpretation and Representation (verification, validation, voice)	Reporting and Use (voice, control, benefits, public/private use)
Teacher (person affiliated with an institution primarily oriented towards practice)	Negotiated participation in terms of perceived benefit, commitment, and procedure	Identification of information sources and negotiation of appropriate strategies	Responsive to preliminary analyses; mutual interpretation leading to final analysis	Negotiated representation in report and editing of personal accounts; perceived mutual benefit
Researcher (person affiliated with a research institution)	Primary responsibility for articulation of purpose, coordination of research, and negotiation of activities	Identification of possible strategies and primary responsibility for gathering mutually agreed upon information	Preparation and presentation of preliminary analysis; mutual interpretation of preliminary analysis leading to final analysis	Primary responsibility for writing account; responsive to teachers' editorial and representational comments; perceived mutual benefit

A natural benefit of this type of research relationship is professional development for both the teacher and the researcher.

Research Design

The formative experiment was an appropriate methodology for this study because it allowed me to formulate a local instructional theory within the context of improving practice as the study unfolded. According to Gravemeijer and Cobb (2006), a local instructional theory “consists of conjectures about a possible learning process, together with conjectures about possible means of supporting that learning process” (p. 21). Furthermore, Reinking and Bradley (2008) add that “the instructional theory is local because it must also take into account the existing culture of a classroom, the orientation of its teacher, available materials, and so forth” (p. 68).

The purpose of this study was to investigate how understanding can be constructed with struggling readers in an elementary classroom through collaborative classroom interactions and how such collaborative classroom interactions consequently impact the students' reading identity and the classroom environment. Formative experiment allowed for this type of investigation by providing a flexible methodological landscape on which some modifications to the local environment were made to suit the needs of the classroom context.

The study consisted of three phases. In the first phase, the teacher and I gathered baseline data. We made a determination as to where students were in relation to the goal. Struggling readers were identified. In the second phase, the teacher and I implemented the discussion groups for eight weeks while gathering data. Each week during this phase, students cycled through specific comprehension instruction followed by discussions with scaffolded support. In the final phase, post-assessment data was collected to provide a point of comparison with the baseline data gathered in phase one. Specific methods and techniques that were utilized are discussed below.

Participants and Setting

This study took place in one third grade classroom containing 31 students. The class was situated in an elementary school in a suburban medium-sized Midwestern city. The student body was slightly over 500 students in pre-kindergarten through grade five, and included bilingual classrooms at every grade. The student population consisted of racial backgrounds which included: 5% White; 25% Black; 66% Hispanic; and, 4% other races. Based on the 2013 school report card, 42% of the students met or exceeded standards on the Illinois Standards Achievement Test (ISAT), and, 42.5% of third grade students met or exceeded standards in

reading. This school did not make adequate yearly progress in reading or math. Based on free or reduced lunch status, 91% of students were considered to be from low income families. The high rate of students who struggled to meet standards in this school made it an ideal setting for formative experiment research.

This school and classroom were selected because of my familiarity with the district, teacher, and student population. As a former reading teacher, curriculum specialist, and administrator in this district, I am familiar with the challenges its teachers face in working with their struggling readers to build comprehension.

At the conception of the study, the teacher began her eighth year of teaching. She has taught third grade at this school, and second grade at a school with similar demographics within the same district. This was her fourth year teaching third grade. It was important to choose a teacher who felt relatively comfortable with utilizing discussion groups and was somewhat familiar with strategy instruction. However, I also wanted to choose a teacher who had room to grow in instructing struggling readers to improve comprehension. This teacher was experienced in working with struggling readers, but felt her comprehension instruction needed improvement. The first year she taught third grade at this school had been particularly difficult, especially in the area of literacy instruction. Also important in selecting a teacher was an established professional relationship with me, as the researcher. Having an existing relationship allowed for open and collaborative research.

The study focused on six students who were placed in one of six heterogeneous discussion groups. Participating students were identified as struggling readers based on the teacher's beginning of year reading assessments. This included the district-mandated

assessment, AIMSweb (www.aimsweb.com), which is a curriculum-based measure used to screen and progress monitor student performance and achievement on skills in reading. To obtain comprehensive literacy assessment data, students who were initially identified as needing support through the AIMSweb screening were also given the Basic Reading Inventory (Johns, 2008), which I administered. The Basic Reading Inventory included a set of questions following each passage that were used to measure comprehension. Additionally, the students' self-identity as a reader, which was based on the reading identity survey administered to the entire class during phase one, was considered. Table 3.2 identifies the six student participants and their beginning reading levels.

Table 3.2: Participating Students

Student	Gender	Reading Level
Brenda	Female	Primer
Daquan	Male	3 rd
Collin	Male	Pre-primer
Andres	Male	2 nd
Nakita	Female	2 nd
Juan	Male	2 nd

Data Sources

To address this study's research questions, multiple data collection methods were used. More specifically, data was obtained from reading inventories, reading identity surveys, teacher

and student self-assessments, observational and reflective field notes, transcripts of discussions, student artifacts, and teacher interviews and informal discussions.

Reading inventories. During research phase one, the teacher used AIMSweb screening data as a guideline for recommending possible study participants. The students recommended by the teacher were then administered Johns' (2008) Basic Reading Inventory, which included leveled reading passages and comprehension questions following each passage. The Basic Reading Inventory was also administered to participating students at the end of the study, in research phase three. Reading inventories provided comparative data regarding each participant's reading level on narrative and expository text and comprehension level for each. To assess comprehension, the Basic Reading Inventory utilizes a combination of retelling and five different types of questions, which include: facts, topical, evaluative, inferential, and vocabulary.

Reading identity and motivation surveys. Each student in the class completed a reading identity and motivation survey during phase one and phase three of the study. This survey was similar to that of a structured questionnaire, which allowed for comparisons to be made between the beginning and the end of the study. This form of data collection includes a clear structure, sequence, and focus, while setting an agenda (Cohen, Manion & Morrison, 2007). Multiple choice questions were used, in which students chose one answer from the range of responses given. This survey was designed to assess two key areas: reading identity; and, the nature of the student's reading motivation (Gambrell, Palmer, Codling, & Mazzoni, 1996). The identity questions were aimed at determining how the student self-identifies in reading and performance relative to peers. The motivation questions addressed general motivational factors

and factors related to different types of text (i.e. narrative, informational). Appendix A provides a sample of the reading identity and motivation survey.

Teacher and student self-assessments. It was important and necessary to follow up discussions with the teacher and student self-assessing the quality of conversation that took place. Using an adapted version of Kelley and Clausen-Grace's (2013) Meaningful Discussion Scale (see Appendix B), the students made a determination as to how well they participated in their group discussion and what they could do better next time. Cohen, Manion and Morrison (2007) describe scales as, "very useful devices for the researcher, as they build in a degree of sensitivity and differentiation of response while still generating numbers" (p. 325). The Meaningful Discussion Scale helped students assess their progress through the use of a four-point scale, with 1 considered limited success, and 4 highly successful. To obtain more open-ended data, students were asked to write one thing they learned from their group and one thing they taught their group during that day's discussion. Effective self-assessment using the scale was dependent upon phase one discussions about what meaningful discussion consisted of. This self-assessment was designed to help students reflect on how well they functioned individually and as a group, in relation to the anchor chart. Self-assessments took place throughout phase two of the study.

Likewise, the teacher began by using the scale during the first two discussions. However, after discussing it further, we found it to be more beneficial for her to keep open-ended notes in her notebook. This allowed her to observe more than one group on any particular discussion day. Her notes contained information about individual students and group strategy use.

Observational and Reflective Field Notes. Observations provided me with a first-hand experience with the participants and the opportunity to record information as it occurs (Creswell, 2009). Observations were scheduled so that I could understand and participate in a variety of classroom events during the reading block. I worked with the teacher on a weekly basis to schedule a specific time each day in which implementation would occur. This was based on the teacher's reading schedule. Over the course of this research, several changes had to be made to the observation schedule, to coincide with changes occurring in the teacher's reading block. Field observations were that of a participant observer. During the first few weeks, observations primarily focused on the classroom environment to understand the context, which is a critical component of formative experiments (Reinking & Bradley, 2008). Once the context was understood, I then focused on instruction and student work. As a participant observer, I participated in class activities, offered suggestions about how to provide instruction, and interacted with the students. On average, I was present in the classroom three times per week.

During discussions, observational and reflective field notes were kept by both me and the teacher; and, discussion group conversations were recorded using an audio recording device and later transcribed. Ten audio-recordings were collected over the course of the study. The teacher was asked to record informal reflective notes in writing before, during, and after observations. Ongoing field notes included: informal notes about how students are working in discussion groups; notes about student incidents occurring during my observations; notes about individual student participants; thoughts on classroom set up; things that occur during student interactions; and, other observations related to classroom dynamics. During instruction or following each observation, I recorded reflective thoughts regarding instruction, implementation, what seemed to be working well, and possible changes and adaptations to consider. Observations

took place and reflective field notes were collected throughout all phases of the study and were used to make adaptive changes to the intervention.

Student Artifacts. Student artifacts were gathered throughout all three phases of the proposed study. These included pre- and post-intervention assessment data, and work samples documenting strategy application with each text. These documents served as written evidence of comprehension processes taking place before, during, and after discussion groups. Generally, I collected one work sample per participating student for each week of the study. These artifacts were used for triangulation of the data.

Interviews and Informal Discussions. Cohen, Manion, and Morrison (2007) posit, “Interviews enable participants – be they interviewers or interviewees – to discuss their interpretations of the world in which they live, and to express how they regard situations from their own point of view” (p. 349). With that in mind, this flexible tool allowed me to assess the teacher’s perception of the classroom environment, utilizing a one-on-one format, at the beginning and at the end of the study. The interviews followed a semi-structured format, and were audio-taped and transcribed. Semi-structured interviews contain close-ended as well as open-ended questions. This interview structure allowed me to net useful information which supported my formulation of a local instructional theory, while also allowing the teacher to provide personal experience (Creswell, 2002).

In addition to the two scheduled interviews, I asked the teacher to share her overall impression of the intervention, the classroom environment, and the instruction, at least once per week either in person or via email communication. Conversational notes were kept following informal discussions. These ongoing discussions were used to decide upon adaptive changes.

The Approach – Discussion Groups in Action

Outline of implementation. This study proposed the implementation of a discussion group intervention approach that combined the strengths of the approaches to peer discussions discussed in chapter two. The complete investigation consisted of three research phases spanning 12 weeks, during the first semester of the school year. Table 3.3 represents an outline of implementation.

Table 3.3: Implementation Outline

Phase	Weeks	Goals
1	Weeks 1-3 (3 weeks total)	Gathered baseline data; Determined where students were in relation to the goal; Identified struggling readers.
2	Weeks 4-11 (8 weeks total)	Implemented discussion group intervention with scaffolded support.
3	Week 12 (1 week total)	Collected post-intervention data.

Research phases. This study was comprised of three research phases. Phases one and three were used for collecting baseline data and post-intervention data, respectively. During phase one, baseline data was gathered from the entire class to determine which students were considered to be struggling readers, and which students self-identified as a poor reader. This data included beginning of the year assessments and informal reading inventories, as well as the reader identity survey (See Appendix A). Phase one was also used to take observational notes regarding classroom activities, instructional methods being used, student participation, and the overall classroom environment. The first of two teacher interviews was conducted during phase one. Since it was the beginning of the school year, this interview focused on the teacher's impression of the classroom environment that was beginning to unfold in her classroom.

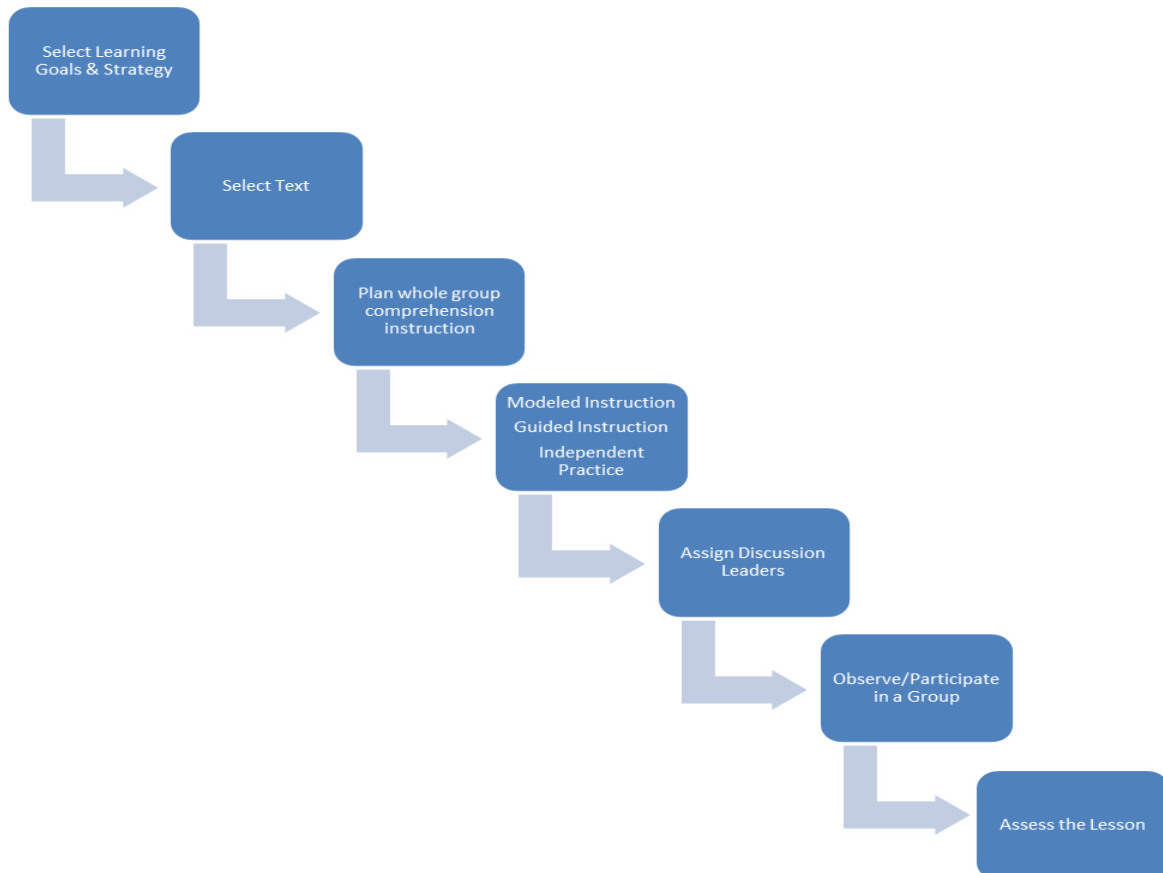
In phase three, the reader identity survey was re-issued to the entire class. In addition, study participants were post-tested using The Basic Reading Inventory (Johns, 2008). And, the final teacher interview was conducted. The final interview consisted of the teacher's: impression of changes in classroom environment; perspective on participating students; thoughts on comprehension instruction, including guidelines and district mandates for instruction; and, overall impression of the study.

During phase two, I assumed the role of participant observer, as discussed above. This role varied, depending on the classroom activities that were taking place. For example, sometimes my role was to observe, while other times we used a collaborative, team teaching approach, and, on other occasions I was doing the teaching. The flexible nature of my role allowed be to gain an inside perspective on the everyday activities taking place in the classroom. Using Cole & Knowles' (1993) matrix of collaborative research responsibilities in Table 3.1, I was primarily responsible for the research planning and preparation, information gathering, interpretation, and reporting. The teacher played a considerable role in information gathering, which consisted of taking observational notes during discussion groups and reflections. Additionally, she shared the responsibility of interpreting the outcomes of implementation and working collaboratively with me to make adaptive changes.

Planning for implementation. Of the utmost importance were the steps in planning for discussion groups. The role of the teacher was essential. To help students in their construction of meaning, especially when working through challenging text, it was imperative that the teacher use good judgment when choosing material. To support comprehension, the teacher must consider the text features of the text, as well as the strategies that may lend themselves to the text

(Kucan & Palincsar, 2013). The teaching steps we followed during this study are illustrated in Figure 3.1.

Figure 3.1: Teaching Steps



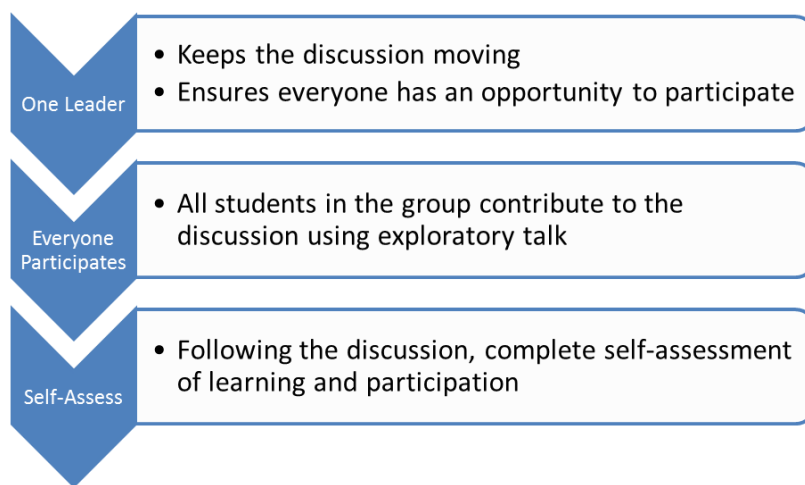
These teaching steps were utilized each week with one text and one round of small group discussions.

The role of the students. Setting clear guidelines which address the role of the students in discussion groups was also important. Prior to implementation, the entire class worked collaboratively with the teacher and me to co-create an anchor chart to reflect rules for appropriate interactions with peers. Anchor charts are used in education to display targeted

behaviors during any given task. They are posted in the room as a constant reminder and a way to *anchor* students' thinking about what is essential and what they need to accomplish.

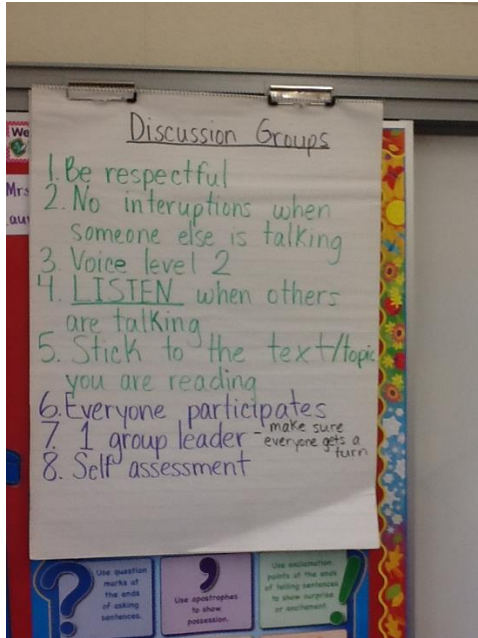
For our discussion group anchor chart, students were involved in deciding what went on the chart, in an effort to establish a collaborative, democratic learning environment. The non-negotiable rules for discussion groups which needed to be included on the anchor chart are contained in Figure 3.2. These items are essential for creating exploratory talk situations during which everyone participates, and struggling readers are supported (Langer & Close, 2001).

Figure 3.2: Discussion Group Participant Requirements



Students were adept at identifying the characteristics of group work. They had created anchor charts for other activities prior to this. The idea of having an opportunity to be a group leader seemed particularly appealing to most. The anchor chart we created for discussion groups can be seen in Figure 3.3 below.

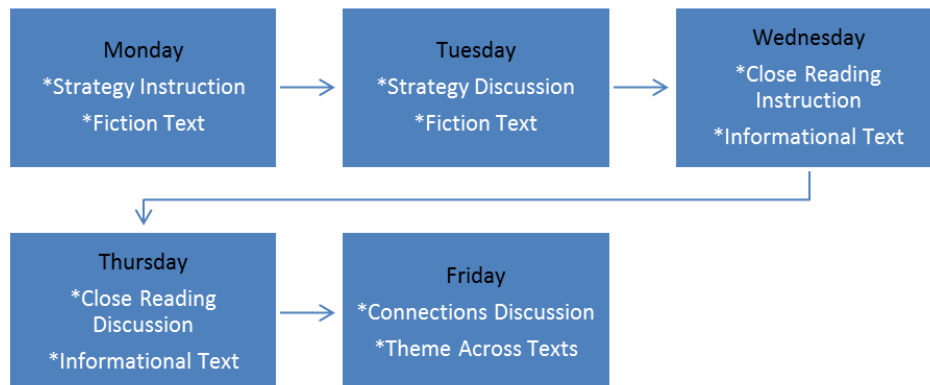
Figure 3.3: Class Anchor Chart for Discussion Groups



Cycle of Discussion. The implementation phase was initially planned to be cyclical in nature and was initially designed to involve several different types of discussion each week.

Figure 3.4 depicts the planned weekly cycle.

Figure 3.4: Discussion Cycle



However, after some collaboration with the teacher, the research plan and preparation had to be modified to coincide with the district's mandates for comprehension instruction.

Adaptations and modifications to the implementation approach will be discussed in detail in Chapter 5.

Data Analysis Procedures

Throughout the study, qualitative data was reviewed often to determine adaptive changes to the intervention. Pre- and post-intervention data were analyzed and compared. Pre- and post-intervention comparisons were not utilized to establish causal relationships, but instead, as a complement to other qualitative data that was collected. Qualitative data collection was used to develop pedagogical theories based on the instructional practices implemented with this intervention.

Comparisons. Scores on reading inventories were used to make comparisons between participating students' beginning and ending reading levels, as well as beginning and ending comprehension levels. Comparisons were also made using reading identity survey data. Initially, the reading identity survey was used to identify students who had a negative literacy self-identity. The beginning and ending surveys were scored and compared to determine whether or not there was a change in identity, based on beginning and ending scores. The survey utilized a 4-point scale. This allow me to avoid obtaining neutral responses. The most positive responses were assigned 4 points, while the least positive responses received only 1 point. The total value of the entire survey was 80 points. Even questions were geared towards reading self-concept, or how the student viewed his or herself as a reader in relation to peers. Odd questions were geared

towards value, or how the student views the value of reading. After the reading identity surveys were scored, the students' total scores were used to calculate a class mean and a class median.

Teacher interviews were clustered into units of meaning relevant to the research question regarding the classroom environment (Cohen, Manion, & Morrison, 2007) and compared. My intention was to extrapolate the essence of the teacher's general perception of the classroom environment before as well as at the end of the study. To do this, a comparative analysis of the before-study and after-study interviews was conducted.

Coding. My primary sources of data were generated from discussion transcriptions. Audio from discussions was transcribed by breaking speech down into individual student "turns". Each turn consists of "utterances" which are considered to be chunks of speech made by an individual; and, many utterances can occur during one student turn (Cameron, 2001). The number of turns each student took during the recorded discussion was placed into a table. This allowed me to analyze group discussions in four ways: 1) by measuring participation based on number of responses; 2) by analyzing the turn for quality of thought based on the type of talk that occurred; 3) by analyzing the quality of the discussion as a whole based on the percentage of each type of talk that occurred; and, 4) by measuring the amount of teacher and researcher talk that occurred during each discussion.

First, a participation rate was generated by determining each student's total number of turns based on the transcript. The total number of student turns was divided by the total group turns. Participation rates were also generated for teacher and researcher turns, if and when they were present in a group. This allowed me to consider how much each student was participating, as well as how much talk was being done by the teacher or researcher. For example, Table 3.4

represents an analysis of Group 1's very first small group discussion, which took place on October 3, 2014. I was present during this discussion and took 10 of 24 total turns, which represents a 42% participation rate. Furthermore, the research participant, Andres, took only 2 of 24 turns, which represents an 8% participation rate.

Table 3.4: Discussion Analysis – Discussion 1

Group 3					
Participant (P) = Andres					
Researcher (R); Teacher (T)					
Date: 10-3-14			Small Group Discussion Number: 1		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	3	12%	D-33% C-0% E-33% S-33% O-0%
	2	E			
	3	D			
2	1	E	4	17%	D-25% C-0% E-75% S-0% O-0%
	2	E			
	3	D			
	4	E			
3	1	E	5	21%	D-20% C-20% E-60% S-0% O-0%
	2	E			
	3	D			
	4	E			
	5	C			
P	1	D	2	8%	D-50% C-50% E-0% S-0% O-0%
	2	C			
R			10	42%	
Total Type Rate					D-29% C-14% E-50% S-7% O-0%
Total Group Turns			24		
Total Time in Group			5:00		

I then analyzed and coded each student turn based on Mercer's (1995) three types of talk:

Disputational (D). This type of talk included short exchanges characterized by disagreement, assertions, and challenges.

Cumulative (C). This type of talk built on what others have said, thereby constructing "common knowledge" within the group.

Exploratory (E). Talk included critical engagement in which reasoning occurred and hypotheses were offered.

In addition to these three codes, two additional categories were also included:

Strategy Statement (S). Since the instructional foundation of this study was comprehension strategy instruction, it was necessary to include a code for turns in which students stated their strategy use. For example, discussions often got started with one group member telling the others about the questions they wrote during reading and how they answered their questions. Most often, this type of talk involved a statement of the ideas the student wrote down while reading the text.

Other Talk (O). There was also a fifth category, which contained other talk, or talk not generated from the text and related to procedure, organization, or simply off-task.

Percentages were then generated to determine how much of each type of talk was represented in total group talk. For example, using Table 3.5 above, 50% of Group 3's discussion was characterized by exploratory talk. However, the research participant, Andres, did not produce any exploratory utterances during this discussion.

Charting. Self-assessments were used to measure progress over the course of the study. This was done by charting each student's self-assessment points in a table. For example, each time a Meaningful Discussion Scale was completed, the students' score was charted. This provided a visual representation of perceived changes by the students in the quality of their discussion participation over time.

Triangulation. Creswell (2002) defines triangulation as “the process of corroborating evidence from different individuals..., types of data..., or methods of data collection...in descriptions and themes in qualitative research” (p. 280). Consistent with Creswell's definition, this formative experiment approach naturally supplied multiple sources of data through multiple methods, which produced findings, interpretations, and implications. Triangulation added rigor, accuracy, and credibility to my investigation. Subsequently, supporting data from the data collection methods herein were compared.

Ethical Considerations

The highest level of ethical standards were maintained throughout the data collection and analysis process. The rules and regulations set forth by the Institutional Research Review Board at National Louis University were strictly followed. In all research, it is essential that the researcher respect the participants as well as the site where research takes place (Creswell, 2002; Creswell, 2009). The rights of all human subjects need to be protected. To do this, it was important to obtain consent of participants and guarantee their anonymity. Additionally, participants were informed of the research purpose, aims, and use of results. An informed consent form was issued to and signed by the teacher and the parents of selected students, a copy of which can be found in Appendix C. Additionally, a general letter, informing the parents of

nonparticipating students of this research that was taking place in their classroom, was sent home (see Appendix C). To comply with anonymity rules, a pseudonym was used for each participant.

Creswell (2009) points out the need to maintain a code of ethics in which the privacy of the participants is protected. This ensures that potentially harmful or personal information disclosed by participants during the data collection process will be protected. In analyzing and interpreting data, honesty and accuracy must be maintained, without changing or altering findings to benefit the research goals (Creswell, 2002).

Conclusions

This study intended to build a case for the implementation of collaborative classroom interactions as a means of helping struggling readers construct meaning. Using a formative experiment approach, it was my goal to formulate a local instructional theory within the context of improving practice as the study unfolds. This will be discussed in subsequent chapters. Although research on discussion groups exists, this approach has yet to be considered a primary method for building comprehension in reading. Furthermore, to date, research on utilizing formative experiment as a methodology through which discussion groups are investigated does not exist.

Firmly set in pragmatism, this formative experiment sought to transform the learning environment by influencing practice through the implementation of an intervention aimed at building comprehension for struggling readers. Additionally, this study sought to change struggling readers' self-identity and positively impact the classroom environment. Finally, it was the intention of this research to consider whether or not national standards and mandated testing influenced classroom comprehension instruction and how so. Building on the foundational work

of classical pragmatist John Dewey, the research design featured a social inquiry model within an experiential, problem-solving approach.

Two key ingredients in this study's design were the teacher-researcher relationship and the participant observer stance of the researcher. I worked closely with the teacher to implement instructional strategies, while maintaining the highest level of ethical standards. The participant observer stance of the researcher allowed me to gain experiential insight through direct classroom involvement, while the highest level of respect for the participants was maintained. These key ingredients afforded me the opportunity to enter deeply into the ecology of the classroom, while serving as an agent of change (Reinking & Bradley, 2008).

Using a unique combination of approaches and techniques, this discussion group approach sought to ultimately transform practice and enhance comprehension for the struggling reader. Beyond building comprehension, it is was my intention to use these social modes to foster a positive self-identity of the struggling reader, while establishing a collaborative classroom environment. An obvious limitation to this study is that it took place in one classroom with a limited sample size. Additionally, it may not be generalizable to classrooms in which a different context and different characteristics exist. Furthermore, since data was only collected during one semester, sustained gains will be unknown. However, this study's attempt to reach its pedagogical goal will help to inform classroom teachers, while adding to the literature on discuss groups, social modes of learning, and formative experiments. My results and findings are described and analyzed in Chapter 4. In Chapter 5, I draw conclusions and provide recommendations for further research in relation to these findings.

CHAPTER 4

FINDINGS

This chapter presents the results of this formative experiment and examines the collaborative classroom interactions that took place. The individual participants provided a window into types of talk that could be generated about texts, in collaboration with their peers. The participants in this study included one teacher and six students who were identified as struggling readers. Data collected included reading inventories, reading identity surveys, teacher and student self-assessments, observational and reflective field notes, transcripts of discussions, student artifacts, and teacher interviews and informal discussions. These sources were woven together to provide a rich description of this intervention's results.

As the researcher, I was the primary instrument for data collection and analysis. I administered pre- and post-intervention assessments, recorded field notes, transcribed discussions, interviewed the teacher, and wrote up my findings. In addition, the participating teacher gathered baseline data to recommend potential participants, recorded field notes, and participated in interviews and informal discussions.

In the section below, the broad context of the comprehension instruction taking place in this classroom is described. Next, the type of talk generated as a result of this intervention is discussed. Then, the overall impact on comprehension for the study participants is presented. This chapter concludes with a discussion of the factors that had a profound effect on teaching and learning.

From Group Discussions to Discussion Groups

In this classroom, comprehension was centered on strategy instruction. The lessons began with whole group instruction that involved text and a comprehension strategy. During whole group instruction, the text was typically read aloud by the teacher or myself and the focus strategy was modeled using a document camera and a think-aloud. Through interactive group talk, students volunteered ideas for strategy use. During each weekly cycle of strategy instruction, Tanya closely adhered to the gradual release of responsibility model, in which, the students become increasingly responsible for the own thinking, and the teacher less responsible, over the course of the week (Pearson & Gallagher, 1983). The model Tanya followed is shown in Table 4.1.

Table 4.1: Gradual Release of Responsibility Model for Strategy Instruction

Day 1 (Monday)	Teacher models the strategy – students copy written responses
Day 2 (Tuesday)	Teacher guides students in strategy use through whole group instruction – students volunteer responses
Day 3 (Wednesday)	Teacher reads text aloud – students form independent written responses
Day 4 (Thursday)	Discussion groups to discuss strategy use
Day 5 (Friday)	No comprehension instruction due to physical education

The strategy focus was determined by the district. The district created a comprehension strategy pacing chart to be used by all teachers. Table 4.2 provides a sample of the pacing chart for the dates of this study.

Table 4.2: Comprehension Pacing Chart

Comprehension Strategies	Pacing	# of days
Overview of Comprehension Toolkit	August 18-29, 2014	8 days
Monitoring Comprehension		
Nonfiction Lessons 1-3	September 2-11, 2014	8 days
Fiction Lessons 1-3	September 12-24, 2014	9 days

Activate & Connect		
Nonfiction Lessons 4-7	September 25-October 8, 2014	10 days
Fiction Lessons 4-7	October 9-22, 2014	9 days
Ask Questions		
Nonfiction Lessons 8-11	October 23-November 7, 2014	11 days
Fiction Lessons 8-11	November 12-25, 2014	10 days

The comprehension pacing chart was based on Harvey and Goudvis' (2005) Comprehension Toolkit. All teachers in the district received The Comprehension Toolkit (2005), which contains 26 strategy lessons that are organized into a set of six strategy books. The six strategies addressed are: monitor comprehension; activate and connect; ask questions; infer meaning; determine importance; and, summarize and synthesize.

In an effort to maintain consistency across classrooms, grade levels, and schools throughout the district, the district assigned specific date ranges for each strategy as a guideline for what they considered to be appropriate pacing. When I asked Tanya about texts that were used with each strategy, she informed me that the district did not provide texts. At her school, the policy was that all grade-level teachers needed to use the same text for each strategy. It was up to the grade-level team of teachers to find their own texts that related to the recommended strategy instruction.

Using the gradual release of responsibility model (Pearson & Gallagher, 1983), explicit instruction was used to move students towards strategic thinking, a goal of The Comprehension Toolkit (Harvey & Goudvis, 2005). Although this model provided a structured format in which strategies could be introduced and practiced, its use also came with consequences. One drawback of this format, which I noted during my observation and participation, is that it often

lead to the three-part sequence described by Cazden (2001) as IRF or *Initiation, Response, Feedback*, as discussed in Chapter 2. For example, during guided practice, the teacher would initiate by asking students to come up with questions for the text that was read aloud. Students would suggest questions orally. The teacher would respond with feedback about their suggested question. Then, if deemed appropriate, the teacher would write the student's suggested question on her chart under the document camera, and all students would copy it onto their individual charts.

In addition, it greatly limited the amount of time students had to think strategically to independently apply strategies, which typically did not occur until day three. For example, Figure 4.1 depicts Brenda's use of the questioning strategy over the course of three days. Question 1 was modeled by the teacher on day one. Questions 2 and 3 were volunteered by students during guided practice and copied by all. Brenda wrote questions 5 and 6 during independent practice time.

Figure 4.1: Brenda's Questioning Chart

Questions	Answers	Strategy
① Will someone help the ant? How long will it take?	The Dove helped the ant by dropping her a branch.	Keep reading
② Where will ant end up?	Ant got to shore.	Keep reading
③ Will ant drown before Dove get there?	no she didn't drown.	Keep reading
④ Why did the Dove forget about saving the ant?	because she was to bezz with her baby	Keep reading
⑤ Why would hunter be in the woods?	because they were looking for food	Keep reading

For question 5, Brenda wrote, “Why did the dove forget about saving the ant?” And, for question 6, Brenda wrote, “Why would hunter be in the woods?” Although these questions are not literal recall questions, they do not contribute to deep meaning of the text. In other words, seeking answers to these questions did not help Brenda acquire meaning from the text or the overall big ideas of the story.

Furthermore, the instructional format was the same for all students in the classroom, with no further modifications being made for struggling readers. Because the instruction approach naturally provided scaffolding within the gradual release of responsibility model (Pearson & Gallagher, 1983), struggling readers did not have difficulty participating. However, such an approach seemed to slow down students not in need of such support because everyone was kept at the same pace while working through the text.

Students participated in discussion groups on day four. Discussions were based on the text and the focus strategy. For example, using Figure 4.3, Brenda would share questions 5 and 6 with her group during the discussion group. As time went on, we found it most beneficial to identify discussion group tasks, which were written on the board. This served as an impetus for collaborative construction of knowledge within the group, as opposed to simply strategy sharing. For example, during the last two discussions, in addition to sharing their strategy use, which was questioning, students also needed to work together to figure out the moral of the story and make connections across texts.

Description of Individual Students' Observed Participation Style

Before considering the types of talk that were generated during this intervention, it is necessary to present my understanding of the participants. A participation rate was generated for all students during discussion groups. The participation rate was determined by the number of turns each student took in relation to the amount of total group talk. In many instances, a turn did not include or lead to exploratory talk. However, in order to explore whether or not a relationship existed between participation and self-identity, it was still important to consider whether or not the participants were contributing at all to the discussions, regardless of the type of talk produced.

From the onset of the study, I began collecting observational notes on each student. Throughout all phases of the study, I continued to note student factors that impacted their participation in groups. Below, I describe my impressions of each student based on observational data.

Brenda

Brenda was an English language learner who I initially described as quiet and unsure. However over the course of the study she seemed to come out of her shell. She enjoyed leading the discussions and always participated. She used things other group members said to aid in her interpreting an answer and to build understanding. This group seemed to take on a “boy vs. girl” stance during discussions. Oftentimes, the girls would be having one discussion while the boys simultaneously discussed something else. Brenda never backed down and was the more vocal of the 2 girls in the group. This group had more of an issue with following the discussion group rules than anything else. Brenda increased a full grade level for decoding (from P to 1) and was able to comprehend even 2nd grade text at 85% at the end of the study. She gained confidence as a reader but lacked some decoding strategies and vocabulary. Consistent with my observations, Brenda’s scores on the motivation survey were 65 (pre) and 63 (post), which were above and slightly below the class mean and median, respectively. Brenda was a student who liked to participate but has a harder time developing understanding because she was still learning the language.

Daquan

Daquan did not lack confidence and was an excellent reader. This was consistent with his motivation survey scores and his reading levels, which improved over the course of the study. Daquan was included as a participant in the study at Tanya’s request. She was concerned about his reading comprehension skills. Consequently, Daquan’s comprehension scores on the initial assessment were below grade level. Daquan enjoyed discussing and leading his group, although as a whole, they were often off task. For example, during one of the first rounds of discussion, the group discussed the recording device for two-thirds of the discussion time. Several times, Daquan directed his group to get back on task but was also very easily brought off task. In his

group's case the discussions seemed to take on a very social nature more than build comprehension. While observing Daquan during classroom activities, he seemed to be a kid that got along with everyone. I also noted that at times he seemed to get frustrated easily and shut down if things didn't go right.

Of the participants, Brenda and Daquan were top contributors. Furthermore, both had a participation rate that was typically one of the top highest in each of their groups, overall. For example, during Discussion 4, Brenda's participation rate was 16%, the second highest in her group. During Discussion 6, Brenda's participation rate increased to 25%, tied with one other student as top contributor.

Collin

Collin presented a very quiet nature. He seemed somewhat reluctant to participate, especially in the beginning. . Collin was typically responsible for about 10% of the turns during any given discussion, which was usually the lowest or second lowest rate. On the pre-assessment reading inventory, Collin was nervous in reading aloud to me. Motivation survey results were consistent with these observations. Collin did not consider himself to be a good reader. He tended to participate in groups only when prompted by other students. For example, while reviewing transcribed discussions, I noticed that the students in Collin's group encouraged him to share his questions. He did so after being prompted by other group members more than once. However, I also noted that after Collin read his question aloud the other group members then deemed it okay to move on to another group member, with no discussion about Collin's questions or considering an answer. This was very different than how other group members' questions were addressed. Collin seemed to be fine with moving on to someone else after

reading his questions. During the post-assessment I noticed Collin covering one eye while reading aloud. He said the doctor instructed him to do this because reading with both eyes was blurry. After discussing this with Tanya, she said she was aware of the problem and his mom informed her that he would eventually be using a patch to cover one eye per their doctor's instructions. I noted an increase in confidence while reading aloud during the post-test.

Andres

Andres loved being part of the study. Every day that I was present, he would ask me what I was going to be doing with them. Also an English language learner, Andres had a very difficult time following the group discussion and building on meaning based on the other group members' responses. Oftentimes, it was difficult for Andres to follow the task at hand or the structure of the assigned tasks. For example, during whole group independent activities in which the students had to write questions, it was very difficult for Andres to formulate his thoughts into an actual question. Instead, he would write a statement that was already in the text. During the pre-assessment reading inventory, it became clear to me that language was an issue. He was able to formulate answers to comprehension questions orally when he had the time to construct his thoughts. However, transferring his thoughts to a concise statement or question in writing was much more difficult. Andres loved sharing his books with me when I visited during independent reading time. He loved nonfiction and learning about snakes, alligators, and other animals and reptiles. Andres mostly waited for prompting before participating in group discussions. At times Andres' speech was difficult to understand, which may have caused group members to not encourage him to participate as much.

Nakita

Nakita was shy and quiet during whole class activities and initial discussion groups. During the last few rounds of discussion groups, however, Nakita started to come out of her shell and seemed to enjoy participating. For example, Nakita's participation rate, however, increased from 5% in Discussion 4 to 13% in Discussion 5. This was also confirmed by the increase in her reading identity and motivation survey scores, from 53 in September to 62 in November. I also noticed that during class activities, in which students were required to independently respond in writing, it took her longer to process and get her thoughts written down. For example, during the very first practice round of discussion groups she ran out of time to write down her ideas before students met in groups to discuss. This upset her and made her cry. However, towards the end of the study the amount of talk that Nakita contributed during group discussions considerably increased. It also seemed like she enjoyed being a leader towards the end and assisted the group in following the rules. When I observed the class during Daily 5 stations, Nakita always seemed to enjoy sharing with me the book she was reading or her word study activity.

Juan

Juan was a student who I found to be always fiddling with something in his desk. He was always very pleasant, but, when working with other students, could become silly and off-task. He always had a smile on his face and was highly confident in his reading ability. Juan's reading identity and motivation survey scores were 70 (pre) and 68 (post), both well above the class mean and median. During discussions, Juan seemed to stay quiet until prompted to talk. As an English language learner, Juan seemed to "pretend" to understand more than he actually did. For example, during both whole group and small group discussions, sometimes his oral responses did not seem to make sense, either due to lack of interest or understanding.

Types of Talk

This section contains descriptions of the types of talk that occurred during intervention implementation, or phase two, of this formative experiment. This research phase included six discussion groups. The text, genre, and strategy focus (based on the district’s guidelines) are listed in Table 4.3.

Table 4.3: Texts, Genres, and Strategies

Week	Text	Genre	Comprehension Strategy
Week 1 – 9/29/14 -10/3/14	“Growing Plants”	Nonfiction	Monitoring Comprehension/Recording Inner Voice
Week 2 – 10/6/14 – 10/10/14	“Tiger gets his Stripes”	Fiction	Activate & Connect
Week 3 – 10/13/14 – 10/17/14	“A Mammoth Adventure”	Fiction	Activate & Connect
Week 4 – 10/20/14 – 10/24/14	“Cats in the Wild”	Nonfiction	Ask Questions
Week 5 – 10/27/14 – 10/31/14	“Tarantulas: Giants of the Spider World”	Nonfiction	Ask Questions
Week 6 – 11/3/14 – 11/7/14	“The Ant and the Grasshopper”	Fiction/Fable	Ask Questions
Week 7 – 11/10/14 – 11/14/14	“The Dove and the Ant: A Retelling of an Aesop Fable”	Fiction/Fable	Ask Questions

The goal of this research was to study how reading comprehension evolved for struggling readers as a whole, as a result of collaborative classroom interactions, rather than study individual cases. To illustrate this, I have included an analysis of the types of talk that were generated by the student participants as a result of this intervention, as well as their rate of participation. To do this, each student turn was coded using the five types described in Chapter 3: disputational; cumulative; exploratory; strategy statement; or, other talk. Additionally, a

participation rate was generated, based on the number of turns each participant took, in relation to the total group talk. (Charts containing a complete analysis of all types of talk that occurred for all group participants during the discussions presented in this section can be found in Appendix D.)

In addition, excerpts of discussion transcriptions are included for each discussion to exemplify each type of talk. Complete transcriptions for each discussion presented herein are located in Appendix E. In transcribing the discussions, the following abbreviations were used:

R = Researcher
T = Teacher
S1 = Student/Group Member 1
S2 = Student/Group Member 2
S3 = Student/Group Member 3
S4 = Student/Group Member 4
S5 = Student/Group Member 5

Discussion 1

Prior to Discussion 1, whole group instruction took place, during which students were instructed to record their thoughts about the text as I read it aloud to them. The text was chunked into two small subheadings entitled, “Pesticides” and “Greenhouses”. This was a continuation of text, instruction, and strategy that was started earlier in the week. For this discussion, I focused on the type of talk that occurred in Andres’ group.

During this discussion Andres had the lowest participation rate of the group, only 8%. Furthermore, his contributions to the discussion came after my prompting with questions. Even though the group, as a whole, generated a rich discussion, which contained 50% exploratory talk, Andres’ contributions contained no exploratory talk. Below is an excerpt from this discussion.

S1: Okay, well I'll read mine. They keep them in the greenhouse so when the winter comes they will survive.

R: What do you think? Do you think that's the big idea? How would that help them survive?

S1: Because when winter comes it gets really, really cold and plants die.

S2: The greenhouse is built to keep the plants warm.

R: Yeah, so it's built to keep the plants warm.

S2: And safe.

S3: And, it's like, I think they made it because then, so if there is winter coming, they keep a lot of heat in there so they won't die.

R: Yeah, so think about where we live. We live outside of Chicago, right? Can plants grow outside here in Chicago?

S2: Nope.

S1: Yeah, in greenhouses.

R: In greenhouses – that's what the greenhouses are for, right Andres?

Andres: Yes.

S3: When I go bike riding by the train tracks, we go to this trail and you can see this generator thing that helps the planet.

R: Oh my gosh, did you hear what he just said? There's a generator that helps the planet. The planet or the plants?

S3: The planet.

R: How?

Andres: For electric?

S3: The windows entrap heat and ... so it helps the world.

S2: Plants are like us, they need to keep warm so they don't get freezeed. Like when it's winter we need a lot of jackets.

R: What happens if they freeze?

S3: Frost covers them.

R: So you said we need to wear a jacket in the winter, so are you comparing a greenhouse to our jackets? What a smart idea – that is so smart!

As a participant in this group, I found myself leading the conversation and getting caught in the IRF (Cazden, 2001) trap. Although deep thinking and exploration occurred among other group members, my participation led only to “ping-pong” participation with Andres. It was my initial instinct to encourage Andres’ participation through questioning, instead of letting the conversation evolve naturally, with peers taking the lead. This drove my participate rate to 42%, the highest in the group. Following this discussion, Tanya and I discussed how we were participating in groups and decided we needed to listen and observe more and only scaffold the conversation when necessary.

Subsequent to the first discussion, students were introduced to the self-assessment tool. The Meaningful Discussion Scale (Kelley & Clausen-Grace, 2013) was then adapted, based on this initial discussion, to provide students with an opportunity to tell how they felt they participated in their group discussion.

Discussion 2

For the second discussion, I examined what transpired in Juan’s group. Juan, who has a positive self-identity, tended to have a low participation rate. Although Juan did not have the lowest rate of participation of the group during this discussion, which was 4%, his was only slightly higher, at 6%.

Although this discussion consisted of many turns, 77 in all, the percentage of exploratory talk remained low at only 14% for the group. Juan’s contributions during this discussion did not contain any exploratory talk. During this conversation, the students began by sharing their strategy use for the fiction text, “Tiger gets his Stripes”. Whole group strategy instruction

included recording thinking and connecting to text. The first 2 of Juan's 5 turns consisted of strategy sharing. The transcribed excerpt below demonstrates the discussion that took place.

R: Juan, what does that have to do with the story do you think? Can you read us that sentence?

Juan: "I didn't like being stuck in my cocoon, said Butterfly." He didn't like to be cooped up (also from the story).

R: So, does that help you understand anything in the story?

S3: Not really.

S2: I don't think so.

R: So are you starting to see what's important here.

S1: Yes, the terms.

S2: It's kind of about the story. It's kind of in the story. The butterfly is trying to help tiger. I could see she didn't like being cooped up in a cocoon. She wanted to be a butterfly already, just like tiger wants his stripes.

S1: Kendra you can go now. I mean Justin.

S2: I have a question: I wondered did he earn his stripes? Or, did he grow up at the time and get them?

R: What do you guys think:

S4: I think he grew up with them.

S1: Well he was a tiger, so I think he grew up with them.

R: Go ahead and jump in.

S5: How did tiger get stripes that fast on his fur?

R: Did you guys hear her? Say is again so they can hear you.

S5: How did tiger get stripes that fast on his fur?

S1: How do tigers get stripes?

S3: I think probably he could have.

S2: I think I read a book or something, but you know when you are a baby you don't grow up with everything. He must have grew up at the time and his stripes must have slowly come up when he was seeing leopard.

R: What do you guys think? Do you agree?

All: Yes

R: You think he got them as he got older?

All: Yes

R: So he didn't have them when he was little?

S3: I think he got one stripe a day or a year.

R: What do you think about that? One stripe a day or a year, he's saying?

S2: I think it's a day.

R: A year would be too long, wouldn't it?

R: Juan, what were you going to say?

Juan: I want to know how he got them.

R: Really good questions.

S2: Here's how he would get the stripes. I mean, who knows why he has the stripes, but that's how tigers are.

S5: As I was reading the story, I got to "rose" and I didn't know what it means, so I bubbled it.

R: Did you figure out what it means though?

S5: No.

R: Well let's read the sentence and figure it out, because it's not only important to bubble words, but you have to figure them out.

S2: Read me the sentence!

S5: "Just then a beautiful, striped butterfly rose out of the tall grass.

R: Rose out of the tall grass.

S2: It just came up.

Once again, joining the group as a participant, I felt compelled to take the lead in directed the conversation. I also purposely tried drawing Juan into the discussion through questioning.

Juan, like Andres, would have otherwise been content not participating in the discussion.

However, this elevated my participation rate to 36%, consequently, the highest in the group once

again. Although my participation was less than the previous discussion, some of the potential for exploratory talk may have been lost. Students were discussing how tigers get stripes, which was not from the text, and highly exploratory in nature. Yet, before they reached any conclusions, the conversation shifted to a discussion of the word “rose”, which offered less exploratory value. At that time, I, too, shifted from the discussion of stripes to the word being offered by Student 5. This could have been the result of my trying to be sure all students contributed to the conversation, regardless of the type of talk taking place.

Discussion 3

Discussion 3 is focused on Collin’s discussion. Collin, who had the lowest self-identity score in the class at the inception of the study also had the lowest participation rate among the group during discussion 3, at 11%, or 4 of 38 turns.

Although Collin’s participation rate was low, interestingly, 50% of his contributions contained exploratory talk. Most of the group’s talk during the discussion was cumulative. However, Collin made statements early on that demonstrated inferences that needed to be made in order to understand the fiction text, “A Mammoth Adventure”. Below is an excerpt of this conversation.

S1: I didn’t know what ice age was.

R: Did you figure it out? Remember we said it’s also important to figure out what it is from reading.

Collin: All I want to know is did they go back in time?

R: Wait, what did you say?

Collin: They went back in time.

R: They went back in time! And, what else happened?

S2: They got to see a mammoth.

R: Did they stay there, back in time?

S2: No. The bear tried to eat them.

R: So then what did they do?

S2: They went back.

S3: Ray went back in time and travelled to the ice age.

R: And, what happened?

S3: They found a mammoth.

R: Do you think that will help him with his school project?

All: Yeah.

S3: They can see what they eat, and what they do there...they just travelled back and...

R: Good. I think you got the gist very well.

Although his contributions were minimal, Collin lead the group in moving the discussion away from strategy sharing to inferences required for deeper thinking about the text. For example, in the story, the author does not explicitly state the idea that the characters travel back in time as part of their adventure. Instead, this idea required students to make an inference. Collin was the first in the group to acknowledge this. Knowledge became cumulative after Collin's contributions, with students building on his ideas.

Discussion 4

Discussion 4 took place in conjunction with the nonfiction text, "Tarantulas: Giants of the Spider World". During whole group instruction prior to this discussion, the teacher modeled and guided students in using the "asking questions" strategy. In Nakita's group, this strategy paired with this text did not produce much exploratory talk. Instead, the students seemed to stick to

strategy statements, which accounted for 41% of their total talk. Nakita contributed to 5% of the total talk, or 2 of 39 turns.

On the contrary, Brenda's group was able to generate 29% exploratory talk from the same text. The difference in these two discussions was that Nakita's group, seemed to feel compelled to stick to questions that were answered in the text, by the author. In other words, their strategy use stemmed directly from information the author was providing readers in the text. By reading on in the text, students were able to answer questions they generated, making the strategy use very surface-level. Consequently, the discussion remained low-level as well.

Below is an excerpt from Nakita's group discussion.

S1: What will happen if the spider has venom and poison? And my other questions was why are there....?

S2: My questions was why is there a special way of eating for the tarantula? My other question is how do tarantulas protect themselves?

S3: My question is why are tarantulas shy? [reads from text: "They usually run away if they are attacked or threatened."]

S3: They run away fast if they are getting attacked. That's why they are shy. My second question is why do it lift its legs in the air? To scare them away.

S4: Why do they raise their front legs? I know the answer.

S1: You need to go, you haven't went yet (directed at Nakita).

Nakita: Why do tarantulas move slowly?

R: That's a really good question. What do you guys think – can you help her answer that? What does the text say?

S1: It didn't say nothing about them moving slow.

R: But what can you infer, even if it's not in the text? Think about it.

S3: That they have legs, so they try to stand up like this [demonstrating from text] so they can run. They are shy...it says right here "they are shy".

S1: My question was why are they scared of people?

R: Why are they scared of people?

R: So, Dalton has said, in answer to Nakita's question he said that maybe they move slowly because they are shy. Do you think that makes sense?

S2: I think it's because they are little and they can't really run that fast.

S3: It says right here that if they can't run away they bite.

Students continued to share their questions in the same way for several more turns.

Toward the end of this discussion, students began moving towards exploratory talk, but relied heavily on strategy sharing to initiate each turn. This resulted mostly in literal recall questioning. At times, students would share a connection. For example, student one interjection by saying, "I saw a wolf spider". At that time, the student was promptly reminded by other group members to stick to the topic, one of the discussion group rules. However, it is possibly that the integration of background knowledge and connections between text and personal experience could have led to more exploratory talk. I was not present in the group when this occurred.

On the other hand, Brenda's group, generated a higher percentage of exploratory talk because the students were able to go beyond the text to extend their thinking about the topic. This exploration included Brenda, whose exploratory talk totaled 17% of her total contributions, which in this case was 16% of the total group talk. The excerpt below provides an example of how students started with strategy statements but also included their background knowledge.

Brenda: I put: "Why do tarantulas get shy?"

S1: I put: "Do they have poison?" and "what tarantulas protect themselves"...what kind of protection?

S2: "What do tarantulas eat?" and "what are tarantulas shy of?" "what animals eat tarantulas?"

S3: "How painful is its bite?" "How are they scared of things?"

S1: They bite animals and it sprays poison and it makes the animals stop moving. If they protect itself it raises its front legs.

S2: I'm using my background knowledge for the answer. Tarantulas eat [inaudible]. "What are tarantulas shy of?" and I'm fittin' to use my background knowledge: they might be shy because of their predators.

S1: And this part I kept reading. Did you read this, everybody? Does anybody have a question about tarantulas?

S1: To figure out my answers I kept reading on.

All students: I kept on reading on.

S3: So everybody kept reading on. Except Michael didn't say anything. Michael?

S2: I used my background knowledge.

S3: I'm reading the captions.

Brenda: Why are they scared of people?

[Students begin discussion]

Brenda: So why are they scared of people? Because they think people are going to step on them.

[Various discussions]

R (enters): So are you helping each other answer your questions?

S1: What do we do when we are done?

R: Keep going!

R: [Directed at Brenda] What was your question?

Brenda: Why do tarantulas get shy?

R: Why do they get shy? Did they help you answer it?

S3: I know why.

R: So what did you discuss about that?

Brenda: That why did they get shy.

R: What was the answer? Can you tell me in your own words. Look up at me. Tell me in your own words.

Brenda: It says, "they usually run away if they are attacked or threatened."

R: What do you guys think? Anything else to add about that? Would you think tarantulas would be shy?

S2: Yes.

R: You would? Why?

S2: Because it says it in the story.

R: So you're using the text. Would you think that though, if you didn't read the story?

[All students respond "no"]

R: Probably not right? They look kind of scary, don't they?

S2: I'm using my background knowledge and I said they might be shy because of their predators.

R: Because of their predators or because they are predators?

S2: Because of their predators.

R: Because of their predators. What could predators do?

S2: Kill them.

R: Why?

S2: For them to eat.

R: Yeah. Because, tarantulas, even though they are bigger than most spiders, they're still not super huge, right? Have you ever seen one? Like this maybe [holding out hands to demonstrate].

[Other students demonstrate size with hands.]

Although students in this group relied on their questions to spark the conversation, they used their background knowledge to go slightly beyond isolated strategy use to build on information that was provided by the author in the text. The incorporation of background knowledge was more explicit with some students, for example Student 2, than it was for the participant in this case. However, although it does not go very far, Brenda begins to explore the idea of the tarantulas being shy and scared of people. Interestingly, these were not strategy questions Brenda had written on her paper prior to the discussion.

Discussion 5

Discussion 5 was based on the first of two fables, in which the “asking questions” strategy continued to be the focus. During this discussion, Collin’s group, produced 40% exploratory talk from this text. Although Collin only contributed to 10% of the total group turns, or 6 turns of 58, he did invoke some exploration.

Transcripts from this discussion provided useful information related to the group dynamic. This group proved to be intent on making sure they followed the group discussion guidelines that we created and posted on the anchor chart (see Figure 3.4). In the transcript excerpt below, it is evident they paid careful attention to the class rule that everyone must participate in the discussion. Here, they demonstrated their attention to the rules specifically in regard to Collin, who typically only participated in the conversation when prompted by others to do so.

S1: I want to answer my question. So, the grasshopper is being nice to the ant because the grasshopper, he doesn’t have any food, and he’s out in the winter and cold.

S4: I know the lesson to this!

S2: No, we don’t do the lesson yet. We have to do Collin’s [questions].

Collin: My question is the grasshopper, he is homeless and hungry.

S1: Okay.

S4: He just said the grasshopper is alone.

S2: Just let him pick.

S1: My other question is why is the grasshopper being nice now and asking if he could sing a song for ant?

S2: My other question is why would he just tell ant...so he could just warm up and...? If grasshopper...the ant will not want him to be cold and he thought ant would let him in.

S4: I asked why is the ant going to let grasshopper...? My answer is because grasshopper wasn’t working over the summer and he can’t....

What is particularly interesting about this portion of the discussion, is that the group members encouraged Collin to participate by sharing his question, but then simply moved on once he did. This indicates that they knew that everyone must participate because that was a class rule, but they did not feel Collin's contribution warranted further discussion. Furthermore, Collin did not get an opportunity to clarify his statement, nor did he interject to do so. The discussion simply continued with other students' turns. As was the case with Nakita's group during Discussion 4, it is quite possible that the group's desire to follow the discussion rules may have somewhat inhibited opportunities for exploratory talk. I was not present during this portion of the discussion.

Prior to beginning Discussion 5, based on informal conversations with Tanya, we decided to make an adaptation to enhance how students were participating in group discussions. I instructed students to go beyond discussion strategy use by working collaboratively to figure out the lesson or moral of the story. This proved to promote collaboration and deeper thinking about the text.

Some students were able to lead their group in moving beyond the text as a result of whole group instruction. For example, in a whole group lesson prior to Discussion 5, I stressed to the students the importance of including their own ideas based on their background knowledge when discussing text. This excerpt from Collin's group, demonstrates the students' understanding of this idea.

S1: Never tease a person and then ask for something to borrow because you might need somebody's help.

R: And the other part was what?

S2: That when someone is working and you're just standing there, just messing with them, it's just hurting yourself because they're going to have something to eat and you'll be sitting there cold. So, you're just hurting yourself.

S4: Yes, because if you're working hard, and then someone's teasing you, you're going to be hurting yourself because when summer turns into fall and then fall turns into winter ant's going to have a house and then grasshopper will be trying to ask ant for help.

S2: Yeah, like in the story I kept thinking where does grasshopper live? Don't grasshopper need to be making a house because with winter coming you need to be in a house because it's too cold to stay outside.

[Other students agreeing]

S3: We didn't use the text, we used our own words.

S2: Yeah, like she told us, your answers not always going to be in the text. Or you can use your background knowledge more. We learned what the main idea was, we put everybody's ideas all together to put the main idea together.

Although I was present during this part of the discussion, I made a point of just listening to the conversation. It was evident just from observing that the students understood the moral of the story and were able to connect it to their background knowledge. Although Collin was not participating at this point in the discussion, he had the opportunity to learn from his group members.

Similarly, in Nakita's group, discussions deepened when specific tasks were given which required students to work together to form a response, such as, determining the lesson of the story. This helped them go beyond strategy instruction to construct meaning, as was also the case in Collin's group. The excerpt below from Nakita's group provides another example of the collaboration that took place within the group once I added the task of figuring out the moral to the group discussion guidelines.

S1: The lesson was he didn't help the ant so the ant isn't going to help him get any food.

S3: The lesson learned is to be prepared for anything and don't make fun of people, even when they're working hard.

S2: My lesson was do not be lazy when winter is coming up.

S1: Was it a good idea to shut the door on the grasshopper's face?

S3: Only if they don't listen to you, or if they say something mean to you – call you mean names or laugh at you.

S4: He learned a lesson so do not make fun of him or he's going to keep not giving him food or let him in, let him stay cold and starve. Then he's going to learn a lesson of what treating him bad means.

Nakita: The ant didn't give grasshopper food because what happened...the grasshopper was talking about how the ant was working so hard so when the grasshopper knocked on the door the ant didn't give the grasshopper any food.

S3: The lesson that will be learned so you will be prepared for anything and do not make fun of people and help people out.

R: Did you guys come up with a lesson?

All: Yes!

R: What did you come up with Nakita?

Nakita: We came up with when the grasshopper was talking about how the ant worked hard, so that's why the ant didn't give the grasshopper anything when he knocked on the door.

R: Yeah! Erika?

S3: Don't make fun of people when you something's going to happen.

R: Because you might need...?

All: Help!

S3: And, be prepared for anything that happens.

R: So how did you come up with the lesson? Did one person say it or did you figure it out together?

All: Everybody said it!

R: You did? Everyone participated? Dalton did you? Pedro?

S1: He couldn't hear.

R: Oh, you guys make sure he can hear you.

S3: We didn't hear what he said when he read.

S1: Mine is that ant didn't let grasshopper in because the grasshopper didn't help the ant.

R: Right. So did the ant's hard work pay off?

All: Yes!

S4: Mine was that he didn't give him no food because of the way he treated him by laughing at him and making fun of him, so he didn't want to give him food, so he wanted to teach him a lesson, so he won't do it next time.

Although students identify their contributions as their own, it is evident that they are building on each other's ideas and collaborating to form what they think is the lesson. For example, Students 1 and 4 begin their turn with "Mine is..." or "Mine was..." which indicates they feel they have established the lesson of the story independently. However, the ideas they shared were not preconceived, and were a direct result of the discussion. For this discussion, Nakita's participation rate increased to 13%, with 25% of her turns being classified as exploratory talk.

Discussion 6

The last discussion of this study seemed to particularly generate understanding for Brenda. The text utilized for this discussion was the second of two fables, "The Dove and the Ant: A Retelling of an Aesop Fable". Brenda's group discussion of this text produced 83 total turns. Brenda's contribution was 21 turns, equating to 25% of the total talk.

While reading the text, students applied the "asking questions" strategy. During whole group instruction, we modeled only one question, in order to incorporate more independent time to apply the strategy. Prior to this discussion, as an adaptation to the intervention, I wrote three tasks on the board to help move the students beyond the strategy sharing that tended to dominate past discussions. The three discussion tasks were:

1. Share questions;

2. Work as a group to figure out the lesson or moral of the story;
3. Make a connection between this fable and the previous fable (“The Ant and the Grasshopper”).

Initially, during this discussion, Brenda’s group seemed to split up into two separate conversations – one among the boys, and the other among the girls. Once the teacher entered the group, she was able to help them reconvene and address the discussion tasks. The excerpt below demonstrates how Brenda was able to negotiate meaning with the assistance of a peer, one of the boys.

T: Why don’t we move on to number 2 – what was the lesson of the story?

Brenda: Dove was trying to save ant and they both were trying to save the ant.

T: They both were trying to save the ant?

Brenda: No, they both were working and the dove was saving the ant.

S1: And helping each other.

Brenda: Yeah, and helping each other.

S1: Well mostly dove was helping ant. Ant didn’t do nothing for dove.

Brenda: Well he was trying to say thanks but he didn’t.

S1: They helped each other, but mostly dove was helping ant.

Brenda: And ant didn’t even say thank you.

At first, Brenda is a bit confused by the general story line. In the story, the dove saves the ant from drowning. The ant returns the favor by later saving the dove from hunters. It seems that Student 1 was able to steer Brenda’s thinking in the right direction. Brenda was then able to build on Student 1’s statements through cumulative talk.

A few minutes later, I entered the group when students were discussing the lesson. Again, Brenda benefited from the assistance of peers to gain a better understanding of this text, as well as connection between the two fables.

S1: [reading aloud from board] Can you make a connection between this story and The Ant and the Grasshopper?

Brenda: I can! I can!

Brenda: They are both the same really.

[R enters]

Brenda: We are working on number 3.

R: You are working on number 3? Did you already come up with the moral?

All: Yeah.

R: What is it? What's the lesson learned?

[No response]

R: Did you already talk about this?

All: Yeah.

R: What did you come up with?

Brenda: That they worked together and that the dove was trying to save the ant.

S1: Well they really didn't help each other because dove was actually helping ant.

R: But didn't ant help dove at the end?

Brenda: Yeah.

S1: No.

S4: Yeah, he bit the hunters.

Brenda: So they did work together.

R: Okay go on to the next one. Think about the other story and think about this story. Are there similarities?

Brenda: They're both really the same, but the lesson.

S2: The connection is they are both ants [in both stories].

S1: They're not both ants!

S2: The connection is that they are both ants.

S1: Can anyone make a connection?

S4: I could.

S1: Okay, make a connection.

S2: There were two ants in the stories. There was the one about the ant and the grasshopper.

At first, Brenda shares ideas that are not completely clear to the other group members.

This results in disputational statements from Student 1. Student 4, assists Brenda in clarifying her statements by disputing Student 1 and telling how the ant saved the dove. Reassured, Brenda then restates her original ideas that the ant and the dove worked together to save each other.

Although Brenda was not able to articulate a connection, this transcript clearly revealed how her thinking evolved as the result of other members' contributions.

Additionally, as a result of collaboration between Tanya and me regarding how we were participating in the group discussions, by Discussion 6, we had both significantly decreased our percentage of contributions. Though we each participated with Brenda's group at different points during the discussion, our combined contributions only totaled 18%.

This speaks volumes about the role of the teacher in small group discussions. Although scaffolded support is often necessary to steer the conversation in the right direction, it can also quite easily lead to the IRF sequence (Cazden, 2001), or teacher dominated conversations. Furthermore, these discussion excerpts identify times when the teacher's desire to lead the group hindered the potential for exploratory talk, as was the case in Discussion 2.

Other Talk

Many of the transcripts revealed exploratory talk that was generated during discussion groups. However other talk, a considerable amount of which was related to organization, sometimes dominated the discussions. For example, early on the study, during Discussion 3, Daquan's group spent 87% of their total turns on other talk. This is exemplified in the excerpt below.

Daquan: Then their mother found them, but Liz said do you want to tell mom and Ray said no, nobody will believe a crazy story like that.

S1: Okay, now Marcus. I'm going to call somebody.

S2: Ice age went back in time...and they went back in time to and [inaudible], back in time.

Daquan: Woohoo, good job!

[Daquan and S3: Discussing iPhone]

S2: The giant bear...I like that word...because they just disappeared and went to the ice age.

[All students spelling each other's names]

S1: Okay, okay, go Bethany

S4: No.

Daquan: You have to because she's going to listen to it.

S4: It's not even recording anymore.

All: Yes it is!

Daquan: This is for Bethany [reading her paper]: "They are in ice age...."

S3: That's just making us worse. Bethany, you need to read your story!

S4: I don't feel like it. My hair's all messy.

S3: They are trying to get out of there...

Although Daquan tried guiding his group to stay on topic during this particular discussion, he was unsuccessful in his attempts. This occurred during the fiction story, "A Mammoth Adventure". The off-task nature of this conversation could have been the result of a

lack of interest in the topic or the distraction of the recording device. Neither the teacher nor I were present during this discussion.

Self-assessments of Student Participation

Following each small group discussion, it was important for students to consider how they participated. The self-assessment used in this study was adapted from Kelley and Clausen-Grace's (2013) Meaningful Discussion Scale (see Appendix B). Using a 4-point scale, students rated their participation, and were able to share something they learned from their group and something they taught their group, as a result of the discussion. Table 4.4 depicts participating students' self-assessment scores over the course of the study.

Table 4.4: Meaningful Discussion Scale Scores

	Discussion 1 "Growing Plants"	Discussion 2 "Tiger gets his Stripes"	Discussion 3 "A Mammoth Adventure"	Discussion 4 "Tarantulas: Giants of the Spider World"	Discussion 5 "The Ant and the Grasshopper"	Discussion 6 "The Dove and the Ant: A Retelling of an Aesop Fable"
Brenda	4	3	4	3	3	4
Collin	3	2	2	2	4	3
Andres	3	2	4	3	3	4
Daquan	4	2	3	2	2	3
Nakita	4	4	4	4	4	4
Juan	1	4	2	3	3	3

Brenda, who had a high participation rate, typically felt she met most or all of the discussion group requirements. Interestingly, Nakita, who had a low participation rate, gave herself the highest rating for every discussion. Collin's lower self-assessment scores were consistent with his low participation rate. Daquan's low self-assessments scores are consistent with the type of talk that took place in his group, which largely consisted of "other" or

“organization” talk. Andres’ and Juan’s self-assessment scores were not aligned with other findings, and seemed to gravitate toward the middle of the scale.

Reading and Comprehension Levels

Participating students’ reading level and comprehension abilities were assessed at the beginning and the end of the study. All participants’ comprehension scores improved over the course of the study. The instructional reading level improved for most as well, with the exception of Nakita and Juan, whose scores remained about the same. Table 4.5 contains a comparison of beginning and ending scores.

Table 4.5: Reading and Comprehension Scores

Student	9/10/14 – Decoding – Instructional Level	9/10/14 – Comprehension - Scores	11/18/14 – Decoding – Instructional Level	11/18/14 – Comprehension - Scores
Andres	2 nd	2 nd 80% (F); 35% (NF)	2 nd /3 rd	2 nd 85% (F); 70% (NF) 3 rd 80% (F)
Brenda	P	1 st 100% (F); 90% (NF)	1 st	1 st 100% (F); 90% (NF) 2 nd 85% (F)
Daquan	3 rd	2 nd 90% (F) 3 rd 80% (F); 80% (NF)	4 th	3 rd 100% (F); 75% (NF) 4 th 80%(F); 90% (NF)
Nakita	2 nd	1 st 100% (F) 2 nd 70% (F); 60% (NF)	2 nd	2 nd 100% (F); 90%(NF) 3 rd 90% (F); 70% (NF)
Juan	2 nd /3 rd	2 nd 50% (F); 70% (NF)	2 nd	2 nd 90% (F); 70% (NF) 3 rd 50% (F)
Collin	PP	P 75% (F); 90% (NF)	1 st	P 80% (F); 90% (NF) 1 st 90% (F)

(F) Fiction Passages
(NF)Non-fiction Passages

Factors Influencing the Intervention

Student Factors

Analysis of qualitative data revealed student factors as having a heavy influence on the intervention. Student factors included whether or not the students were able to read the text in order to apply strategies independently, language, their motivation and interest in the text, their self-identity as a reader, their background knowledge on the topic, and their unique personality. Qualitative data collected included: reading inventories, which revealed the participants' reading abilities; reading identity and motivation surveys, which told about each participants' self-perception as a reader, as well as their interest and motivation for reading; ongoing field notes, which documented how students participated in groups, as well as group dynamics. My observations occurred between two and four times per week, depending on the instructional schedule. Observations were followed up with reflective notes about the occurrences of the day.

Reading identity. Self-perceived reading identity and motivation to read were measured using a survey, which was administered during phases one and three of the study (see Appendix A). Obtaining a class mean and median was important to determine how each participant's self-concept and value of reading compared to that of their peers. Table 4.6 represents a comparison of the beginning and ending survey results for the entire class, with research participants' scores in bold.

Table 4.6: Reading Identity Survey Comparison

Student	SC		V		Total	
	9/19/14	11/18/14	9/19/14	11/18/14	9/19/14	11/18/14
Michael	34	32	35	36	69	68
Brenda	30	28	35	35	65	63
Kayla	31	32	34	33	65	65
Avery	28	30	34	20	62	50
Collin	20	18	15	29	35	47
Maria	29	25	33	30	62	55
Jesus	30	A	32	A	62	A
Jannell	40	40	35	39	75	79

Edgar	25	36	25	32	50	68
Andres	29	32	29	34	58	66
Bethany	27	31	32	30	59	61
Natalie	26	31	36	31	62	62
Summer	30	26	21	17	51	43
Jorge	31	A	29	A	60	A
Daquan	34	29	30	31	64	60
Nakita	27	26	26	36	53	62
Anita	32	38	38	38	70	76
Kendra	36	40	33	38	69	78
Marcus	29	38	25	38	54	76
Dalton	33	36	36	40	69	76
Mark	26	24	30	33	56	57
Giselle	26	36	31	36	57	72
David	39	36	28	26	67	62
Juan	33	31	37	37	70	68
Manuel	31	31	36	33	67	64
Natasha	34	34	30	38	64	72
Erika	36	34	35	37	71	71
Nathan	34	A	32	A	66	A
Derrick	32	38	30	30	62	68
Leanne	27	25	33	36	60	61
Gabriel	33	29	39	37	72	66
Pedro	A	24	A	28	A	52
9/19/14			11/18/14			
Class Mean = 62			Class Mean = 64			
Class Median = 62			Class Median = 65			

SC – Self Concept: How the student views his or herself as a reader in relation to peers (40 possible)

V – Value: How the student views the value of reading (40 possible)

T – Total score on both parts (80 possible)

The results of this survey were consistent with participation rate for Collin, Brenda, and Nakita, meaning a low survey score translated to a low participation rate, and, a high survey score translated to a high participation rate. Collin scored well below the mean and also generated one of the lowest participation rates in his group for each discussion. Although his survey scores were low, it is noteworthy that his ending score increased by twelve points, from 35 to 47. Brenda, who had some of the highest participation rates in her group, also scored around or above the mean on both surveys. Nakita scored below the mean on both surveys and

generated low participation rates during group discussions. However, Nakita's survey scores and participation rate both increased over the course of this study.

Although there was a slight decrease in Juan's post-assessment score, his pre- and post-assessment scores were both substantially above the class mean. This, however, did not translate to a high rate of participation. Interestingly, Daquan's survey scores went from a score of 64, which was above the class mean, to a score of 60, which was below the class mean. Throughout the study, Daquan remained an active participant in his group's discussions. Like Collin, Andres also had a substantial increase in his ending survey score. Although Andres' score increased by eight points, from 58 to 66, his participation rate remained low.

Although changes in self-identity and motivation to read varied among the participants, there is greater significance in the results of Collin, Nakita, and Andres. For these students, overall discussion group participation was initially low, and mostly remained low, regardless of the type of talk they were generating. However, their post-assessment survey revealed a score much closer to the class mean, and perhaps a positive change in their self-identity or motivation to read. With more time, this could have led to an increased rate of participation.

Teacher Factors

Initial Perceptions. Since the research took place at the beginning of the school year, it was important to get an idea of the teacher's perception about the classroom environment that was beginning to take shape in her classroom. This was done through a face-to-face interview. The first interview took place on October 2, 2014. In this interview, the teacher pointed out class size as being a major obstacle in establishing a highly productive classroom environment. The entire

class consisted of 31 students. However, during this interview, the teacher identified 25 as being a number closer to ideal classroom size.

Below is an excerpt from the first interview in which Tanya discusses how she rates her classroom environment and the students' participation.

R=Researcher
T=Teacher

R: Where do you think you are in terms of establishing the kind of classroom environment that you want? Say on a scale from 1 to 10, where would you say you are? Your ideal, not anyone else's, just what you think. 10 is your perfect classroom environment, 1, you're nowhere near. Where would you say you are?

T: Probably a 7 or an 8.

R: What things do you want to get better then, to make it a 10?

T: Following directions – not having to repeat myself 2, 3, 4 times. And, again, I feel like majority of them are there, just those few that need constant reminders.

R: What else?

T: For the most part, they do respect each other, but just 100% respect. Respect for authority, too – not talking back to the teacher, when I ask you to do it, you need to do it.

R: Do you see that as a problem?

T: Not a huge problem, but I feel like it's the same couple of kids, that just overall don't have respect for anyone.

R: So how do you feel in general just about the way that they participate? Again, on a scale from 1 to 10, like you said in a perfect world your classroom is a 7 or 8 right now, what about as far as the kids participating?

T: On the same scale 1 to 10, I would probably say they would be like a 6. The same kids participate and raise their hand willingly to participate, even though I do call on everyone, but as far as on your own participating.

R: What about when they are in groups? I've seen them do the "Go Fish" game, they are always doing Daily 5, so what would you say about the management and behaviors during those types of activities? What we are going to do is try to improve, by using

discussion groups, we're hoping it's going to trickle down to the environment, because the kids are learning what this is supposed to look like. So, where do you see them now?

T: So, as far as participation in group?

R: Yes, and do they participate in the way you'd like them to participate? Or, is it more just that superficial level, where I'm just going to read off something because I have to say something? And, then, does everyone get a turn? Where are they right now?

T: They still can't...if they know you aren't watching them, they might be off task. I don't know if it's just that age or the make-up of the school.

R: Just speculate and why would you say that is? Why is it that somebody always has to be watching?

T: It may just be one of those things for some of them – I'm not going to do it unless someone makes me do it. If no one's paying attention, why am I going to do it?

R: So, lacking the intrinsic value of learning?

T: Self-motivation, maybe?

R: So, with self-motivation, how many of your kids would you say? Just roughly, how many do you feel have an issue with that?

T: Maybe 10 out of 30, one-third. But, when I'm looking at them, they know what they should be doing.

R: Would that be something you would want to change if you could?

T: Yes.

R: One more question, since it's so early in the year: you rated overall classroom environment as an 8 and student participation and behavior in groups as a 6. Do you anticipate these getting better or worse as the year goes on?

T: Yes, I anticipate these getting better. Especially the behavior in groups. The more practice they get the more it should improve.

In this interview excerpt, Tanya conveyed her feeling that her students participate at a higher level when a teacher is present, and went on to consider the possibility that this may somehow be related to school demographics. At that time, she did anticipate that the classroom environment would continue to improve as the year went on. It is interesting to note that when

asked about classroom environment in general, Tanya judged her class strictly on behaviors that were exhibited by students. More specifically, she alludes to the idea that her students' behaviors are what makes the classroom environment what it is, without consideration of what role she has played in establishing the existing environment, or what she could do to change it.

Later in the interview, we discussed how the students participate. At that time, Tanya disclosed her heavy reliance on behaviorist techniques and systems to help her manage her classroom environment. This interview revealed her feelings that a behavior system that involved rewards and consequences and positive reinforcement was the best way to establish the desired classroom environment.

T: ...I would say for the most part, I try to do a lot of positive reinforcement. I do the points on the board. It seems more if they are working towards a goal, with an end in mind, it works. Like, I have a ticket system, so for a lot of them it works, they want those tickets, they want those points, and that what they do it for. They work with their team, you even see them getting the other people that aren't ready on board, to get their point. I try to do a lot of positive reinforcement to help. Or, I'll clap – I do the 5,4,3,2,1 – I try to have indicators for them to know what to expect. If you're not ready by this time, there's a consequence.

R: Would you, in an ideal, perfect classroom, would you like it if you didn't have to do the positive rewards, where the behavior was more innate?

T: In a way, yes, it might make it easier, but I don't mind rewarding. I feel like you should be rewarded for good behavior, just not every time. Like, you are expected to sit in your seat, you are expected to listen, you're expected to follow teacher's directions, you shouldn't have to be rewarded every time. Or, sometimes, that why I try to have the kids who always do the right thing flip up. This is to train them that they are getting rewarded for following directions. But, yes, in a perfect classroom, I shouldn't have to, for every single activity, reward them.

In this excerpt, Tanya discussed her feelings that a system of rewards and consequences was the best way to establish appropriate behavior. Interestingly, however, she revealed that it is precisely this type of management system that could hinder some students from self-motivation. Here, again, Tanya describes only behaviorist techniques for addressing student behavior as her

way of establishing the desired classroom environment. She views her role in establishing such an environment as that of the reward giver for appropriate behavior. This perspective lacks consideration of factors other than behavior that make up the classroom environment that could drive students toward self-efficacy.

Concluding Perceptions. The second interview took place about seven weeks later, on November 20, 2014. During this interview, I wanted to revisit Tanya's perception of her classroom environment, and also get her thoughts on aspects of the comprehension instruction that took place. In the first part of the interview, we discussed whether or not there were perceived changes in the classroom environment.

R: Your first interview was on 10-2 and we talked about classroom environment. Do you think your environment has changed at all?

T: I think it has improved slightly but no dramatic changes.

R: How?

T: Well, the kids are well behaved overall [pause]. I have seen an improvement in manners and helping one another succeed.

R: So, last time you said your class was a 7 or 8 on a scale of 1 to 10? Is this the same now or different?

T: It's about the same. I think they are about an 8 in terms of overall classroom environment. Most students can follow classroom routines with minimal prompts. Positive reinforcement works well. Most students work well together and know expectations.

R: In terms of participation, you gave your kids a 6 during the first interview. Is this the same or has it changed? Not just for discussion groups, but overall. So, does everyone participate?

T: Now they are about a 7. For the most part, everyone participates, but sometimes there are kids that want to do all of the talking. And, some kids are still quieter. But, I hear them being respectful and taking turns.

R: Can you think of any specific examples?

T: Leanne is a shy student and would never raise her hand to answer. Now she is participating whole group and proud to share.

In this portion of the interview, Tanya stated that she felt her classroom environment was about the same as it was at the time of the first interview, but that the students continued to improve in terms of participation and overall behavior. She, again, notes that she feels positive reinforcement, such as rewarding students for appropriate behavior, seems to work well for her, but does not discuss any other factors that contribute to the overall classroom environment. Although student participation is important, the focus remained on student behaviors, with no consideration as to how the teacher contributed to the environment that existed.

One variable that significantly affected implementation of the intervention was the district's mandates for comprehension instruction. I wanted to use this interview to get Tanya's thoughts on this. The excerpt below contains our discussion regarding this issue.

R: So, one thing that I was unaware of when I started working in your classroom was that the district had given you pretty strict guidelines and a schedule for comprehension instruction, which includes strategy instruction, which required all teachers to use the specific materials and genres of text. How do the district's guidelines for comprehension instruction impact your teaching? What's the good and the bad of it?

T: I like having a guideline to go by, I just feel that the pace is too fast. We have the toolkit, which is great, with all of the strategies, but then we have to find the texts, which could be good and could be bad. It's nice to pick our own texts, but it's time-consuming. Every week we have to sit down together and find a story that matches the strategy. I mean, it's good that we get to pick stories around our theme, so all of our stories, like right now we are doing animal habitats and surviving, so all of our stories can go around that, but no one's helping us find those stories. Like the reading coaches, they are telling us what to do, and they are basically giving us the resources, but then, I guess since we are the teachers we have to find everything. But, it's just time-consuming.

R: So you would say, overall the pace is too quick and what about the switching of genres?

T: With the genres it depends on...like each strategy has 4 or 5 lessons. So, 4 or 5 lessons on one strategy for fiction and then the same lessons on nonfiction. Which, you know, the kids become familiar with the strategies the second time around, but maybe it would work better if we could switch off. So, maybe we could do 3 lessons fiction, 2 lessons nonfiction for the same strategy. We are fitting in all of these lessons, but we

don't have enough time to do... basically, we are doing the lessons twice, for fiction and for nonfiction. It's a good idea to do 50% fiction and 50% nonfiction, but just not as fast. Maybe just slow down and do a couple of lessons fiction and a couple of lessons nonfiction on the same strategy.

R: What do you think the reason is for the district implementing this in this way? For example, the pacing guide, the strategy instruction.

T: I know they have PARCC in mind, I think that is what they are going for, to meet all of the common core standards. But, I feel like they don't really know, because everything is always changing. For example, now we have to do a district writing assessment every quarter, and they updated that at least four times just since school started three months ago. We're expected to meet those, I mean, I know it's a learning process, but they're just trying to go big too fast.

R: What do you think about them keeping everybody on the same page? I don't know if you remember, well you've been teaching for 8 years, so maybe, but back a long time ago, teachers were able to keep their own pace and do their own thing. It's really different now. What are your thoughts on that?

T: I really like staying on the same page, just because, well especially last year, me and the other third grade teacher, we had three groups of siblings. So, for the parents, we had the same homework. It was easier for them to work with their students. So, as far as that, or even just moving to the next grade, so when they move to fourth grade, for example, if I did this but the other third grade teacher didn't then for those kids some of the third graders got it and some of them didn't. So, I think it's a good idea that we are on the same page.

R: What about, say for example with comprehension instruction, if you are behind a few days?

T: If I'm behind a few days, I try to either catch up, like one day I'll do double comprehension, or, at our team meetings, we plan three days a week, we can say "where are you at?" and sometimes we are both behind, so then we slow down a little bit.

Interestingly, this portion of the interview reveals that, for the most part, Tanya felt the district's outline of scheduled strategy instruction was helpful in teaching comprehension. This is, again, consistent with a behaviorist perspective of learning. She did, however, feel that the overall pace of the district's guidelines and the lack of strategy alignment to text and genre were issues. Based on Tanya's insight during this interview, it seemed that consistency in instruction and coverage were the focus for teachers, rather than quality of instruction. This could be the

result of pressure from district administrators to adhere to the guidelines and pacing schedule. Overall, it is evident from this interview that the district's attention to standards and testing have influenced this teacher's comprehension instruction.

In the next part of the second interview, we discussed the intervention. Together, we concluded that time was always an issue and that discussion groups were more productive and focused when students were given guiding tasks. For example, Tanya's instructional schedule guidelines often left us feeling pressed for time when it came to discussion group implementation. Additionally, since the students were naturally inclined to read what they had written, in terms of their independent strategy use, it was beneficial to also provide them with prompts that would encourage groups to construct knowledge together, in order to respond to the prompts. For example, Discussions 5 and 6, during which the students had to work together to figure out the lesson of the story, seemed to produce more exploratory talk.

During the last part of the interview, I wanted to get Tanya's thoughts on some of the students who were participating in the study. In the excerpt below, Tanya discusses individual student progress.

R: Let's just talk for the last few minutes about the kids that were involved in the study. So, I'm going to focus on Nakita, Collin, and Brenda, because they are struggling readers, but they are also really quiet and had low scores on the motivation survey. Do you see any changes in them from the beginning of the year to now? And, what do you see with these three struggling readers and addressing their needs?

T: I would say Brenda improved the most. I see her participating more. And, she is in the interventions group and the fluency group. So, she is getting extra help to help her become a fluent reader. She tries very hard. She wants to learn and she does try. So, I've seen the most improvement with her. And then, next, I would say Nakita. She is starting to participate more, ask a question when she is confused. She needs a little bit more time just to think about it. She needs to think before she gets it. For example, sometimes we'll be done and she doesn't even have anything on her paper. So, we're really working on getting your thoughts out and writing them down. But I have seen her

participating more. And Collin, he is still very shy. He doesn't raise his hand. I do call on him, and when I do call on him, half the time he knows the answer and half the time he doesn't, depending on whether he is paying attention. I feel like, with him, vision is an issue.

R: Did you see him covering up his eye when I was testing him?

T: Yes, and that helps him. So, I tell him to do that, and when he does that and I progress monitor him for Aimsweb he does about 50% better. Just from covering that eye.

R: Well he told me he got so many words, I don't know what the amount was, but a week or so ago, he said he got so many words on his test.

T: Yes, he went from 20 wpm to 40 wpm. So, I don't know if it's blurry for him to see. His mom is supposed to be sending eye patches, but I still haven't seen them. And, she said that he needs eye surgery. So that also hinders him, if you can't see. I have him sitting up front, but for him he lacks motivation too. So, sometimes he may feel it's just easier to sit there and not try.

R: So, when you observed by sitting in with the groups, did you notice with these three students in particular, when you were observing their groups, did you notice this helping these quiet, low motivation kids? Or, the other kids pulling them up at all, with having the time to talk about things and build comprehension together?

T: In Brenda's group, I thought she became more like a leader.

R: She was awesome.

T: Yeah, she took the lead. Collin and Nakita, I did notice in Nakita's group sometimes if she didn't read it, they would be like, "okay, read yours". They would try to get her to talk. Collin's group, I'm not really sure.

R: Collin's group, you were there the last one we did. They made him read his [questions], but then moved right on, like didn't even talk about the answers, which I thought was interesting. Because they did make him read it, they were like, "come on, come on" but that was it. With everyone else they talked about what the answer would be and for some reason, I'm speculating that they knew that had to have him read him, but I don't know if you saw anything like that.

T: I can't really remember. But, when I was in their groups, I tried to just sit back and watch them. If they were sitting there doing nothing I would ask whose turn it was, but I tried not to give my input too much, just to listen to what they had to say. Overall, though, I really liked it and I learned from it too, like how to improve. And, some of them really enjoyed it. They loved sharing with each other. I may try to do smaller groups, maybe like four kids, but we have such a large class this year. With bigger groups, some kids always wanted to be the sharer, or always wanted to answer.

In this final part of the interview, Tanya interprets student progress as not only increased participation, but also improvement on Aimsweb. This could be an effect produced by district testing mandates and state requirements. We both agreed that Brenda stood out as a leader during discussion groups, while Collin remained shy and less willing to participate. (Complete transcripts of both interviews can be found in Appendix F.)

Cognizance. The teacher's cognizance of her students' abilities undeniably enhanced the intervention. First, she was able to identify students who were a good fit for this study. And, although together we were able to map out the direction of this research, it was the teacher who made day-to-day instructional decisions based on her students' needs. For example, one challenge we faced while implementing the intervention was the difficulty students had with reading the text independently. Tanya realized when text needed to be read aloud to students so they could focus on listening comprehension, instead of reading comprehension. Based on her observations of discussion groups, Tanya kept reflective notes and shared with me her ideas about changes that needed to be made as implementation occurred.

As researcher, I was not present in the classroom everyday, nor did I have extensive knowledge about the students' backgrounds and abilities, which could be construed as a limitation. However, Tanya's awareness of her students supplanted this limitation.

Teacher-researcher relationship. Because the teacher and I had an existing teaching and personal relationship prior to the start of this research, we were, to some extent, able to forego a warming up period during phase one. Even though this was the case, I respected teaching boundaries and participated during phase one only as an observer. This allowed Tanya to become comfortable with having another adult present in her classroom on a regular basis. As

I began to participate as a teacher, our comfort level with each other grew. For example, when creating the anchor chart with discussion group rules, I lead the class discussion while Tanya recorded on the chart.

During whole group comprehension instruction, regardless which one of us was leading the discussion, we both felt comfortable participating in the discussion. Our teaching relationship continued to evolve over the course of the study, and this became a highly beneficial dynamic. Students benefited from two teachers working in collaboration by expanding on each other's ideas and knowledge base. This dynamic resulted in honest, informal conversations about what was working with the intervention and what adaptive changes need to occur. For example, early on, we both realized our participation in discussion groups was dominating the conversation and sometimes leading to IRF (Cazden, 2001), precisely what we were trying to move away from. However, we also discussed the need to sometime scaffold the conversation to move the group beyond strategy sharing.

Although our teaching relationship was highly beneficial to the intervention, the stance by which we each viewed the learning environment differed. Tanya remained married to behaviorist views of teaching and learning which relied on a discreet set of tactics involving rewards and consequences in order to produce desired results. This may be due to pressures Tanya felt at various levels, which will be discussed further in the next section. From a constructivist standpoint, this got in the way of cultivating self-efficacy for students. This resulted in a particular classroom environment, one which placed a high value on appropriate behavior as the most essential feature of a positive environment. Even though we had differing views, I respected Tanya's position and conducted my research within the given parameters.

Outside Factors

Implementation of the discussion group intervention came with some challenges that were the result of outside factors, which came from the school, the district, and the state. At the school level, time and scheduling caused some logistical difficulties. Since this study took place at the beginning of the school year, changes to the lunch schedule, special class schedules (such as art and physical education), and grade-level Response to Intervention time changed several times. The school administrator required each grade-level team to be consistent in what they were teaching, the texts they were using, and the timeline of instructional strategies. While instructional methods remained flexible, team meetings occurred weekly to maintain consistency in the teaching schedule. As a result, Tanya felt pressure to stay closely aligned to her colleagues. This caused some interference with the implementation of this intervention in her classroom.

Other issues were the result of district and state level requirements. One major factor was the schedule of mandated assessments required by the district. The time required to administer progress monitoring and other outcome assessments often impacted the comprehension instruction schedule. In order to allow time to assess, comprehension was sometimes cut short, or removed from the daily schedule.

The second major factor was the comprehension pacing guideline schedule mandated by the district. While this schedule was not completely incompatible with the intervention, it certainly established boundaries. Tanya felt pressure to comply with the schedule, even though there was often a disconnect between the text and the scheduled strategy focus. The lack of

flexibility in scheduling often left us feeling pressed for time, therefore compressing comprehension instruction.

The district's heavy emphasis on strategy instruction did not allow us to focus on the second and third discussion types shown in Figure 3.3 of the proposed discussion cycle. The second type of comprehension instruction that was proposed in our approach was that of close reading utilizing informational text. Close reading could focus on discussions about text features, big ideas, author's purpose, and/or text structures. This would allow all students, including those who struggle, opportunities to grapple with challenging text, which may be slightly above their instructional level. This type of discussion is closely aligned with the goal of the Common Core State Standards (CCSS), which recommends a balance between informational text and literary text. Furthermore, the CCSS call for close reading to build knowledge, with students being required to take a position, argue their perspective, and use textual evidence (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). In fact, three of the CCSS anchor standards relate to author's craft and text structure.

Throughout this formative experiment, we only had one opportunity for close reading. During Week 7, I modeled a lesson on using text structures to help students gain an understanding of a nonfiction text. The text was about two different types of wild cats, leopards and tigers. Initially, it was Tanya's intention to use the "asking questions" strategy with this text because that was the strategy she was scheduled to teach. However, during a planning meeting, I showed her that the structure of the text better lent itself to compare and contrast, since the author distinctly compared leopards and tigers. This deviated from the type of comprehension

instruction the students had previously, but helped in building an understanding of how the structure of the text conveys the author's message or purpose.

The third type of comprehension instruction which was proposed, but not heavily emphasized was to make connections across the texts. The purpose is to piece together theme-based "big ideas" stemming from informational and literary texts, or text sets, encountered throughout the week. The texts the teachers comprised for strategy instruction included fiction and nonfiction stories on the same topic. For example, the first theme was "seeds and plants". For this theme, the teachers gathered fiction and nonfiction texts on this topic which they used with the strategy of using your inner voice to monitor comprehension. Students were able to make connections across texts to gather big ideas about the theme.

However, during the second theme, "animal life cycles", Tanya started with a fiction story on tigers, then continued with a fiction story on mammoths, then switched to a nonfiction text on wild cats. This was the result of the guidelines set forth in the pacing chart and her attempt to adhere to those guidelines. While working on the nonfiction text about leopards and tigers subsequent to the fiction text on the same topic would have allowed the students to make connections across texts of different genres, Tanya was not comfortable deviating from the district's guidelines for implementation.

Although this was consistently an issue throughout the study, there was another opportunity in which students were able to make connections across texts, but not specifically with different genres. Weeks 10 and 11 were structured around discovering the lesson or moral of the story when reading fables. Our discussion during week 11 included an opportunity for students to discuss any relevant connections between the two fables we read. The two fables

used during these weeks also contained similar characters, which furthered the opportunity to discuss connections among texts. Ideally, a combination of different types of comprehension instruction involving fiction and information genres would have provided more opportunities to make connections about themes. For example, Table 4.7 illustrates how genre, discussion type, and focus strategies could fit together in a cohesive way to incorporate strategies and build comprehension.

Table 4.7: Ways to Discuss Text

Genre	Discussion Type	Comprehension Focus Strategies
Fiction	Strategy discussion – Discussion focuses on how a strategy is used with a text.	Questioning, Summarizing , Predicting, Clarifying
Informational	Close reading discussion – Discussion of the text features, big ideas, author’s purpose, and/or text structures.	Genre, main idea, author’s purpose, text organization (problem/solution, compare/contrast, cause/effect, chronological sequence)
All	Connections discussion – Discussion focuses on making connections across many texts on the same topic or theme.	Synthesizing

Finally, the impact of national standards and the state’s standardized testing placed constraints on the intervention. Tanya’s feelings of uncertainty in regard to the district’s approach to meeting the demands of the Common Core State Standards and the assessments that go along with the standards, inhibited her freedom in making instructional decisions that would have better suited this intervention. But, like all teachers, Tanya had to accommodate school, district, and state mandates.

Summary of Findings

In this study, the type of talk and participation rate generated by student participants varied with each discussion. However, it is evident from this formative experiment that struggling readers are capable of generating exploratory talk, and, thus, constructing knowledge in collaboration with their peers.

There were several factors that enhanced or inhibited this intervention. Qualitative data revealed these factors to be: individual student factors, such as the students' abilities in reading and language, their motivation and interest, their self-identity, and existing background knowledge related to topics; teacher factors, such as perceptions and stance related to teaching and learning, and awareness of students' abilities; and outside factors, which included requirements from the school, district and state that were beyond the teacher's control.

The qualitative data suggested that the teacher's stance played a large role in the teaching and learning that took place in the classroom. Students in this classroom seemed to be much more adept at instruction that included specific steps or learning tasks. For example, all students were able to share their strategy use during discussion groups. However, for many of the initial discussions, that was as far as the discussion went, with no further collaboration among the group members. This could be the result of behaviorist approaches adopted by the teacher. But, with some scaffolding or support, students were able to move beyond strategy sharing to deepen understanding.

Despite the challenges associated with implementation of this intervention, it did appear to contribute to the participating students' decoding and comprehension abilities, based on the Basic Reading Inventory (Johns, 2008). In addition, the teacher felt it had a positive impact overall on her classroom. In her final reflection at the end of the study, Tanya wrote:

Overall, I feel my class did a great job in their discussion groups with their peers. Some students really enjoyed it and loved discussing with each other. It was fun to sit back and watch students learn from each other with minimal guidance from the teacher. Some students did struggle with sticking to and discussing the topic – this would be something to work on further. The self-assessment was a great tool to see how the students felt they did. Students did improve discussion techniques over time. Establishing group leaders facilitated the process, but I felt some groups did not listen to the direction of the group leader and took over – another area to work on. Anchor chart – another great tool to refer back to. I think with more practice the students will continue to improve. Sometimes, it's hard to get them to move beyond the text and this is something we are always working on! (November 18, 2014)

CHAPTER 5

SUMMARY, DISCUSSION, AND IMPLICATIONS

As a teacher, I recall implementing literature circles for the first time in my third grade classroom. Working with peers built excitement within the students, which positively charged the classroom environment. However, I still recall an enduring feeling of reluctance that accompanied the idea of relinquishing some control over the discussions that would take place. The positive response from students that occurred during implementation, though, helped me understand the power of peer-led talk in the classroom. Later in my career, as a curriculum specialist who did teacher observations, and then an administrator, I began to notice whole group, teacher-led discussions dominating the classroom landscape and becoming the primary method of instructional delivery. This prompted my curiosity about the role of talk and led me to this study. Typically and historically, sociocultural influences on reading comprehension and the social nature of learning have been studied and described. It was my desire to further examine these elements as they occurred among struggling readers.

Past research on the implementation of peer-led discussion groups in various educational setting and with diverse populations of students resulted in many positive findings (e.g. Almasi, 1995; Berne & Clark, 2006; Eeds & Wells, 1989; Evans, 2002; Hall, 2012; Leal, 1992; McGee, 1992; McMahan & Goatley, 1995). This research inspired my thinking and paved the way for this study. In the first section of this chapter, I describe key findings of the study, in relation to the research questions. The subsequent sections include: a discussion of tensions that existed between pedagogical perspectives, and adaptive changes that were made during this formative

experiment; the implications towards a local instructional theory that resulted; and, recommendations for teachers and future research.

Key Findings

The data from this study revealed significant findings based on the results presented in Chapter 4. Key findings in relation to the research questions are presented below.

Research Question 1

How was the construction of meaning impacted, for struggling readers in an elementary classroom, as a result of collaborative classroom interactions?

Research has shown that the use of strategies to help the reader make sense of text is essential to understanding (e.g. Block & Pressley, 2001; Dole, Duffy, Roehler & Pearson, 1991; Duke & Pearson, 2002). Therefore, discussion centered on the students' use of strategies provided a basis for discussion each week. Our strategy discussion was modeled after Palincsar and Brown's (1984) reciprocal teaching approach, which starts with the teacher modeling how to interact with text in sophisticated ways. This leads to the reader independently employing strategies that will enhance comprehension.

In this classroom, strategy instruction encompassed whole group and small group formats, as well as independent application. Strategy instruction provided a structure that students could use to approach comprehension of the text. However, a finding of this study indicated that it also led to structured responses. Whole group comprehension instruction in which the teacher initiated strategy use through guided practice, and small group strategy sharing often led to the Initiation, Response, Feedback (IRF) (Cazden, 2001) sequence. Strategy

statements accounted for a considerable amount of total group talk during discussions. For example, many students often contributed to the discussion by reading a question they wrote about the text. If I was present in the group, I found myself immediately responding by prompting the group to answer the question, and then offering my feedback about the answers. This sequence sometimes hindered exploratory talk. The teacher and I were eventually able to break this habit by initiating tasks that required students to use collaboration to construct a response. Guiding tasks helped students move beyond strategy statements to work in collaboration to deepen thinking and generate exploratory talk. It was beneficial if tasks required students to incorporate knowledge that was not directly provided by the author. For example, during Discussion 5, students were tasked with figuring out the implied lesson or moral of the story. The lesson was not explicitly stated in the text, and, therefore, required some inferential thinking.

Each discussion resulted in various amounts of exploratory talk. For all students, it is likely that background knowledge and interest in the topic contributed to exploratory talk. For example, during Discussion 3, Daquan's group mainly generated other talk, perhaps due to low interest in the mammoth story or a lack of background knowledge about this topic. However, at times, the student participants contributed to the exploratory talk that was generated by the group as a whole. For example, during Discussion 3, Collin initiated the idea that the characters were traveling through time as part of their adventure. Although his participation rate was minimal during this discussion, this contribution was exploratory in nature. Additionally, Brenda, who seemed genuinely interested in the stories, as well as contributing to the conversation, used the ideas of others to help her explore an idea or strengthen her thinking. For example, during Discussion 6, Brenda explored the inference that two characters worked together to resolve an

issue. She became unsure of her response when another student disputed her. However, another student's response helped her to clarify her idea.

Based on my assessments, comprehension improved for all study participants. This could have been the result of the natural progression in reading over time occurring from all components of Tanya's literacy block as a whole. And, although the instructional reading level of Brenda, Collin, and Juan was still below grade level, individually, Brenda's and Collin's scores increased by at least one grade level, while Juan's scores remained about the same. On the other hand, Andres, Daquan, and Nakita all had scores of 70% or above for comprehension on the third grade passage. This growth indicates progress toward the pedagogical goal, although it would not be possible to credit this increase solely to the intervention.

Research Question 2

How did the reading self-identity of struggling readers change as a result of collaborative classroom interactions?

The qualitative data related to self-identity revealed that students who had scores below the class mean at the beginning of the study showed positive changes to their self-identity at the end of the study. Participants with initially high scores moved closer to the mean at the end of the study. For 50% of the participants, self-identity as determined by the instrument used in this study, was consistent with their participation rate during group discussions. For the other 50% of participants, however, there was no relationship between self-identity and participation rate.

Collin and Nakita, for example, produced low self-identity scores. Consequently, this affected how they participated in their group discussions. Both students needed prompting from other group members to contribute to the conversation. Likewise, their participation in whole

group discussions was seldom voluntary. Since both of these students viewed themselves as a poor reader, based on the initial survey, there may be a correlation between their self-perceived identity as a reader and the participation patterns observed in whole group and small groups. It is possible that they lacked the confidence or felt as if they lacked the necessary knowledge to effectively contribute to discussions. Similar to findings in previous research, it could be that Collin and Nakita used silence to avoid the exposure as poor reader within the class, thereby protecting their self-identity (Hall, 2007).

In a similar vein, Brenda's positive self-identity could have been the driving force behind her active participation during whole group lessons and small group discussions. Although Brenda was an English language learner and her initial reading level was well below grade level, she did not let factors affecting her abilities in reading and language interfere with participation. In fact, she even emerged as a leader within her group and often had a high participation rate.

Having discussion group rules proved to be beneficial in ensuring that all students participate, even those who would otherwise remain silent. Group members encouraged quieter students to contribute to the conversation to be sure their group was in compliance with the rules posted to the anchor chart. The rules posted on our anchor chart included:

1. Be respectful
2. No interruptions when someone else is talking
3. Voice level 2
4. Listen when others are talking
5. Stick to the text/topic
6. Everyone participates
7. One group leader - makes sure everyone gets a turn
8. Self-assess

This could account for the resulting spikes in self-identity survey scores for Collin, Nakita, and Andres. Since the integration of discussion groups into the classroom landscape

provided struggling readers an opportunity to learn from peers, it is possible that these opportunities resulted in struggling readers feeling more confident in their abilities, after experiencing how peers participated in discussions. In other words, the self-perceptions of some struggling readers possibly became more favorable after they observed their peers struggling with applying comprehension strategies. This finding is consistent with previous research (Hall, 2012). In addition, students seemed genuinely excited when it was time for small group discussions. Their enjoyment of this activity could also account for positive changes in self-identity.

Research Question 3

How was the teacher's perception of classroom environment impacted as a result of collaborative classroom interactions?

The classroom environment that takes shape is undoubtedly driven by the teacher's stance. This determines how teaching and learning is structured and viewed in the classroom. No significant changes to the classroom environment were perceived by the teacher over the course of this study, but she viewed the classroom environment to be continuously improving. This formative experiment resulted in the teacher perceiving some of the quieter students of the classroom as being more willing to participate.

The qualitative data strongly suggested that there were teacher factors which impacted the implementation of the intervention. The first teacher factor involved Tanya's perception of the students and how such perception translated to the establishment of the classroom environment. Based on the first interview, Tanya revealed her perception that students needed rewards to reinforce positive behavior; and, some students tended to be off task if a teacher was

not present. Thus, she heavily relied on a student behavior system that revolved around rewards and consequences. However, she felt this undeniably negatively affected the students' self-motivation. This perception produced a classroom environment built on the behaviorist principles that: rewards and consequences control student behavior; and, it is student behavior that ultimately determines environment. This stance directly translated to the type of instruction that occurred during whole group lessons and small group discussions. That is, comprehension instruction took on a traditional lesson format, as described by Cazden (2001). As such, instruction was highly structured and the teacher remained in control the entire time. As a result, small group discussions took some getting used to because of their less structured format. Searching for the structure that was familiar, students tended to share strategies rather than have an open forum for a topical discussion. As discussion groups evolved as part of the classroom environment, students became more adept at using collaboration to construct meaning. An in-depth discussion on the effects that resulted from practices that involved dichotomous perspectives is presented below.

The second teacher factor was her keen awareness of the students' abilities. Tanya had a strong sense of which students could benefit from participating in the study. She also made instructional decisions to try to better meet the needs of the students. Furthermore, her willingness to make adaptive changes to improve teaching and learning were well aligned with the guiding principles of formative experiment, as described by Reinking and Bradley (2008). These findings demonstrated the importance of the role of the teacher and how her stance impacted teaching and learning, as well as set the overall tone in the classroom.

Based on the interviews, no significant changes to the classroom environment were perceived by the teacher over the course of the study. However, more time could have produced more significant results.

Research Question 4

How did national standards and assessments impact classroom comprehension instruction?

Outside factors in the form of school requirements, district guidelines, and state expectations presented challenges to teaching and learning. At the school-level, class scheduling and teaching requirements enacted to ensure consistency presented implementation issues. At the district-level, the comprehension guidelines and the assessment schedule constrained comprehension instruction. At the state-level, national standards and state assessments hovered overhead, as being the impetus of the constraints set forth at the lower levels. Tanya, like all teachers, was compelled to adhere to the guidelines presented by these outside factors, with instruction being modified or planned accordingly.

At the district-level, instructional mandates were in place. I was made aware of district mandates through collaboration with Tanya. Following our collaboration, the intervention implementation plan needed to be modified to coincide with the district's mandates for comprehension instruction. During our collaborative discussions, which occurred in phase one, Tanya shared with me the comprehension pacing chart, which was a district requirement. This chart identified specific strategies, dates of implementation for each strategy, and the genre of text that were required for specific dates. The type of instruction I initially intended to provide in order to inspire collaborative small group discussions was changed to align with the district's

pacing chart. However, we were able to adapt the small group discussions to be compatible with the district's mandates. Since this pacing did not allow for close reading or making connections across texts and genres, small group discussions were based on strategy instruction. Although, these instructional mandates were limiting, they did not prevent effective discussions from occurring. At times, discussions consisted mainly of strategy sharing. Even though this was the case, students still had opportunities to challenge each other's statements with disputational talk, build on each other's ideas through cumulative talk, and explore inferential thinking with exploratory talk. Strategy sharing providing a good starting point for communicating the students' thoughts about text. Since strategy statements were not the only type of talk that resulted from the small group discussions, the results were positive.

Discussion

Tensions between Behaviorist and Constructivist Practices

The formative experiment methodological approach utilized in this study allowed valuable insights about the political context that surrounds the educational landscape to surface. This study supports the positive effects that constructivist practices can have on student learning. Qualitative data revealed that exploratory talk was initiated through small group discussions. Although time for implementation was a limiting factor, behaviorist practices that dominated the classroom, school, and district had an even greater impact on this intervention.

This research design provided an opportunity to incorporate constructivist principles that encouraged students to construct their own meaning about text, with the assistance of peers, into the classroom environment. However, the classroom culture did not directly align with this type of exploration. Teacher compliance with school, district, and state initiatives induced a

behavior-based culture which often led to passive learning. For example, a heavy emphasis on district assessments precipitated the “teacher as evaluator” role in this classroom. Controlling the class often took precedence over active learning and exploration. This finding is consistent with past research in this area (Alvermann et al., 1990; Barnes, 2008; Cazden, 2001). This heavy emphasis on testing forced the teacher to view her students in terms of their individual academic ability, extensively diminishing opportunities for learning through exploratory talk. That is, student talk was sometimes limited to the familiar question-answer sequence, in which students recite what they know (Dillon, 1984).

Many tensions between behaviorist and constructivist approaches to learning were visible during this research. Implementation was confined by these tensions. The need to cover texts and strategies over the course of the school year restricted the teacher’s openness to making a pedagogical shift. One major change in making such a shift is establishing a power dynamic that creates a culture in which the teacher is no longer the “gatekeeper of knowledge” thereby allowing students to explore their own and each other’s thinking (Johnston, 2012). Because compliance with mandates was at the forefront of instruction, a genuine shift could not occur. This research broadened Tanya’s epistemological base by offering opportunities for active learning. However, some teacher scaffolding, such as: more time, guidance, and practice, may be necessary in order for Tanya to gain confidence in moving from the behaviorist principles she is familiar with and which allow her to be compliant with mandates, to constructivist methods that can serve as a springboard for expanding thinking about text (Alvermann et al., 1990). It is evident that mandated practices have a powerful, but not always positive effect on teaching and learning.

In this study, it was interesting to note that, although the intervention immersed this classroom in constructivist practices, it ultimately did not influence teacher perceptions. For example, in my second interview with Tanya, she revealed a high level of comfort in having district guidelines for strategy instruction, even though it was difficult to keep up with the fast pacing. This indicated that she has taken a passive role in deciding what to teach and when to teach it. Decisions about what is best for students are, at times, being made by someone other than their teacher. This can lead to decontextualized instruction which may not be effective in helping students build comprehension.

It is important for policy makers, administrators and educators to consider the steps being taken to improve teaching and learning. Restricting teachers and taking decision making out of their hands has led to compliance-based teaching which could result in passive learning. This passive teaching and learning does not require higher order thinking or inspire problem-solving. Furthermore, mandated practices put in place in an effort to improve instruction may actually be hindering it. For example, there is no research base to support teaching one strategy at a time, in isolation, for any given length of time. This idea suggests that reading comprehension occurs in a vacuum, without any consideration of the reader, the text, and the sociocultural context involved in constructing meaning (Snow & Sweet, 2003). Mandated poor practices such as these may lead teachers to the assumption that covering strategies supersedes quality of instruction.

Although there was a misalignment between classroom culture and collaborative classroom interactions, comprehension improved and student enjoyed engaging with their peers in conversations about text. Perhaps this was the case because participation in discussion groups allowed all students opportunities to break free from the rote nature of recitation to further explore their thinking.

Adaptive Changes

As a formative experiment, the methodology of this research allowed for adaptive changes to take place throughout implementation, while a local instructional theory was formulated. In this section, the adaptive changes and their impact on the intervention's effectiveness are discussed.

Several adaptive changes took place throughout implementation. These changes were made based on ongoing data analysis and to accommodate teacher compliance with various outside factors. The first change involved revising the Meaningful Discussion Scale. While the initial intention was to have students complete this self-assessment following each discussion using Kelley and Clausen-Grace's (2013) model, it quickly became evident that it was too complex. Following the first discussion, the self-assessment was adapted to better align with the rules of our anchor chart and provide simpler benchmarks for each level of participation. I also wanted to include an opportunity for open-ended yet focused responses. This was done by adding a section at the bottom where students wrote one thing they learned from their discussion group and one thing they taught their discussion group. The revised self-assessment seemed to elicit thoughtful and honest responses.

Following the review and transcription of each audio-recording, several other adaptive changes were made. For example, I initially planned for talk to be open-ended or open forums (Alvermann et.al., 1990) in order to try to avoid running into the IRF sequence (Cazden, 2001). However, early on in phase two we found that this often led to "other" talk. On the other hand, when students were guided to share their strategies during their discussion group, talk became only or mostly strategy sharing, with little or no exploratory talk involved. We found that

encouraging students to start the discussion by sharing a strategy they used, but then moving on to other discussion tasks seemed to provide effective balance and led to more exploratory talk.

Subsequent to the review and transcription of the first few discussions, it was evident that both teacher and I were leading the discussions when participating in a group. During meeting times and in email communications we discussed the need to change how we were participating in groups, to take on more of a listener/observer role and only scaffold when critical to the conversation. This led to more student talk and less teacher talk.

When first planning this research, it was my goal to have students working independently with text. However, student artifacts and audio-recordings of whole group discussions revealed that because decoding was still an issue for many of the struggling readers, it was necessary for the teacher to help students work through challenging text through a read aloud. The whole group discussion at the beginning of each comprehension lesson served to set the foundation for independent practice. With more time in the instructional schedule or a longer implementation period, it would be beneficial to help individual students work through text one-on-one, partner-read the text, or chunk the text into smaller, more manageable sections.

By reviewing the student artifacts, it became clear that strategy use was, in many lessons, students simply copying the teacher's modeled instruction. For example, Tanya modeled the asking questions strategy and students copied down the questions she wrote on their papers. Though Tanya was heavily reliant on the gradual release of responsibility model (Pearson & Gallagher, 1983) for implementing strategy instruction, I was able to use the students' artifacts to encourage her to reduce the amount of modeled and guided instruction, to increase the amount of independent practice. For example, using the students' work from text five, "The Ant and the Grasshopper", I was able to gauge understanding based on the questions they wrote. Since

students were able to come up sufficient questions for this story, prior to beginning text six, “The Dove and the Ant; A Retelling of an Aesop Fable”, I asked Tanya to decrease the amount of time spend on modeling and guided practice, and increase the amount of time students had to think about text and write their own questions. For some, this not only proved to be beneficial to the quality of strategy use, but also transcended to the quality of the discussions. Discussion 6 resulted in more exploration and collaboration than past discussions.

Over time, teacher-researcher relationship also evolved to form a co-teaching dynamic in which we both felt comfortable inserting ourselves into the discussion to expand on one another’s instruction. Thus, the quality of our whole group discussions increased over time.

There were outside factors that forced adaptive changes as well. At the school-level, Tanya’s daily schedule changed several times during research phase one. This was the result of a shift in special periods, such as art and physical education, as well as a change in her lunch schedule. The school year began with a 35 minute period allotted for comprehension instruction. By the end of September, the comprehension instruction period was reduced to 25 minutes, with no comprehension instruction taking place on Fridays due to physical education.

Like all schools, Tanya’s consisted of an ever-changing environment which sometimes removed decision-making from the hands of the teacher. This type of environment, one which, at times, elicits top-down decision-making and includes directives which drive teacher compliance, could interfere with the type and quality of instruction that is needed to support the students who struggle.

Implications toward a Local Instructional Theory

A local instructional theory is comprised of statements about the learning process and how it was supported in this particular classroom context, resulting from the implementation of this intervention (Gravemeijer & Cobb, 2006). This section contains a discussion of implications resulting in local instructional theory.

In this study, making sense of the text through the use of strategies, as described by Dole, Duffy, Roehler and Pearson (1991) proved to be a foundational tool on which the construction of knowledge could be built. However, the limited social exchanges that occurred as a result of strategy instruction (Guthrie, 2004) were not alone sufficient to deepen thinking and construct understanding. For example, at the onset of each discussion, students got started by sharing a question that they wrote about the text, using a round-robin type of format. Next, they would share their answer to the question, as well as what strategy they used to come up with the answer. For many discussions, this was as deep as the conversation went, with no collaborative knowledge being constructed. However, when the additional tasks of collaboratively discussing the moral of the story and connections between texts were added in Discussions 5 and 6, other types of talk were generated. These results are similar to McGee's (1992) study of first graders' grand conversations. These younger students, like the third graders in this study, were able to benefit from the addition of an interpretive question during literature discussions.

This research solidifies Cazden's (1981) argument that, oftentimes, classroom interactions primarily involve the teacher and student. During many discussions early on in this intervention, I found myself involved in very limited social exchanges involving only questions and answers. This seemed to originate from a student sharing their strategy use and me following up with a question. At times, this seemed to hinder opportunities for exploratory talk, as was the case with Juan's group during Discussion 2. Students were discussing their thoughts

on how tigers acquired stripes as they got older. Instead of encouraging students to explore this idea further, I responded to a student interjecting with a word they found to be important, which led the group directly back to strategy sharing. As Maloch (2002) found in an earlier study, students need scaffolded support when moving away from the teacher-led discussions they are used to. However, in order to make a shift from recitation and the IRF sequence (Cazden, 2001), it is essential that the teacher understand the complexity of their role. That is, to facilitate conversations and provide necessary scaffolding, without hindering opportunities for the exploration of ideas.

In the case of struggling readers, discussion groups provided an excellent opportunity to use each student's zone of proximal development (Vygotsky, 1978) to assist them in negotiating meaning beyond the text. Including more capable peers in each mixed-ability group allowed for scaffolded support to occur without the teacher necessarily leading the way. Together, peer groups can socially construct knowledge. The construction of knowledge that transpires during each discussion group is highly dependent on the sociocultural context and the individuality each student brings to the group. For example, during Discussion 6, Brenda exhibited some difficulty in clearly articulating her ideas about the story to the rest of the group. As an English language learner, at times it seemed difficult for Brenda to interpret what was happening in the text. Because she genuinely wanted to participate and, oftentimes, lead the conversation, she contributed her ideas, but was unsure if they were correct. The social context of this group allowed her to put forth her thoughts, even if they were not completely clear. She used contributions made by other students in the group to clarify, support, or change her thinking about the text. This was similar to the findings in other research (Brock, 1997; Eeds & Wells, 1989). Ultimately, Brenda was able to negotiate meaning in this context with the help of peers,

and even took on a leadership role, which concurs with the findings of Hall (2012). These results are consistent with previous research that acknowledges the role of the knowledgeable other in facilitating student understanding (McMahon & Goatley, 2001).

This study was inspired by the earlier work of Barnes (1976, 2008) and Mercer (1995). Their work focused on utilizing the flexible nature of talk to explore thinking and develop ideas, and was mainly done with secondary students. This study explored the social modes of thinking that occurred among third grade struggling readers and their peers, when given opportunities to collaborate. Identifying which modes of thinking students are using by assigning a type to each turn in the discussion can be viewed as a window into the students' thinking, thus serving as a tool for monitoring progress. The type of talk generated can help the teacher gauge students' level of understanding. For example, a high amount of strategy sharing, but low number of exploratory talk could demonstrate literal understanding. Similarly, a high amount of exploratory talk could be indicative of inferential thinking.

For half of the study participants, the rate at which they participated was directly aligned with their self-identity. Thus, their active participation in reading was situated in how they viewed themselves as readers (Gee, 2000, 2001, 2002). Building on the earlier work of McCarthy and Moje (2002), self-identity positioned these students in a particular way within the group. This resulted in low rates of participation, or ineffective collaboration with other group members. Concurrent with findings in other studies (e.g. Hall, 2007, 2012), silence was possibly being used to avoid exposure as a weak reader.

For the other half of the study participants, for whom there were no direct consistencies among self-identity survey results and participation rate, students' primary Discourses (Gee,

2000), such as their home environment may have led to the establishment of a certain self-identity, while their secondary Discourses (Gee, 2000), such as the school environment, may have caused them to pursue a different approach to how they participated in group discussions. Both findings related to self-identity speak to the importance of understanding the struggling reader's perspective of their abilities.

Rosenblatt (1978) argued that reading is a transaction based on the reader's background knowledge and the text. While reading, a reader adopts a stance, depending on their purpose for reading. The stance they adopt determines whether their reading is efferent or aesthetic, or somewhere in between. Based on the study participants' artifacts collected during this study, it seemed that strategy instruction tended to guide struggling readers to extract information, resulting in an efferent stance. However, integration of discussion groups provided opportunities for students to extend their interpretations of text and negotiate meaning. Discussions provided extra time to construct meaning and connect aesthetically with text in ways they may not necessarily have been able to on their own. For many of the struggling readers in this study, decoding the text proved to be a challenge, which diminished opportunities to authentically transact independently. Having time to discuss provided additional opportunities in which transactions could occur and students could enjoy interacting with peers.

The emphasis placed on national standards and high-stakes testing result in pressures on districts, schools, teachers, and ultimately, students. Recitation and other structured formats of teaching and learning may result. Like many teachers, Tanya agreed that collaboration is an essential part of learning. Implementation, however, proved to be difficult. It is necessary for teachers to analyze practices and their effectiveness. It is important for teachers to consider their approaches to teaching, learning, and the establishment of a democratic classroom environment

that is conducive to active engagement, equality in learning, and group inquiry. Relinquishing some control is required when implementing discussion groups. This may force teachers out of their comfort zone. Assistance in this area may be necessary.

It is evident from this research that learning is highly individualized and comprised of many factors and variables. All students, including struggling readers, learn within the context of their own lives, making a one-size-fits-all curriculum ineffective. The implications of this study are useful for educators because they focus on the possibilities that discussion groups can offer, regardless of the various levels of impending constraints bestowed upon them. It is my hope that educators will discover parallels to their own educational setting and this research will inspire them to explore how collaborative classroom interactions could help their students construct meaning from text.

Recommendations for Teachers

Although today's educational landscape is highly impacted by the outside factors that have been discussed in this chapter, it is important for teachers to consider how to navigate the policy induced climates that may be restraining them, in order to optimize learning. The following recommendations can help teachers in establishing active teaching and learning environments:

- Establish a positive classroom environment in which all students participate and receive scaffolded support.
- Include opportunities to expand classroom discussions beyond recitation, to include meaningful discussion as a whole group and in small groups. Establish a culture in which open and respectful dialogue occurs and is valued.

- Reflect on current practices to determine what type of collaboration is taking place and what modes of teaching and learning are used and effective. Be open to making adaptive changes.
- Become knowledgeable about the self-identity of students and establish an awareness of the identity that the classroom environment may foster.
- Carefully choose texts from various genres and topics that are relevant and appropriately aligned with comprehension instruction.
- Provide students with time to independently work through text while applying strategies independently. Create opportunities to discuss learning.
- Provide students with opportunities to draw from their background knowledge.
- Establish a network of support among teachers.

Recommendations for Future Research

This study was limited to several weeks of small, peer-led discussion groups. Future research in which discussion can be used more often, over an extended period of time may further inform the field. In addition, although this formative experiment included only a small number of struggling readers from one third grade classroom, it would be beneficial to include a wider range of participants across classrooms, and, perhaps, spanning several grades.

Furthermore, since discussions were on different topics, participation was highly dependent on topical interest and background knowledge. Thus, participation rates varied across discussions. It would be beneficial to further investigate the relationship between background knowledge and exploratory talk. Studying the progression of exploratory talk over time, perhaps utilizing a case study approach, could prove to enhance this area of research.

Finally, it was the original intent of this study to combine a variety of instructional and discussion approaches. This approach would include not only strategy instruction, but also instruction and discussion of close reading, such as: text features, big ideas, author's purpose, and/or text structures, as well as connections discussion, which would include discussion focused on making connections across many texts on the same topic or theme. Such an approach would incorporate many more comprehension focus strategies, such as: main idea, author's purpose, text organization (problem/solution, compare/contrast, cause/effect, chronological sequence), and synthesizing. Future research utilizing the original approach that was intended at the conception of this formative experiment could further contribute to helping educators meet the needs of their students who struggle to make meaning.

Conclusion

This study took place in a third grade classroom during the teacher's daily scheduled comprehension instruction time. The intervention included the incorporation of discussion groups as a means of constructing knowledge through collaboration. The class was divided into six mixed-ability groups, each including one student who was considered to be struggling. These struggling readers were the focus of this study.

The purpose of this study was to explore the types of talk that were generated as a result of collaboration among peers. The classroom environment, as perceived by the teacher, as well as the effects of national standards and assessments on comprehension instruction were also examined. Finally, this study investigated the self-identity of the struggling readers in this class and how their identity related to their participation.

A pragmatic approach, which seeks to provide answers to real problems associated with struggling readers (Johnson & Onwuegbuzie, 2004) guided this inquiry. Qualitative research methods were used to collect and analyze data. A formative experiment methodological approach, which included adaptive changes throughout implementation, allowed for in-depth exploration and rich data collection in response to the four research questions.

This study's theoretical roots were derived from the work of Barnes (1976, 1992, 2008), Gee (2000), Rosenblatt (1978, 2004), and Vygotsky (1962, 1978), as well as other sociocultural theorists who expanded on their theories of teaching and learning. From a constructivist stance, meaning can be socially constructed with struggling readers through collaborative classroom interactions.

The data gleaned from this study provided insight about how talk can help students negotiate meaning from text. Incorporating discussion groups into the classroom landscape provided opportunities for struggling readers to build on the ideas of others through cumulative talk, and, go a step beyond the text with exploratory talk. As teachers, we often get caught in the question and answer sequence of IRF (Cazden, 2001), and I was no exception; but it is essential that we realize this and work to move beyond recitation. For students who struggle, talk can be the difference between surface-level understanding and deep thinking.

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APPENDIX A

Reading Identity & Motivation Survey

Name _____

Date _____

1. I am _____.
 - A. female
 - B. male

2. My friends think I am _____.
 - A. a very good reader
 - B. a good reader
 - C. an okay reader
 - D. a poor reader

3. Reading a book is something I like to do.
 - A. Never
 - B. Not very often
 - C. Sometimes
 - D. Often

4. I read _____.
 - A. not as well as my friends
 - B. about the same as my friends
 - C. a little better than my friends
 - D. a lot better than my friends

5. My best friends think reading is _____.
 - A. really fun
 - B. fun
 - C. okay to do
 - D. no fun at all

6. When I come to a word I don't know, I can _____.
 - A. always figure it out
 - B. sometimes figure it out
 - C. almost never figure it out
 - D. never figure it out

7. I tell my friends about good books I read.
 - A. Never
 - B. Almost never
 - C. Sometimes
 - D. A lot

8. When I am reading by myself, I understand _____.
- A. almost everything I read
 - B. some of what I read
 - C. almost none of what I read
 - D. none of what I read
9. People who read a lot are _____.
- A. very interesting
 - B. interesting
 - C. not very interesting
 - D. boring
10. I am _____.
- A. a poor reader
 - B. an okay reader
 - C. a good reader
 - D. a very good reader
11. I think libraries are _____.
- A. a great place to spend time
 - B. an interesting place to spend time
 - C. an okay place to spend time
 - D. a boring place to spend time
12. I worry about what other kids think about my reading.
- A. every day
 - B. almost every day
 - C. once in a while
 - D. never
13. Knowing how to read well is _____.
- A. not very important
 - B. sort of important
 - C. important
 - D. very important
14. When my teacher asks me a question about what I have read, I _____.
- A. can never think of an answer
 - B. have trouble thinking of an answer
 - C. sometimes think of an answer
 - D. always think of an answer
15. I think reading is _____.
- A. a boring way to spend time
 - B. an okay way to spend time
 - C. an interesting way to spend time
 - D. a great way to spend time

16. Reading is _____.
- A. very easy for me
 - B. kind of easy for me
 - C. kind of hard for me
 - D. very hard for me
17. When I grow up I will spend _____.
- A. none of my time reading
 - B. very little of my time reading
 - C. some of my time reading
 - D. a lot of my time reading
18. When I am in a group talking about stories, I _____.
- A. almost never talk about my ideas
 - B. sometimes I talk about my ideas
 - C. almost always talk about my ideas
 - D. always talk about my ideas
29. I would like for my teacher to read books out loud to the class _____.
- A. every day
 - B. almost every day
 - C. once in a while
 - D. never
20. When I read out loud I am a _____.
- A. poor reader
 - B. okay reader
 - C. good reader
 - D. very good reader
21. When someone gives me a book for a present, I feel _____.
- A. very happy
 - B. sort of happy
 - C. sort of unhappy
 - D. unhappy

APPENDIX B

Meaningful Discussion Scale

Name: _____ Date: _____

- I was **prepared** – I completed the reading and made some discussion notes to share with my group.
- I **participated** by sharing my ideas.
- I **supported my ideas** with information from the text and my background knowledge.
- I was **respectful** by **not interrupting** and **listening** to the ideas of others.
- I talked only about the **text or topic**.
- I **clarified or explained my ideas** and asked others to clarify when necessary.

Levels: (Circle one)**4** – I did **ALL** of these things.**3** – I did **MOST** of these things.**2** – I did **SOME** of these things.**1** – I did **ONE** or **NONE** of these things.One thing I **learned** from my group today:

One thing I **taught** my group today:

APPENDIX C

Informed Consent - Teacher

Dear Prospective Participant:

You are being asked to participate in a research study conducted by Mary Hoch, doctoral student at National Louis University, Wheeling, Illinois, occurring from September, 2014 through November, 2014. The study is entitled *Talking to Learn: A Formative Experiment on Constructing Meaning through Collaborative Classroom Interactions*. The primary purpose of this study is to investigate how understanding can be constructed by struggling readers in an elementary classroom through collaborative classroom interactions. This study also seeks to investigate the effects of collaborative classroom interactions on the self-identity of struggling readers, as well as the teacher's perception of the classroom environment.

Your participation will include the following:

- Two 30 minute interviews before and after the study. Upon request, you will receive a copy of your transcribed interview at which time you may clarify information.
- Weekly conversations during which you will be asked to share your overall impression of the intervention, the classroom environment, and the instruction. I will take conversational notes during these informal discussions. These ongoing discussions will be used to decide upon adaptive changes.
- Completion of scales and exit notes while observing groups to determine how effective each group discussion was and what needs improvement.
- You will also be asked to record informal reflective notes in writing before, during, and after observations.
- Additionally, discussion group conversations will be recorded using an audio recording device (pending parent consent).

Your participation is voluntary and you may discontinue your participation at any time without penalty. Your identity will be kept confidential by the researcher and will not be attached to the data. Only the researcher will have access to all transcripts, taped recordings, and field notes from the interview(s). For confidentiality purposes, the transcripts, taped recordings, field notes, and all files pertaining to your participation in this study will be stored in a locked cabinet for ten years and destroyed afterwards if no longer needed. All computer files will be kept on a secure server. I will also maintain a copy of the data on a password-protected computer. Your actual name will be known only to the principal researcher (me). A pseudonym will be assigned to your name to keep all the information fully confidential.

Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life. The likely benefit of being in this research study may lead to a better

understanding of how discussion can impact comprehension of struggling readers, your students' self-identity, and perception of your classroom environment.

While the results of this study may be published or otherwise reported to scientific bodies, your identity will in no way be revealed. Upon request, I will provide you with summary results of this study.

In the event you have questions or require additional information you may contact the researcher, Mary Hoch at 630-874-4533, or at mary.hoch@nl.edu.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact Dr. Sophie Degener, National-Louis University, 5202 Old Orchard Road, #437, Skokie, Illinois 60076; 224-233-2018; sophie.degener@nl.edu, or the chair of NLU's Institutional Research Review Board: Dr. Judah Viola, National Louis University, 122 South Michigan Avenue, Chicago, Illinois 60603; 312-261-3527, judah.viola@nl.edu.

You will be tendered a copy of your signed consent form. Please acknowledge with your signature below your consent to participate in this study.

Participant Name (Print)

Participant Signature

Date

Researcher (Print)

Researcher Signature

Date

Informed Consent – Principal

Dear Principal,

Your teacher is being asked to participate in a research study conducted by Mary Hoch, doctoral student at National Louis University, Wheeling, Illinois, occurring from September, 2014 through November, 2014. The study is entitled *Talking to Learn: A Formative Experiment on Constructing Meaning through Collaborative Classroom Interactions*. The primary purpose of this study is to investigate how understanding can be constructed by struggling readers in an elementary classroom through collaborative classroom interactions. This study also seeks to investigate the effects of collaborative classroom interactions on the self-identity of struggling readers, as well as the teacher's perception of the classroom environment.

During this study, the participating teacher will be asked to participate in two 30 minute interviews before and after the study; have weekly conversations with me in which she will be asked to share her overall impression of the intervention, the classroom environment, and the instruction; complete scales and exit notes while observing groups to determine how effective each group discussion was and what needs improvement; and, make informal reflective notes in writing before, during, and after observations. In addition, pending parental consent, students will be asked to complete a reading identity and motivation survey, participate in discussion groups, and complete scales and exit notes following discussions. Discussion group conversations will be recorded using an audio recording device and student work samples will be collected (pending parent consent).

Your school's participation is voluntary and you may discontinue participation at any time without penalty. Your school's identity will be kept confidential by the researcher and will not be attached to the data. Only the researcher will have access to all transcripts, taped recordings, and field notes from the interview(s). For confidentiality purposes, the transcripts, taped recordings, field notes, and all files pertaining to participation in this study will be stored in a locked cabinet for ten years and destroyed afterwards if no longer needed. All computer files will be kept on a secure server. I will also maintain a copy of the data on a password-protected computer. All actual names will be known only to the principal researcher (me). A pseudonym will be assigned to all names to keep all the information fully confidential.

Your school's participation in this study does not involve any physical or emotional risk to the participating teacher or students beyond that of everyday life. The likely benefit of being in this research study may lead to a better understanding of how discussion can impact comprehension of struggling readers, your students' self-identity, and perception of this classroom environment.

While the results of this study may be published or otherwise reported to scientific bodies, your school's identity will in no way be revealed. Upon request, I will provide you with summary results of this study.

In the event you have questions or require additional information you may contact the researcher, Mary Hoch at 630-874-4533, or at mary.hoch@nl.edu.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact Dr. Sophie Degener, National-Louis University, 5202 Old Orchard Road, #437, Skokie, Illinois 60076; 224-233-2018; sophie.degener@nl.edu, or the chair of NLU's Institutional Research Review Board: Dr. Judah Viola, National Louis University, 122 South Michigan Avenue, Chicago, Illinois 60603; 312-261-3527, judah.viola@nl.edu.

You will be tendered a copy of your signed consent form. Please acknowledge with your signature below your consent to participate in this study.

Participant Name (Print)

Participant Signature

Date

Researcher (Print)

Researcher Signature

Date

Informed Consent by Parent/Guardian and Student Assent

Dear Parent or Guardian,

This consent form outlines the purposes of the study “*Talking to Learn: A Formative Experiment on Constructing Meaning through Collaborative Classroom Interactions*” and provides a description of your child’s involvement and rights as a participant. The second copy of this consent form is for you to keep.

I understand that a research project will be conducted by Mary Hoch, student at National Louis University, located in Wheeling, Illinois. The study will take place in my child’s classroom with _____ (name of child) from September, 2014 through November, 2014.

I understand that this study is entitled “Talking to Learn: A Formative Experiment on Constructing Meaning through Collaborative Classroom Interactions” The purpose of this study is to examine how discussion groups can help students construct meaning from text and deepen understanding. These students will participate in an eight week unit involving the reading and discussion of fiction and nonfiction texts. I understand that the following may happen during this study:

1. My child’s written assignments may be collected and analyzed by Mary Hoch.
2. My child’s written assignments may be analyzed by peers of Mary Hoch within the Reading and Language Doctoral Program at National Louis University. My child’s name will be removed from any written assignments prior to analysis by peers.
3. Mary Hoch will be audio-taping literature discussions that may include my child. These audio-tapes may be analyzed by Mary Hoch and peers of Mary Hoch within the Reading and Language Doctoral Program at National Louis University. My child’s identity will in no way be revealed to others.
4. The project will not take any extra time on my child’s part. The lessons given as part of this study are already a part of my child’s instruction.

I understand that my child’s participation is voluntary and can be discontinued at any time during the period of the study without penalty.

I understand that only Mary Hoch will have access to a secured file cabinet where all field notes and audio-tapes from classroom lessons in which my child participates, and copies of his/her work will be kept.

I understand that the results of this study may be published or otherwise reported to professional groups of educators, but my child’s identity will in no way be revealed. Results of the study will be provided to me, upon my request.

If I have any concerns or questions before, or during, participation that I feel have not been addressed by the researcher, I may contact the researcher, Mary Hoch at 630-874-4533, or at mary.hoch@nl.edu; or the chair of NLU's Institutional Research Review Board: Dr. Judah Viola, National Louis University, 122 South Michigan Avenue, Chicago, Illinois 60603; 312-261-3527, judah.viola@nl.edu.

I grant permission for my child's work to be used as part of this study.

Student's Signature:

_____ Date: _____

Parent's Signature:

_____ Date: _____

Researcher's Signature:

_____ Date: _____

Informed Consent Letter for Non-Participating Students

Dear Parent/Guardian:

As a doctoral candidate in the Reading & Language Program at National Louis University, I am working in your child's classroom on a research study. The primary purpose of the study is to examine how discussion groups can help students make meaning from text and deepen understanding.

As part of my study, I will be audio-taping classroom discussions. One purpose for these tapes is to capture the conversations taking place in the classroom about texts. Further, another purpose is to help the classroom teacher and me make instructional decisions about reading comprehension. In the course of taping, your child's first name or voice may be present.

I will be the one person who has access to these recorded conversations. No last names of participating children will be used at any time. All personal or educational information regarding any child will remain confidential. I will be happy to share the study results with you, at your request.

Please feel free to contact your child's teacher if you have any questions or concerns. I appreciate your cooperation and look forward to my work in your child's classroom.

Sincerely,

Mary Hoch
Doctoral Candidate
National Louis University

APPENDIX D

Types of Talk Data Analysis Charts

D=Disputational Talk

C=Cumulative Talk

E=Exploratory Talk

O=Other Talk

DISCUSSION 1

Group 3					
Participant (P) = Andres					
Researcher (R); Teacher (T)					
Date: 10-3-14			Small Group Discussion Number: 1		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	3	12%	D-33%
	2	E			C-0%
	3	D			E-33%
					S-33%
					O-0%
2	1	E	4	17%	D-25%
	2	E			C-0%
	3	D			E-75%
	4	E			S-0%
					O-0%
3	1	E	5	21%	D-20%
	2	E			C-20%
	3	D			E-60%
	4	E			S-0%
	5	C			O-0%
P	1	D	2	8%	D-50%
	2	C			C-50%
					E-0%
					S-0%
					O-0%
R			10	42%	
Total Type Rate					D-29%
					C-14%
					E-50%
					S-7%
					O-0%
Total Group Turns			24		
Total Time in Group			5:00		

DISCUSSION 2

Group 6					
Participant (P) = Juan					
Researcher (R); Teacher (T)					
Date: 10-10-14			Small Group Discussion Number: 2		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	10	13%	D-20% C-20% E-10% S-40% O-10%
	2	S			
	3	S			
	4	S			
	5	D			
	6	O			
	7	C			
	8	E			
	9	D			
	10	C			
2	1	D	16	21%	D-50% C-13% E-18% S-13% O-6%
	2	S			
	3	D			
	4	D			
	5	D			
	6	E			
	7	S			
	8	E			
	9	D			
	10	C			
	11	D			
	12	E			
	13	O			
	14	D			
	15	C			
	16	D			
3	1	D	6	8%	D-66% C-17% E-17% S-0% O-0%
	2	D			
	3	D			
	4	D			
	5	C			
	6	E			
4	1	D	3	4%	D-67% C-33% E-0% S-0% O-0%
	2	D			
	3	C			
5	1	E	9	12%	D-22% C-22% E-22%
	2	E			
	3	D			

	4 5 6 7 8 9	C S D S O C			S-22% O-11%
P	1 2 3 4 5	S S D C C	5	6%	D-20% C-40% E-0% S-40% O-0%
R			28	36%	
Total Type Rate					D-39% C-20% E-14% S-20% O-6%
Total Group Turns			77		
Total Time in Group			19:09		

DISCUSSION 3

Group 2					
Participant (P) = Collin					
Researcher (R); Teacher (T)					
Date: 10-17-14			Small Group Discussion Number: 3		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	5	13%	D-20%
	2	C			C-40%
	3	C			E-20%
	4	E			S-20%
	5	D			O-0%
2	1	C	6	16%	D-17%
	2	C			C-83%
	3	C			E-0%
	4	C			S-0%
	5	D			O-0%
	6	C			
3	1	C	5	13%	D-0%
	2	C			C-100%
	3	C			E-0%
	4	C			S-0%
	5	C			O-0%
4	1	C	5	13%	D-0%
	2	C			C-60%
	3	E			E-40%

	4 5	E C			S-0% O-0%
P	1 2 3 4	E E C C	4	11%	D-0% C-50% E-50% S-0% O-0%
R			13	34%	
Total Type Rate					D-8% C-68% E-20% S-4% O-0%
Total Group Turns			38		
Total Time in Group			6:00		

Group 4					
Participant (P) = Daquan					
Researcher (R); Teacher (T)					
Date: 10-17-14			Small Group Discussion Number: 3		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	O	7	18%	D-0%
	2	O			C-0%
	3	O			E-0%
	4	O			S-0%
	5	O			O-100%
	6	O			
	7	O			
2	1	S	7	18%	D-0%
	2	S			C-0%
	3	O			E-0%
	4	O			S-29%
	5	O			O-71%
	6	O			
	7	O			
3	1	O	8	20%	D-0%
	2	O			C-0%
	3	O			E-0%
	4	O			S-13%
	5	S			O-87%
	6	O			
	7	O			
	8	O			
4	1	O	7	18%	D-0%
	2	O			C-0%

	3 4 5 6 7	O O O O O			E-0% S-0% O-100%
P	1 2 3 4 5 6 7 8 9 10	S O O O O O S O O O	10	26%	D-0% C-% E-0% S-20% O-80%
Total Type Rate					D-0% C-0% E-0% S-13% O-87%
Total Group Turns			39		
Total Time in Group			6:00		

DISCUSSION 4

Group 5					
Participant (P) = Nakita					
Researcher (R); Teacher (T)					
Date: 10-29-14			Small Group Discussion Number: 4		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	9	23%	D-11%
	2	O			C-11%
	3	D			E-0%
	4	S			S-44%
	5	S			O-33%
	6	S			
	7	O			
	8	C			
	9	O			
2	1	S	10	26%	D-10%
	2	E			C-10%
	3	C			E-20%
	4	O			S-30%
	5	S			O-30%
	6	O			
	7	S			

	8 9 10	E O D			
3	1 2 3 4 5 6 7 8 9 10	S S C C O S E S D O	10	26%	D-10% C-20% E-10% S-40% O-20%
4	1	S	1	2%	D-0% C-0% E-0% S-100% O-0%
5	0		0	0%	D-0% C-0% E-0% S-0% O-0%
P	1 2	S C	2	5%	D-0% C-50% E-0% S-50% O-0%
R			7	18%	
Total Type Rate					D-9% C-16% E-9% S-41% O-25%
Total Group Turns			39		
Total Time in Group			10:42		

Group 1					
Participant (P) = Brenda					
Researcher (R); Teacher (T)					
Date: 10-29-14			Small Group Discussion Number: 4		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	5	13%	D-0%
	2	E			C-0%
	3	S			E-20%

	4 5	S O			S-60% O-20%
2	1 2 3 4 5 6 7 8 9	S E S C C E E E E	9	24%	D-0% C-22% E-56% S-22% O-0%
3	1 2 3 4	S O S D	4	10%	D-25% C-0% E-0% S-50% O-25%
P	1 2 3 4 5 6	S S E S C C	6	16%	D-0% C-33% E-17% S-50% O-0%
R			14	37%	
Total Type Rate					D-4% C-17% E-29% S-42% O-8%
Total Group Turns			38		
Total Time in Group			11:53		

DISCUSSION 5

Group 2					
Participant (P) = Collin					
Researcher (R); Teacher (T)					
Date: 11-6-14			Small Group Discussion Number: 5		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate

1	1 2 3 4 5 6 7 8 9 10	S D E S E C E C O E	10	17%	D-10% C-20% E-40% S-20% O-10%
2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	S E O D O E E C E E E E E E	15	26%	D-7% C-7% E-66% S-7% O-13%
3	1 2 3 4 5 6	S C E C E C	6	10%	D-0% C-50% E-33% S-17% O-0%
4	1 2 3 4 5 6 7 8 9 10	S D D S C C E C E O	10	17%	D-20% C-30% E-20% S-20% O-10%
P	1 2 3 4 5 6	S O C E C S	6	10%	D-0% C-33% E-17% S-33% O-17%

R			11	19%	
Total Type Rate					D-9% C-23% E-40% S-17% O-11%
Total Group Turns			58		
Total Time in Group			18:43		

Group 5					
Participant (P) = Nakita					
Researcher (R); Teacher (T)					
Date: 11-6-14			Small Group Discussion Number: 5		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1	S	11	18%	D-9% C-23% E-40% S-17% O-11%
	2	D			
	3	O			
	4	E			
	5	S			
	6	C			
	7	C			
	8	O			
	9	O			
	10	E			
	11	C			
2	1	D	8	13%	D-13% C-37% E-13% S-24% O-13%
	2	S			
	3	S			
	4	E			
	5	C			
	6	C			
	7	O			
	8	C			
3	1	C	12	20%	D-0% C-33% E-42% S-8% O-17%
	2	S			
	3	E			
	4	E			
	5	E			
	6	C			
	7	E			
	8	C			
	9	E			
	10	O			
	11	O			
	12	C			
4	1	S	7	12%	D-0%

	2 3 4 5 6 7	E C C O C E			C-43% E-29% S-14% O-14%
5	1 2 3 4 5	S C C O C	5	8%	D-0% C-60% E-0% S-20% O-20%
P	1 2 3 4 5 6 7 8	D O E C E C O C	8	13%	D-13% C-37% E-25% S-0% O-25%
R			9	15%	
Total Type Rate					D-5% C-37% E-24% S-14% O-20%
Total Group Turns			60		
Total Time in Group			18:00		

DISCUSSION 6

Group 1					
Participant (P) = Brenda					
Researcher (R); Teacher (T)					
Date: 11-13-14			Small Group Discussion Number: 6		
Student	Turn Number	Type of Talk	Total Turns	Participation Rate	Type Rate
1	1 2 3 4 5 6 7 8 9 10 11	S O D O O O S O O C C	21	25%	D-24% C-14% E-0% S-10% O-52%

	12 13 14 15 16 17 18 19 20 21	C O O O O D D D D O			
2	1 2 3 4 5 6 7 8 9 10 11	S D O S O O O O E E O	11	13%	D-9% C-0% E-18% S-18% O-55%
3	1 2 3 4 5 6	S O O O O O	6	7%	D-0% C-0% E-0% S-17% O-83%
4	1 2 3 4 5 6 7 8 9	S O E O O O D D O	9	11%	D-22% C-0% E-11% S-11% O-56%
P	1 2 3 4 5 6 7 8 9 10 11 12	S S S O C C C C C C O O	21	25%	D-10% C-33% E-10% S-14% O-33%

	13	E			
	14	O			
	15	O			
	16	O			
	17	C			
	18	D			
	19	E			
	20	D			
	21	O			
R			5	6%	
T			10	12%	
Total Type Rate					D-15% C-15% E-7% S-13% O-50%
Total Group Turns			83		
Total Time in Group			12:52		

APPENDIX E

Discussion Group Transcripts

R = Researcher

T = Teacher

S1 = Student/Group Member 1

S2 = Student/Group Member 2

S3 = Student/Group Member 3

S4 = Student/Group Member 4

S5 = Student/Group Member 5

DISCUSSION 1

10/3/14 - Andres

S1: Okay, well I'll read mine. They keep them in the greenhouse so when the winter comes they will survive.

R: What do you think? Do you think that's the big idea? How would that help them survive?

S1: Because when winter comes it gets really, really cold and plants die.

S2: The greenhouse is built to keep the plants warm.

R: Yeah, so it's built to keep the plants warm.

S2: And safe.

S3: And, it's like, I think they made it because then, so if there is winter coming, they keep a lot of heat in there so they won't die.

R: Yeah, so think about where we live. We live outside of Chicago, right? Can plants grow outside here in Chicago?

S2: Nope.

S1: Yeah, in greenhouses.

R: In greenhouses – that's what the greenhouses are for, right Andres?

Andres: Yes.

S3: When I go bike riding by the train tracks, we go to this trail and you can see this generator thing that helps the planet.

R: Oh my gosh, did you hear what he just said? There's a generator that helps the planet. The planet or the plants?

S3: The planet.

R: How?

Andres: For electric?

S3: The windows entrap heat and ... so it helps the world.

S2: Plants are like us, they need to keep warm so they don't get freezed. Like when it's winter we need a lot of jackets.

R: What happens if they freeze?

S3: Frost covers them.

R: So you said we need to wear a jacket in the winter, so are you comparing a greenhouse to our jackets? What a smart idea – that is so smart!

DISCUSSION 2

10/10/14 - Juan

S1: (Reading from text) Tiger wished he could be more like a spotted leopard. Leopard could climb trees and hide in them. Leopard survived. And then I really did know what "blended" means.

S2: I know what "blended" means. Blended is another word, a synonym for camoflauge.

R: Wow. That was really good.

R: Juan, are you listening? Do you need her to clarify anything?

S2: Is there any other bubbled words that you have?

S1: Yes. "Responded".

S2: "Responded" is just really talking, like not is a bad way.

R: You know what? You have something written there, so what did you write down that means?

S1: Like somebody "answered".

R: Answered. So, did those words help you understand the story at all?

S1: (Nods head)

R: So, who's next?

R: You should be ready.

Juan: I bubbled "cocoon".

S2: "Cocoon" is kind of like an eggshell, but a butterfly...it goes in there to turn into a butterfly.

R: Yes. Have you heard of a cocoon?

S3: I know what it is.

R: Juan, what does that have to do with the story do you think? Can you read us that sentence?

Juan: "I didn't like being stuck in my cocoon, said Butterfly." He didn't like to be cooped up (also from the story).

R: So, does that help you understand anything in the story?

S3: Not really.

S2: I don't think so.

R: So are you starting to see what's important here.

S1: Yes, the terms.

S2: It's kind of about the story. It's kind of in the story. The butterfly is trying to help tiger. I could see she didn't like being cooped up in a cocoon. She wanted to be a butterfly already, just like tiger wants his stripes.

S1: Kendra you can go now. I mean Justin.

S2: I have a question: I wondered did he earn his stripes? Or, did he grow up at the time and get them?

R: What do you guys think:

S4: I think he grew up with them.

S1: Well he was a tiger, so I think he grew up with them.

R: Go ahead and jump in.

S5: How did tiger get stripes that fast on his fur?

R: Did you guys hear her? Say is again so they can hear you.

S5: How did tiger get stripes that fast on his fur?

S1: How do tigers get stripes?

S3: I think probably he could have.

S2: I think I read a book or something, but you know when you are a baby you don't grow up with everything. He must have grew up at the time and his stripes must have slowly come up when he was seeing leopard.

R: What do you guys thing? Do you agree?

All: Yes

R: You think he got them as he got older?

All: Yes

R: So he didn't have them when he was little?

S3: I think he got one stripe a day or a year.

R: What do you think about that? One stripe a day or a year, he's saying?

S2: I think it's a day.

R: A year would be too long, wouldn't it?

R: Juan, what were you going to say?

Juan: I want to know how he got them.

R: Really good questions.

S2: Here's how he would get the stripes. I mean, who knows why he has the stripes, but that's how tigers are.

S5: As I was reading the story, I got to "rose" and I didn't know what it means, so I bubbled it.

R: Did you figure out what it means thought?

S5: No.

R: Well let's read the sentence and figure it out, because it's not only important to bubble words, but you have to figure them out.

S2: Read me the sentence!

S5: "Just then a beautiful, striped butterfly rose out of the tall grass.

R: Rose out of the tall grass.

S2: It just came up.

S5: Oh.

R: You already asked a question. Do you want to point out one of your words?

R: She's saying "dazzled".

S5: For "dazzled" it says "amazing".

R: Yes. That's actually one of the words in the text box, the vocab box. So did this help you understand "dazzled"? Is "dazzled" important to the story?

S2: It could be because, I thought I had read it.

R: What does this sentence say (pointing)? “The black and orange pattern dazzled him”. What are they talking about?

S2: Like is just came.

R: Like he was amazed by that striped pattern.

DISCUSSION 3

10/17/14 - Collin

S1: I didn't know what ice age was.

R: Did you figure it out? Remember we said it's also important to figure out what it is from reading.

Collin: All I want to know is did they go back in time?

R: Wait, what did you say?

Collin: They went back in time.

R: They went back in time! And, what else happened?

S2: They got to see a mammoth.

R: Did they stay there, back in time?

S2: No. The bear tried to eat them.

R: So then what did they do?

S2: They went back.

S3: Ray went back in time and travelled to the ice age.

R: And, what happened?

S3: They found a mammoth.

R: Do you think that will help him with his school project?

All: Yeah.

S3: They can see what they eat, and what they do there...they just travelled back and...

R: Good. I think you got the gist very well.

S4: Liz and Ray didn't want to tell their mom.

R: So why didn't they want to tell their mom?

S2: I know...that was mine.

R: Okay, let's let her help you because she has that written down – I don't want to spoil it for her.

S5: Liz and Ray did not want to tell their parents because no one would believe them.

R: Go ahead, add on to what she said.

S4: They wouldn't believe them because no one would see mammoths anymore.

R: Why wouldn't anyone see mammoths anymore? Are they still around today?

All: No.

S1: The mammoths are extinct.

R: They are extinct! Oh my gosh did you hear her? What does that word mean?

S1: They are no longer around.

DISCUSSION 4

10/29/14 - Nakita

S1: What will happen if the spider has venom and poison? And my other questions was why are there....?

S2: My questions was why is there a special way of eating for the tarantula? My other question is how do tarantulas protect themselves?

S3: My question is why are tarantulas shy? [reads from text] "They usually run away if they are attached or threatened."

S3: They run away fast if they are getting attacked. That's why they are shy. My second question is why do it lift its legs in the air? To scare them away.

S4: Why do they raise their front legs? I know the answer.

S1: You need to go, you haven't went yet [directed at Nakita].

Nakita: Why do tarantulas move slowly?

R: That's a really good question. What do you guys think – can you help her answer that? What does the text say?

S1: It didn't say nothing about them moving slow.

R: But what can you infer, even if it's not in the text? Think about it.

S3: That they have legs, so they try to stand up like this [demonstrating from text] so they can run. They are shy...it says right here "they are shy".

S1: My question was why are they scared of people?

R: Why are they scared of people?

R: So, Dalton has said, in answer to Nakita's question he said that maybe they move slowly because they are shy. Do you think that makes sense?

S2: I think it's because they are little and they can't really run that fast.

S3: It says right here that if they can't run away they bite.

Various students read aloud from text.

R: So wait, what was Pedro's question?

S1: He said why do they raise their front legs?

Nakita: [reads from text] "A tarantula can make itself look even more frightening by raising its front legs.

R: So it raises its front legs to make it what?

S2: Scarier.

R: Yes! Scarier. Good. Keep going you guys are on a role today.

S2: Now can I read my answer?

S3: Yes, go ahead.

S2: "The special name for tarantula is.... It injects venom or poison"

S1: This is my answer: "The poison makes the animal unable to move."

S3: Here's my answer, my answer is: "To scare them away and kick it...they lift their front legs in the air and try to attack.

S2: Okay, Pedro you go next.

[no response from Pedro]

S2: Okay, I'm going to go again...for my second question I wrote: "How do tarantulas protect themselves?"

S3: They lift their front legs and shoot the poison, shoot the poison!

S2: They lift their front legs and shoot their hairs. Because they have hooks on their hair. They can shoot the hairs.

S1: I saw a wolf spider.

S2: Guys, let's stick to the topic! And the topic is tarantulas.

S3: My second question is: "Why do they lift their legs up in the air?"

S1: So they can keep away their enemies.

S3: I don't get what this means. Tell me what this means Erika.

S2: It means....

S3: Wait let me talk!

10/29/14 - Brenda

Brenda: I put: "Why do tarantulas get shy?"

S1: I put: "Do they have poison?" and "what tarantulas protect themselves"...what kind of protection?

S2: "What do tarantulas eat?" and "what are tarantulas shy of?" "what animals eat tarantulas?"

S3: "How painful is its bite?" "How are they scared of things?"

S1: They bite animals and it sprays poison and it makes the animals stop moving. If they protect itself it raises its front legs.

S2: I'm using my background knowledge for the answer. Tarantulas eat [inaudible]. "What are tarantulas shy of?" and I'm fittin' to use my background knowledge: they might be shy because of their predators.

S1: And this part I kept reading. Did you read this, everybody? Does anybody have a question about tarantulas?

S1: To figure out my answers I kept reading on.

All students: I kept on reading on.

S3: So everybody kept reading on. Except Michael didn't say anything. Michael?

S2: I used my background knowledge.

S3: I'm reading the captions.

Brenda: Why are they scared of people?

[Students begin discussion]

Brenda: So why are they scared of people? Because they think people are going to step on them.

[Various discussions]

R (enters): So are you helping each other answer your questions?

S1: What do we do when we are done?

R: Keep going!

R: [Directed at Brenda] What was your question?

Brenda: Why do tarantulas get shy?

R: Why do they get shy? Did they help you answer it?

S3: I know why.

R: So what did you discuss about that?

Brenda: That why did they get shy.

R: What was the answer? Can you tell me in your own words. Look up at me. Tell me in your own words.

Brenda: It says, "they usually run away if they are attacked or threatened."

R: What do you guys think? Anything else to add about that? Would you think tarantulas would be shy?

S2: Yes.

R: You would? Why?

S2: Because it says it in the story.

R: So you're using the text. Would you think that though, if you didn't read the story?

[All students respond "no"]

R: Probably not right? They look kind of scary, don't they?

S2: I'm using my background knowledge and I said they might be shy because of their predators.

R: Because of their predators or because they are predators?

S2: Because of their predators.

R: Because of their predators. What could predators do?

S2: Kill them.

R: Why?

S2: For them to eat.

R: Yeah. Because, tarantulas, even though they are bigger than most spiders, they're still not super huge, right? Have you ever seen one? Like this maybe [holding out hands to demonstrate].

[Other students demonstrate size with hands.]

DISCUSSION 5

11/6/14 - Collin

S1: Why does the grasshopper ask the ant when he was laughing at him? The question for that is grasshopper said that ant will not want to see him cold and homeless and thought he would let him in and give him some food.

S2: My question is why will he go to ant's house if the grasshopper was teasing him? My answer is the ant said no because he was working hard all summer and grasshopper was just singing some and teasing him. I pick Maria.

S3: Why didn't the grasshopper sing no more? My answer for that is the grasshopper didn't sing because it was winter.

S1: I got some more stuff to say about that. So, your answer you said was the grasshopper didn't sing because it was winter and it was too cold for him.

S2: I have an answer for that too, can I say my answer? My answer is that he didn't sing songs, he was going to sing a song, but ant wouldn't let him in. He didn't sing songs anymore because he was cold and he didn't have anybody to sing to.

S4: My question is why was grasshopper being nice to him, to ant, but in the beginning of the story, he didn't like ant?

R: [to whole class] Let's stop for one second. One thing you have to do when you are done with your questions, remember Mrs. D. explained to you guys that this is a fable? And, every fable has a lesson. So, in your groups, see if you can figure out the lesson or the moral of the story.

S1: I want to answer my question. So, the grasshopper is being nice to the ant because the grasshopper, he doesn't have any food, and he's out in the winter and cold.

S4: I know the lesson to this!

S2: No, we don't do the lesson yet. We have to do Collin's [questions].

Collin: My question is the grasshopper, he is homeless and hungry.

S2: Okay.

S4: He just said the grasshopper is alone.

S3: Just let him pick.

S1: My other question is why is the grasshopper being nice now and asking if he could sing a song for ant?

S2: My other question is why would he just tell ant...so he could just warm up and...? If grasshopper....the ant will not want him to be cold and he thought ant would let him in.

S4: I asked why is the ant going to let grasshopper...? My answer is because grasshopper wasn't working over the summer and he can't....

S2: Lesson time! My lesson is, I think the lesson of the story is that ant is trying to work hard so grasshopper made fun of him, but at the end of the story, that grasshopper was cold and that's because he was making fun of ant while ant was working.

R [enters group]: So what's the lesson? Did you figure it out? [directed at Collin]

Collin: [silence]

R: Do you want someone to help you?

Collin: [nods]

S1: The lesson is never tease people or nothing because then when you ask for something they will say no because you were teasing them.

R: Okay. So do you think the lesson is don't tease anybody because you might need their help?

All: Yes.

R: That could be it. What else? There could be a different lesson though. Maria what do you think?

S3: When somebody tells you that you have to work, you have to help, and sometimes then if you ask them for something then they're going to say yes.

R: So, when somebody's working hard and you're sitting around...Jannell?

S2: You need to get up and work because in the winter you're just going to be hungry and homeless because you won't have anything to eat.

R: Yes! I think you guys got it. Collin, what do you think now?

Collin: That the ant was working hard and the grasshopper was just sitting there.

R: Oh my gosh, so how could you summarize that?

[Group discussing]

R: That hard work pays off?

S2: Yes! All ours put together, that we just said, is the...

S4: Moral of the story!

R: Did you hear what she just said? It took all of you to work together to figure it out. So, we figured out what? He had a good one, which was different than what you guys just said.

S1: Never tease a person and then ask for something to borrow because you might need somebody's help.

R: And the other part was what?

S2: That when someone is working and you're just standing there, just messing with them, it's just hurting yourself because they're going to have something to eat and you'll be sitting there cold. So, you're just hurting yourself.

S4: Yes, because if you're working hard, and then someone's teasing you, you're going to be hurting yourself because when summer turns into fall and then fall turns into winter ant's going to have a house and then grasshopper will be trying to ask ant for help.

S2: Yeah, like in the story I kept thinking where does grasshopper live? Don't grasshopper need to be making a house because with winter coming you need to be in a house because it's too cold to stay outside.

[Other students agreeing]

S3: We didn't use the text, we used our own words.

S2: Yeah, like she told us, your answers not always going to be in the text. Or you can use your background knowledge more. We learned what the main idea was, we put everybody's ideas all together to put the main idea together.

S1: Wait, it was Collin's turn. Collin what were you going to say?

Collin: I got two questions. Why is the ant closing the door on grasshopper?

S3: I have an answer for that. Because he was teasing ant.

S4: What you were just talking about, is because ant had time to build a house. Ant didn't have a house and he knew that winter was going to come up. So, he built a house. And, grasshopper didn't know that winter was coming up. I choose...do you want to ask a question?

S1: [discussing the animal home pictured in the text] I think he found it somehow because in one of the pictures it shows...I think he found the house.

S2: I think he built it first because what other animal would make a house really little? I think an ant would make a house this little.

11/6/14 - NAKITA

S1: Does the grasshopper have a job?

S2: No he does not. He just sings and plays all day.

S3: And makes fun of ant. Because ant is working so hard, and he didn't know what was coming to him.

S4: Will the ant forgive him and let him in and give him food? No, he will not.

Nakita: The grasshopper shouldn't make fun of the ant.

S3: Will ant let grasshopper in his home? No he will not let grasshopper in his home. Why did the ant say no to the grasshopper in his home? Because he was making fun of the ant in the summer.

R: [to whole class] Let's stop for one second. One thing you have to do when you are done with your questions, remember Mrs. D. explained to you guys that this is a fable? And, every fable has a lesson. So, in your groups, see if you can figure out the lesson or the moral of the story.

S2: Why is the grasshopper so lazy?

S1: Because he just wants to sing all day. He don't want to work.

Nakita: Go Pedro, what do you have?

S1: He doesn't have anything.

S5: Why is the grasshopper so hungry? [barely audible]

S2: [Repeats] Why is the grasshopper hungry?

S1: The lesson was he didn't help the ant so the ant isn't going to help him get any food.

S3: The lesson learned is to be prepared for anything and don't make fun of people, even when they're working hard.

S2: My lesson was do not be lazy when winter is coming up.

S1: Was it a good idea to shut the door on the grasshopper's face?

S3: Only if they don't listen to you, or if they say something mean to you – call you mean names or laugh at you.

S4: He learned a lesson so do not make fun of him or he's going to keep not giving him food or let him in, let him stay cold and starve. Then he's going to learn a lesson of what treating him bad means.

Nakita: The ant didn't give grasshopper food because what happened...the grasshopper was talking about how the ant was working so hard so when the grasshopper knocked on the door the ant didn't give the grasshopper any food.

S3: The lesson that will be learned so you will be prepared for anything and do not make fun of people and help people out.

R: Did you guys come up with a lesson?

All: Yes!

R: What did you come up with Nakita?

Nakita: We came up with when the grasshopper was talking about how the ant worked hard, so that's why the ant didn't give the grasshopper anything when he knocked on the door.

R: Yeah! Erika?

S3: Don't make fun of people when you something's going to happen.

R: Because you might need...?

All: Help!

S3: And, be prepared for anything that happens.

R: So how did you come up with the lesson? Did one person say it or did you figure it out together?

All: Everybody said it!

R: You did? Everyone participated? Dalton did you? Pedro?

S1: He couldn't hear.

R: Oh, you guys make sure he can hear you.

S3: We didn't hear what he said when he read.

S1: Mine is that ant didn't let grasshopper in because the grasshopper didn't help the ant.

R: Right. So did the ant's hard work pay off?

All: Yes!

S4: Mine was that he didn't give him no food because of the way he treated him by laughing at him and making fun of him, so he didn't want to give him food, so he wanted to teach him a lesson, so he won't do it next time.

DISCUSSION 6

11/13/14 - Brenda

Brenda: I'll go, why did the dove forget about the ant? Why would hunters be in the woods?

S1 [reading questions at same time as P]: Will dove save ant? How long will it take? Where will ant and dove...to shore? Is the dove going to drown? No, he don't drown he is saved...

T: Okay, Gabriel are you still sharing?

S1: I was helping him because...

T: Okay.

S2: How is ant going to say thank you? By saving dove.

T: Good!

S1: No, dove saved ant.

T: That's a good question – how is ant going to say thank you? Awesome, and did you find that answer?

S2: Yeah.

[Side conversation between S1 and S2]

S1: You forgot to put the why right there. [reading from S2's paper] "Why did they kill dove?" They killed dove?

S2: No, I said will they kill dove?

S1: Oh!

Brenda: Why did the ant...

T: I hear Gabriel is sharing, Brenda is sharing, but two people are sharing at once, so I don't know who to listen to.

S1: Where did dove put the baby doves? In a nest; and background knowledge. Why was the boy holding two ropes? Not an answer to that question. Why did the ant bite the boy? To make the hunter go away. Why does the dove keep leaving baby doves? To save ant from the hunter.

Brenda: I put, why did the dove forget about the ant? Why would the hunters be in the woods? What did the ant didn't like about the dove? Why did the ant bit the kid?

[Long pause in conversation]

T: Okay group leader, what's happening next? Everyone is looking at you for what to do next.

S1: Kayla did you go?

S3: What does the hunter do when they are there?

S4: I had the say question as she did. Why would the hunters be in the woods?

[Pause]

T: Okay, so how about if someone asks a question, what should we be doing?

All: Try to answer it.

T: Yes!

S4: have an answer for that. They were in the woods to find food. And I kept reading so I got the answer.

Brenda: That's what I wrote, because they were looking for food. And I put keep on reading.

T: Why don't we move on to number 2 – what was the lesson of the story?

Brenda: Dove was trying to save ant and they both were trying to save the ant.

T: They both were trying to save the ant?

Brenda: No, they both were working and the dove was saving the ant.

S1: And helping each other.

Brenda: Yeah, and helping each other.

S1: Well mostly dove was helping ant. Ant didn't do nothing for dove.

Brenda: Well he was trying to say thanks but he didn't.

S1: They helped each other, but mostly dove was helping ant.

Brenda: And ant didn't even say thank you.

S1: [reading aloud from board] Can you make a connection between this story and The Ant and the Grasshopper?

Brenda: I can! I can!

Brenda: They are both the same really.

[R enters]

Brenda: We are working on number 3.

R: You are working on number 3? Did you already come up with the moral?

All: Yeah.

R: What is it? What's the lesson learned?

[No response]

R: Did you already talk about this?

All: Yeah.

R: What did you come up with?

Brenda: That they worked together and that the dove was trying to save the ant.

S1: Well they really didn't help each other because dove was actually helping ant.

R: But didn't ant help dove at the end?

Brenda: Yeah.

S1: No.

S4: Yeah, he bit the hunters.

Brenda: So they did work together.

R: Okay go on to the next one. Think about the other story and think about this story. Are there similarities?

Brenda: They're both really the same, but the lesson.

S2: The connection is they are both ants [in both stories].

S1: They're not both ants!

S2: The connection is that they are both ants.

S1: Can anyone make a connection?

S4: I could.

S1: Okay, make a connection.

S2: There were two ants in the stories. There was the one about the ant and the grasshopper.

APPENDIX F

Teacher Interview Transcripts

R=Researcher

T=Teacher

INTERVIEW 1 - October 2, 2014

R: So, I just wanted to start by asking you a little bit about classroom environment. How would you describe your ideal classroom environment?

T: Anything, as far as environment?

R: Anything.

T: Okay. Ideally, I would only want like 25 kids. I think 25 is a perfect number, even for like 5 groups of 5. Carpet time, as far as desks, as long as I could put them in groups. Computer center, a guided reading table, just spots for us to move around the room comfortably, safely.

R: So, other than having so many kids, what else would you see as being...like say you had 25 kids, or even 20 kids, what would the perfect environment look like? As far as behaviors, and management.

T: It would be perfect to have groups...I could have a library center, labeled areas around the room, like "computer station", that we could move to, without being so schwiched. Bean bags, pillows, to make it comfortable for reading.

R: What about behaviors?

T: Do you mean the ideal class in terms of behaviors?

R: Yes, like what would the behavior look like in the classroom.

T: Every student on-task, paying attention, ready to start when I'm ready to start, materials that are needed.

R: So, you already have a certain classroom environment established, right? And, you can tell, even when we did that chart, that the kids knew right off the bat – be respectful, no interruptions – those first things they all knew, so do you see them actually taking place in your classroom? Like we have be respectful on the chart, that's a huge one and it can mean something different to everybody, do you feel the kids have established respect?

T: I feel, for the most part, they do, overall. But, there are those couple kids that don't respect other people's property or each other. Some of them even know it's wrong. Like, they will

laugh at someone, and I'll look at them, and I'll say "is that right", "is that the right thing to do", and they'll say "no".

R: What do they do with property?

T: Steal it, break it, lose it.

R: Why do you think?

T: I think some of them maybe don't have respect for other people's things. They are not taught, even though we go over it, when we do our rules. For example, if someone lets you borrow a pencil, you should return it the way it was given to you.

R: So, other kids they laugh sometimes at each other? Can you think of any other examples, to other kids? You don't have any hitting, do you?

T: Once in awhile, if it's an accident, but not deliberate. Like if they are getting in line, there are so many of them, they will be getting in the line and they will accidentally bump someone with their backpack, but I wouldn't say deliberate.

R: What about listening was another big one. They knew they shouldn't interrupt each other and that has a lot to do with classroom environment and how they are taught that they behave here...what's acceptable. Where do you think they are with that? Because they named it...but do they do it?

T: Again, I would say for the most part, I try to do a lot of positive reinforcement. I do the points on the board. It seems more if they are working towards a goal, with an end in mind, it works. Like, I have a ticket system, so for a lot of them it works, they want those tickets, they want those points, and that what they do it for. They work with their team, you even see them getting the other people that aren't ready on board, to get their point. I try to do a lot of positive reinforcement to help. Or, I'll clap – I do the 5,4,3,2,1 – I try to have indicators for them to know what to expect. If you're not ready by this time, there's a consequence.

R: Would you, in an ideal, perfect classroom, would you like it if you didn't have to do the positive rewards, where the behavior was more innate?

T: In a way, yes, it might make it easier, but I don't mind rewarding. I feel like you should be rewarded for good behavior, just not every time. Like, you are expected to sit in your seat, you are expected to listen, you're expected to follow teacher's directions, you shouldn't have to be rewarded every time. Or, sometimes, that why I try to have the kids who always do the right thing flip up. This is to train them that they are getting rewarded for following directions. But, yes, in a perfect classroom, I shouldn't have to, for every single activity, reward them.

R: Do you guys have school programs? Like, do you do PBIS or anything?

T: No. The only thing the school has is for birthdays, they call them down for birthday pencils. That's the only thing we do. I know Sanchez did student of the month and pizza lunches, we don't do that.

R: Where do you think you are in terms of establishing the kind of classroom environment that you want? Say on a scale from 1 to 10, where would you say you are? Your ideal, not anyone else's, just what you think. 10 is your perfect classroom environment, 1, you're nowhere near. Where would you say you are?

T: Probably a 7 or an 8.

R: What things do you want to get better then, to make it a 10?

T: Following directions – not having to repeat myself 2, 3, 4 times. And, again, I feel like majority of them are there, just those few that need constant reminders.

R: What else?

T: For the most part, they do respect each other, but just 100% respect. Respect for authority, too – not talking back to the teacher, when I ask you to do it, you need to do it.

R: Do you see that as a problem?

T: Not a huge problem, but I feel like it's the same couple of kids, that just overall don't have respect for anyone.

R: So how do you feel in general just about the way that they participate? Again, on a scale from 1 to 10, like you said in a perfect world your classroom is a 7 or 8 right now, what about as far as the kids participating?

T: On the same scale 1 to 10, I would probably say they would be like a 6. The same kids participate and raise their hand willingly to participate, even though I do call on everyone, but as far as on your own participating.

R: What about when they are in groups? I've seen them do the "Go Fish" game, they are always doing Daily 5, so what would you say about the management and behaviors during those types of activities? What we are going to do is try to improve, by using discussion groups, we're hoping it's going to trickle down to the environment, because the kids are learning what this is supposed to look like. So, where do you see them now?

T: So, as far as participation in group?

R: Yes, and do they participate in the way you'd like them to participate? Or, is it more just that superficial level, where I'm just going to read off something because I have to say something? And, then, does everyone get a turn? Where are they right now?

T: They still can't...if they know you aren't watching them, they might be off task. I don't know if it's just that age or the make up of the school.

R: Just speculate and why would you say that is? Why is it that somebody always has to be watching?

T: It may just be one of those things for some of them – I'm not going to do it unless someone makes me do it. If no one's paying attention, why am I going to do it?

R: So, lacking the intrinsic value of learning?

T: Self-motivation, maybe?

R: So, with self-motivation, how many of your kids would you say? Just roughly, how many do you feel have an issue with that?

T: Maybe 10 out of 30, one-third. But, when I'm looking at them, they know what they should be doing.

R: Would that be something you would want to change if you could?

T: Yes.

R: One more question, since it's so early in the year: you rated overall classroom environment as an 8 and student participation and behavior in groups as a 6. Do you anticipate these getting better or worse as the year goes on?

T: Yes, I anticipate these getting better. Especially the behavior in groups. The more practice they get the more it should improve.

INTERVIEW 2 – November 20, 2014

R: Your first interview was on 10-2 and we talked about classroom environment. Do you think your environment has changed at all?

T: I think it has improved slightly but no dramatic changes.

R: How?

T: Well, the kids are well behaved overall [pause]. I have seen an improvement in manners and helping one another succeed.

R: So, last time you said your class was a 7 or 8 on a scale of 1 to 10? Is this the same now or different?

T: It's about the same. I think they are about an 8 in terms of overall classroom environment. Most students can follow classroom routines with minimal prompts. Positive reinforcement works well. Most students work well together and know expectations.

R: In terms of participation, you gave your kids a 6 during the first interview. Is this the same or has it changed? Not just for discussion groups, but overall. So, does everyone participate?

T: Now they are about a 7. For the most part, everyone participates, but sometimes there are kids that want to do all of the talking. And, some kids are still quieter. But, I hear them being respectful and taking turns.

R: Can you think of any specific examples?

T: Leanne is a shy student and would never raise her hand to answer. Now she is participating whole group and proud to share.

R: So, one thing that I was unaware of when I started working in your classroom was that the district had given you pretty strict guidelines and a schedule for comprehension instruction, which includes strategy instruction, which required all teachers to use the specific materials and genres of text. How do the district's guidelines for comprehension instruction impact your teaching? What's the good and the bad of it?

T: I like having a guideline to go by, I just feel that the pace is too fast. We have the toolkit, which is great, with all of the strategies, but then we have to find the texts, which could be good and could be bad. It's nice to pick our own texts, but it's time-consuming. Every week we have to sit down together and find a story that matches the strategy. I mean, it's good that we get to pick stories around our theme, so all of our stories, like right now we are doing animal habitats and surviving, so all of our stories can go around that, but no one's helping us find those stories. Like the reading coaches, they are telling us what to do, and they are basically giving us the resources, but then, I guess since we are the teachers we have to find everything. But, it's just time-consuming.

R: So you would say, overall the pace is too quick and what about the switching of genres?

T: With the genres it depends on...like each strategy has 4 or 5 lessons. So, 4 or 5 lessons on one strategy for fiction and then the same lessons on nonfiction. Which, you know, the kids become familiar with the strategies the second time around, but maybe it would work better if we could switch off. So, maybe we could do 3 lessons fiction, 2 lessons nonfiction for the same strategy. We are fitting in all of these lessons, but we don't have enough time to do...basically, we are doing the lessons twice, for fiction and for nonfiction. It's a good idea to do 50% fiction and 50% nonfiction, but just not as fast. Maybe just slow down and do a couple of lessons fiction and a couple of lessons nonfiction on the same strategy.

R: What do you think the reason is for the district implementing this in this way? For example, the pacing guide, the strategy instruction.

T: I know they have PARCC in mind, I think that is what they are going for, to meet all of the common core standards. But, I feel like they don't really know, because everything is always changing. For example, now we have to do a district writing assessment every quarter, and they updated that at least four times just since school started three months ago. We're expected to meet those, I mean, I know it's a learning process, but they're just trying to go big too fast.

R: What do you think about them keeping everybody on the same page? I don't know if you remember, well you've been teaching for 8 years, so maybe, but back a long time ago, teachers were able to keep their own pace and do their own thing. It's really different now. What are your thoughts on that?

T: I really like staying on the same page, just because, well especially last year, me and the other third grade teacher, we had three groups of siblings. So, for the parents, we had the same homework. It was easier for them to work with their students. So, as far as that, or even just moving to the next grade, so when they move to fourth grade, for example, if I did this but the other third grade teacher didn't then for those kids some of the third graders got it and some of them didn't. So, I think it's a good idea that we are on the same page.

R: What about, say for example with comprehension instruction, if you are behind a few days?

T: If I'm behind a few days, I try to either catch up, like one day I'll do double comprehension, or, at our team meetings, we plan three days a week, we can say "where are you at?" and sometimes we are both behind, so then we slow down a little bit.

R: So, how do you think the discussion groups went, how did it work? Can you just talk a little bit about the project overall?

T: Sure. I really like the idea. It was really nice to observe their discussions and see the question and answer. I was thinking though next time to start with a model group, maybe what it should look like. And, it's one of those things that the more you do it, like I saw how they did it the first time and how they improved, but some of them just read their question and that was it. I know the group leader made sure everyone got a turn, but sometimes, depending on who the group leader was, they would just sit there and they weren't taking initiative. I think it's just because they don't have practice with that, since this is the first time we are doing discussion groups. So, I think maybe if we model a couple of times or show a video just to show what this looks like or show kids interacting. Also, the groups were larger, like six kids. But, I feel that by the end, they did improve.

R: I think too that time was always an issue. I feel like we were always rushed because you only had this certain amount of time and certain block, so some of the things we kind of had to skip to try and get to the discussions.

T: Yeah, and I like too that the last day you wrote the 3 tasks on the board. I think that really helped some of the groups. They would look up there and say, “what number are we on?”...

R: ...and gave them more of a focus.

T: Yes, and some guidance.

R: They were naturally inclined to just read what they had written. And, the whole point was to get them beyond that by using each other to come up with the lesson or whatever. So, I also think that really worked. Let’s just talk for the last few minutes about the kids that were involved in the study. So, I’m going to focus on Nakita, Collin, and Brenda, because they are struggling readers, but they are also really quiet and had low scores on the motivation survey. Do you see any changes in them from the beginning of the year to now? And, what do you see with these three struggling readers and addressing their needs?

T: I would say Brenda improved the most. I see her participating more. And, she is in the interventions group and the fluency group. So, she is getting extra help to help her become a fluent reader. She tries very hard. She wants to learn and she does try. So, I’ve seen the most improvement with her. And then, next, I would say Nakita. She is starting to participate more, ask a question when she is confused. She needs a little bit more time just to think about it. She needs to think before she gets it. For example, sometimes we’ll be done and she doesn’t even have anything on her paper. So, we’re really working on getting your thoughts out and writing them down. But I have seen her participating more. And Collin, he is still very shy. He doesn’t raise his hand. I do call on him, and when I do call on him, half the time he knows the answer and half the time he doesn’t, depending on whether he is paying attention. I feel like, with him, vision is an issue.

R: Did you see him covering up his eye when I was testing him?

T: Yes, and that helps him. So, I tell him to do that, and when he does that and I progress monitor him for Aimsweb he does about 50% better. Just from covering that eye.

R: Well he told me he got so many words, I don’t know what the amount was, but a week or so ago, he said he got so many words on his test.

T: Yes, he went from 20 wpm to 40 wpm. So, I don’t know if it’s blurry for him to see. His mom is supposed to be sending eye patches, but I still haven’t seen them. And, she said that he needs eye surgery. So that also hinders him, if you can’t see. I have him sitting up front, but for him he lacks motivation too. So, sometimes he may feel it’s just easier to sit there and not try.

R: So, when you observed by sitting in with the groups, did you notice with these three students in particular, when you were observing their groups, did you notice this helping these quiet, low motivation kids? Or, the other kids pulling them up at all, with having the time to talk about things and build comprehension together?

T: In Brenda's group, I thought she became more like a leader.

R: She was awesome.

T: Yeah, she took the lead. Collin and Nakita, I did notice in Nakita's group sometimes if she didn't read it, they would be like, "okay, read yours". They would try to get her to talk. Collin's group, I'm not really sure.

R: Collin's group, you were there the last one we did. They made him read his [questions], but then moved right on, like didn't even talk about the answers, which I thought was interesting. Because they did make him read it, they were like, "come on, come on" but that was it. With everyone else they talked about what the answer would be and for some reason, I'm speculating that they knew that had to have him read him, but I don't know if you saw anything like that.

T: I can't really remember. But, when I was in their groups, I tried to just sit back and watch them. If they were sitting there doing nothing I would ask whose turn it was, but I tried not to give my input too much, just to listen to what they had to say. Overall, though, I really liked it and I learned from it too, like how to improve. And, some of them really enjoyed it. They loved sharing with each other. I may try to do smaller groups, maybe like four kids, but we have such a large class this year. With bigger groups, some kids always wanted to be the sharer, or always wanted to answer.

R: And they were the kids that didn't need as much help.