INTERMEDIATE-LEVEL, LOWER-ACHIEVING READERS’
PARTICIPATION IN AND HIGH-LEVEL THINKING DURING GROUP
DISCUSSIONS ABOUT LITERARY TEXTS

DISSERTATION

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By

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ABSTRACT

This dissertation examined the participation of eight lower-achieving readers in two intermediate-level elementary classrooms (one fourth- and one fifth-grade) during group discussions about literary texts. The purpose of the investigation was to determine the extent to which lower-achieving readers (defined as students who had persistent struggles to attain minimum scores on state, district, and classroom assessments in reading) displayed discourse features that indicated the students’ high-level thinking during heterogeneous and homogeneous (by reading level) discussions about literary texts. Several characteristics of discourse indicate high-level thinking, including but not limited to: generalizations, analyses, speculations, affective responses, inter-textual connections, and elaborated explanations. A secondary purpose was to describe what happened when lower-achieving readers, their peers, and teachers engaged in group discussions about text.

A multiple case study design was used in this investigation. Data were collected between October 2005 and May 2006. Data sources included: field notes collected from participant observation, transcripts and indices of student and teacher interviews, transcripts and indices of audiotaped and videotaped discussions and reading lessons, and students’ writing assignments and other artifacts. Multiple strategies were used to analyze the data, including analytic induction and descriptive statistical techniques. A
discourse analysis coding scheme was used to determine the extent to which lower-achieving readers likely used high-level thinking about literary texts during group discussions.

The findings revealed focal students used the discourse of discussion as a tool to comprehend text in two ways. The students used the discourse about texts as ‘intellectual scaffolds for their own thinking and transformation in understanding of the texts. In addition, the discussions created authentic opportunities for students to explore reading comprehension strategies (e.g., meanings of new words, visualizing the story). This means students drew on their knowledge of comprehension strategies and incorporated them into their discussions to reason about the texts without explicit instruction from the teacher. Focal students both evoked and heard others refer to and talk about the comprehension strategies during discussions. Moreover, an important contextual foundation of the discussions that seemed to relate to the focal students’ thoughtful responses, or those that suggested the students went beyond recalling the literal details of the stories, was the use of the discourse to problem-solve about the meaning of the texts. Finally, in respect to the students’ writing assignments that often followed the discussions about the texts, lower-achieving readers made use of the ideas of the discussions in their writing.

Regarding high-level thinking during discussions, the lower-achieving readers’ discourse suggested that they thought in high-level ways about texts during discussions, and that they thought in high-level ways to the same extent or nearly the same extent as their peers did in the same discussions about texts. The one major difference in their talk about texts related to the instances of elaborated explanations or instances when students...
stated a position and explained their thoughts about the position with more than one reason or with evidence from the text. Higher-achieving readers produced significantly more ‘elaborated explanations’ during discussions than the lower-achieving readers in this study.

From a theoretical perspective, this investigation extends our understanding of lower-achieving readers’ use of discursive practices that influence thinking and reasoning about text. From pedagogical perspectives, the findings suggest teachers might need to understand ways to encourage a kind of discourse that elicits genuine problem-solving about the meanings of text. Likewise, teachers might need to understand the discourse features that indicate high-level thinking to model and discuss the features in their work with lower-achieving readers during discussions about literary texts.
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FIELDS OF STUDY

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CHAPTER 1

INTRODUCTION

“American public education is under increasing pressure to educate all children to a standard that has been historically held for few.” (Allington, 1994, p. 105)

Background

For young students in US schools, the demand to read more complex texts increases in the fourth and fifth grades (Allington, 2001; Salinger, 2003). Likewise, teachers at these grade levels require students to do more independent reading and independent learning from their reading as the shift from ‘learning to read’ to ‘reading to learn’ takes hold (National Reading Panel, 2000). In combination, these aspects of reading in the intermediate grades pose new challenges for some readers who may already struggle with thinking about texts in ways that facilitate reading comprehension. Moreover, for students who begin the intermediate grades with weak word recognition skills or poor fluency, the challenges of intermediate-level reading can lead to or exacerbate reading difficulties and lower-achievement in reading (McCormack & Paratore, 2003; Salinger, 2003; Snow, Burns & Griffin, 1998). The present study explores and describes intermediate-level, lower-achieving readers’ participation and
high-level thinking during discussions about literary texts in order to understand the ways teachers and students use discursive practices in the classroom to encourage reading comprehension and achievement in reading.

An array of factors affects achievement in reading. First, the reading process is variable, which means the reader, text, and context interact in different ways at different times, so the degree to which one comprehends text may differ from one situation to the next (Wixson & Lipson, 1986; Vellutino, 2003). This variability affects achievement for some students. Second, all students in the regular classroom have the ability to coordinate their skills and think about text in a thoughtful way, but some struggle because they are underserved in their schools (Allington, 2001; Au, 2002; Gaskins, 2003; Montes & Au, 2003; Pearson & Hamm, 2005; Pressley, 2002b; Raphael & Au, 2005). Some schools also fail to recognize the sociocultural factors that influence school literacy practices and learning, and these factors affect opportunities for participation in reading instruction and eventual success in reading (Finders, 1997, Gallimore & Goldenberg, 2001; Heath, 1983; Hicks, 2002; Lewis, 2001). Finally, a number of students lack motivation to read and flounder with engagement during school literacy practices (Guthrie, 2004; Snow et al., 1998).

Together, these factors help explain why 34% of American fourth-grade students in 2005 scored at or below the ‘Basic Level’ on reading assessments, according to the Nation’s Report Card prepared by the National Assessment of Education Progress (NAEP) (National Center for Education Statistics, 2005). In order to achieve more than the basic level, students must make inferences, explain text, provide reasons to defend their positions, and display this way of thinking in writing (National Center for Education
Statistics, 2005). Allington (2001) referred to this kind of reading and thinking about text as a ‘thoughtful’ approach to literacy. Many of the fourth-grade students who did not achieve beyond the basic level in reading may have failed to acquire a thoughtful approach to literacy; on the other hand, the schools may have failed to encourage the kind of thinking about text that fosters a thoughtful approach to literacy and sustains school achievement in reading.

I define lower-achieving readers as students who persistently struggle to attain the minimum standards on reading assessments as determined by the state, school district, or classroom teacher, excluding the students who have identified reading disabilities (e.g., developmental dyslexia). The lower-achieving readers in this study did not achieve beyond a ‘basic’ level on state achievement tests in reading, nor show evidence of grade-level reading on district and classroom assessments. I use the term lower-achieving reader instead of the traditional characterizations, struggling reader or at-risk reader, because I believe the term ‘lower-achieving’ reflects the reality of the students’ participation in school. That is, they have not performed well on reading assessments. The term ‘lower-achieving’ implies the possibility that the students may indeed have legitimate difficulties with reading, but it also implies that the school, society, or aspects of the multiple contexts within which reading takes place may have failed the students or may have been difficult for students to negotiate. The term ‘lower-achieving’ also suggests students may be competent readers, but lack the focus and motivation to perform their reading skills on reading assessments. Moreover, the term ‘lower-achieving’ suggests mobility; that is, the word ‘lower’ implies students with lower achievement levels are able to achieve beyond their current status.
Lower-achievement in reading in the intermediate grades is a serious concern for schools, teachers, and some families because achievement in secondary school and beyond is uncertain for students who struggle with reading comprehension in the intermediate grades (Pressley, 2002b). Chall and Curtis (2003) estimated that 75% of students with reading difficulties in the intermediate grades continue to experience reading difficulties throughout high school and adulthood. Moreover, Snow, Burns, and Griffin (1998) suggested that students with reading difficulties are more likely than those without reading difficulties to drop out of school. They argued that dropping out of school is not a one-time, one-moment phenomenon, but a situation that begins early in one’s school career when the efforts to attain a kind of school literacy that reflects high-level thinking about text go awry.

An essential objective for reading research is to identify the details and complexities of how lower-achieving readers and their teachers work together to construct and sustain opportunities to engage in high-level thinking about text. An in-depth understanding of this process may ensure more lower-achieving readers in the intermediate grades acquire a thoughtful approach to literacy, develop the strategies and skills to engage in high-level thinking about text, achieve beyond the ‘basic level’ on reading assessments, stay in school until they earn diplomas, and become equipped to work and participate in a democratic society that requires sophisticated literacy skills. Drawing on Resnick (1987), I use the term high-level thinking to mean a process of thinking that involves “elaborating, adding complexity, and going beyond the given” (p. 42). A related term is higher-order thinking. In this study, student demonstrations of
analyzing text, generalizing across text events or personal experiences, elaborating ideas about text, and giving responses that go beyond the literal details of the story comprise what it means to think about text in a high-level way (Nystrand, 1997).

The specific aim of this study was to examine the participation of lower-achieving readers in the contexts of classroom discussions about literary texts, which generally take place during whole-class or small-group instruction in reading. These contexts are referred to in this study as group discussions or discussions, but they are also referred to as ‘dialogic discussions’ (Nystrand, 1997), ‘open discussions’ (Barnes, 1992), ‘book clubs’ (Raphael, Goatley, & McMahon, 1992), ‘grand conversations’ (Eeds & Wells, 1989) and ‘shared-inquiry’ (Plecha, 1992). Group discussions about literary texts were chosen as a classroom context to examine because they have the potential to promote engagement in high-level thinking about text and they provide students with opportunities to practice a thoughtful approach to literacy (Almasi, McKeown & Beck, 1996; Alvermann, Dillon & O’Brien, 1987; Alvermann, 2000; Goatley, Brock & Rapahel, 1995; Langer, 1995). Within these contexts, lower-achieving readers’ discourse in discussions was analyzed to learn more about their participation, high-level thinking, and comprehension of texts. I define discourse here as the words communicated during interactions between students and teachers in group interactions. Discourse is simply language in use (Gee, 2005).

Statement of the Problem

The quality of the talk and nature of questions during reading instruction varies, depending on the text, classroom context, expertise of the teacher, and ability levels of the students (Allington, 1983; Alvermann et al., 1987; Nystrand, 1997). The persistent
finding in studies of reading instruction for lower-achieving readers at all levels of education is that the discourse of their reading instruction reflects a focus on and questions about lower-level reading skills (e.g., decoding, recall of literal details) instead of complex ideas and perspectives about the text that are considered higher-level (Allington, 1983; 2001; Ivey & Baker, 2004; Nystrand, 1997; Palinscar & David, 1991; Raphael & Au, 2005). For example, in a large-scale study of classroom discourse in middle schools, Nystrand (1997) found that the kind of discourse between teachers and lower-achieving readers during language arts instruction was unlikely to promote high-level thinking and comprehension in those contexts. Moreover, because the discourse of reading instruction for lower-achieving readers tends to be more skills-oriented, we know few details about what happens when lower-achieving readers are given the chance during instruction (e.g., in discussions) to think in high-level ways and to practice that way of thinking in other literacy events like writing.

I briefly describe two classroom discourse patterns, recitation and discussion, in order to situate the practice of group discussions as a classroom context where students might engage in high-level thinking about literary texts. Recitation is a specific kind of classroom discourse that is sometimes referred to as I-R-E discourse (teacher I initiates, student R responds, teacher E evaluates) (Mehan, 1979). During recitation, students and teachers follow a three-part discourse pattern. The teacher asks a question that typically has a correct answer, and the students raise their hands in order to bid for opportunities to answer the question. The teacher selects a student to answer the question; the student responds, and then the teacher evaluates the student response. The evaluation of the response gives the teacher authority over the eventual meaning that is made. Imagine a
group of fourth-grade students have just read a chapter in their social studies textbooks about California. The recitation discourse pattern about the chapter may look like this:

Teacher: What is the capital of California?
Student (raises hand and is selected): Sacramento.
Teacher: Yes. Good. And in what part of the country is California located?

By contrast, during discussion, participants engage in a more open and flexible discourse pattern than recitation (Chinn, Anderson & Waggoner, 2001). The teacher asks questions, but the questions have multiple “correct” answers or no correct answers (Nystrand, 1997). Students talk to each other about topics or themes of the text with little teacher interruption or mediation of their turns. Student responses also tend to build on each other, so there is a sense that the group collectively constructs meaning, which for some members of the group promotes new understandings about the topic or text (Chinn et al., 2001; Langer, 1995; Mercer, 1998; Nystrand, 1997). The discussion discourse pattern may look like this:

Teacher: Why is California an important state?
Student 1: It’s in the west.
Student 2: Yeah, but also it’s on the coast, so it has a lot of ports and we use those ports to trade things in and out of the country.
Student 3: But New York has ports, too.

The essential characteristic of a classroom that supports genuine discussion is the underlying epistemology that students interpret and co-construct knowledge and meaning (Almasi, 1996; Johnston, Woodside-Jiron & Day, 2001; Langer, 1993; Mercer, 1998; Nystrand, 1997). As such, group discussions provoke an “ethos of involvement” in the classroom during school literacy practices (Christoph & Nystrand, 2001).
Empirical research has shown that group discussion practices promote high-level thinking about text and reading comprehension in intermediate-level readers (Commeyras, 1993; Ellis, 1999; Goldenberg, 1992; Kong & Fitch, 2003; Langer, 1995; McKeown, Beck, & Sandora (1996); Nystrand, 1997; 2003; Nystrand & Gamoran, 1991; Raphael & McMahon, 1994; Saunders & Goldenberg, 1998; 1999; Strickland, Ganske & Monroe, 2003). Nystrand and Gamoran (1991) found that in dialogically organized middle-school classrooms, those that employed an open, co-constructing discussion model, students both recalled more of the texts they had read and understood their reading in more depth than did students in more traditionally organized classrooms.

Saunders and Goldenberg (1998) conducted a quasi-experimental study comparing the effects of discussion (called ‘instructional conversations’) on the reading comprehension of 116 fourth- and fifth-grade students, half of whom were English language learners. They found that students in the discussion condition understood the literal details of the story as well as or better than students in the comparison condition (basal reading lessons). In reports of the same investigation, Saunders and Goldenberg (1999) found that the students who had significantly higher gain scores on interpretive comprehension tests participated in discussions and wrote about the texts in literature logs, whereas the students who had lower gain scores on the same comprehension measure participated in conventional reading instruction with the use of literature logs only. The authors concluded that the use of discussion supported the achievement in reading comprehension of the students in the discussion condition.

In a mixed-method investigation of the use of discussion, called Questioning the Author (QtA), in three 4th-grade classrooms, McKeown et al. (1996) found that the QtA
discussion format provided teachers and students opportunities to ask questions that extended and elaborated meanings about the text, allowed students to hold the floor for longer periods of time, and encouraged students to ask more questions and talk to each other instead of talking directly to the teacher. Moreover, they reported the use of QtA discussions in both language arts and social studies lessons supported students’ complex responses to the texts (e.g., integrating text ideas with prior knowledge). They concluded multiple features of the QtA discussion framework contributed to the students’ comprehension of the texts.

Questions about the ways discussions help students with classroom writing tasks have been explored, and research has shown some effects of discussion on students’ writing. Descriptive research has shown intermediate-level students tend to write more elaborately about story themes after prolonged exposure to and participation in group discussion practices about texts (Chesser, Gellatly, & Hale, 1997; Dugan, 1997; Goatley, 1997; Goatley & Raphael, 1992). Likewise, numerous quasi-experimental studies have determined that intermediate-level students tend to write more elaborately (i.e., with greater length and use of details) about texts following group discussions about those texts than following traditional basal-style reading lessons (Clare, Gallimore & Patthey-Chavez, 1996; Saunders, Patthey-Chavez, & Goldenberg, 1997; Saunders & Goldenberg, 1999). In a quasi-experimental study, Reznitskaya et al. (2001) found that a group discussion framework referred to as ‘Collaborative Reasoning’ improved fourth- and fifth-grade students’ abilities to construct arguments and write persuasively in expository writing tasks more than traditional reading and writing lessons improved a comparison group’s ability to write persuasively. The students who participated in the discussion
condition wrote significantly more reasons to support their claims, relied more on story
details, and presented more alternative perspectives in their essays than did the students
in the comparison group. Reznitskaya et al. (2001) concluded students who participated
in Collaborative Reasoning developed a schema for argumentation that transferred to
persuasive writing tasks. It appears discussions support students’ writing in several ways.

The investigations about group discussions described so far have focused on the
students in a regular classroom setting or groups of bilingual students in transitional
bilingual classroom contexts. Fewer studies have put lower-achieving readers from the
regular classroom context at the center of the inquiry. The studies that have focused on
lower-achieving readers in the regular classroom context have failed to illuminate the
linkages between the discourse of the discussions and the students’ engagement in high-
level thinking about text; hence, they have failed to explicate the contextual features of
discussions that facilitate lower-achieving readers’ high-level thinking and reading
comprehension.

For the most part, investigations of lower-achieving readers and group
discussions have demonstrated the ways in which lower-achieving readers participate in
and contribute to group discussions (Ballenger, 2004; Dugan, 1997; Echevarria &
McDonoug, 1995; Goatley & Raphael, 1992; Goatley, Brock, & Raphael, 1995; Goatley,
1996; Hauschildt & McMahon, 1996; Langer, 1995; McMahon & Goatley, 1995;
Townsend & Pace, 2005). We know from this set of studies that lower-achieving readers
can and do participate in group discussions in the regular classroom context and that they
do so in ways similar to their peers. For example, Goatley et al. (1995) used qualitative
methods to examine and describe the participation of three fifth-grade, diverse students
(defined as students who in previous years had received pull-out reading instruction) who participated in Book Club (Raphael & McMahon, 1994) discussions in the regular classroom setting. Three categories of meaning: *modes of participation, the nature of interactions, and ways interactions influenced meaning*, informed their interpretations. The researchers concluded that the diverse students participated in the discussions in different yet important ways; for instance, one student took on leadership roles whereas the other two did not. In addition, the interaction patterns within the discussions demonstrated that the three focal students provided ‘scaffolds’ for their group members and these helped the group interpret the texts. The authors concluded the students’ diversity enhanced rather than hindered the discussions.

Ballenger (2004) similarly described and interpreted the responses of a third-grade, lower-achieving learner from a group discussion about a science text in a regular classroom context. Qualitative analyses of the discourse of a discussion event during a science lesson about the life cycles of plants showed that the lower-achieving student participated in evocative ways. Ballenger concluded that the student’s responses generated multiple student-to-student interactions because her comments stirred interest and excitement in the topic. The findings remind us that lower-achieving readers, who may struggle with many aspects of school, should not be underestimated in their capacities to contribute positively to classroom interactions.

Open-ended analyses of lower-achieving readers’ participation in discussions have been important because they confirm that discussions are indispensable instructional contexts for lower-achieving readers. However, targeted analyses of lower-achieving readers’ high-level thinking about text are necessary in order to understand the ways
these readers use the discourse of discussions as a tool to engage in high-level thinking and to practice reading comprehension. To my knowledge, only two studies have analyzed the discourse of discussion to characterize lower-achieving readers’ thinking about text during discussions (Commeyras, Pearson, Ennis, Garcia, & Anderson, 1992; Echevarria, 1995).

Using a quasi-experimental design, Commeyras et al., (1992) investigated specific aspects of student discourse related to critical thinking during group discussions. Specifically, they examined the discourse of seven learning-disabled readers during pull-out reading instruction across 10 lessons. This small group of students participated in teacher-led discussions during dialogical-thinking reading lessons (Commeyras, 1993) whereas the comparison group, comprised of seven students, received traditional reading instruction without discussion. After the 10 lessons, Commeyras and her colleagues analyzed students’ performances on individual reading comprehension measures and a test of critical-thinking skills. They found that the students’ gain scores did not show that teacher-led group discussions influenced the students’ abilities to display their comprehension or their critical thinking skills on traditional paper and pencil assessments. However, when they qualitatively coded transcripts of the student discourse from the discussion group for evidence of critical thinking skills (e.g., supporting claims), they found evidence of critical thinking in all of the students’ responses.

The investigators surmised that the discussion formats provided opportunities for learning-disabled readers to display their thinking abilities in ways that a written test could not determine. This was an important study because the authors demonstrated that struggling readers could discuss texts in critical ways. They also showed that the
students’ discourse and relevant features of talk could serve as evidence of the students’ abilities to engage in critical thinking. In spite of these important outcomes, the study failed to specify the extent to which the students displayed critical thinking during the discussions. Did the students make multiple comments that reflected critical thinking or one or two comments? Would higher-achieving peers make the same kinds of critical responses and to a similar extent? Likewise, the conclusions failed to posit any connections between the critical responses the students made about the texts and their comprehension of those same texts.

Echevarria (1995) also examined the discourse of discussions in order to investigate the efficacy of Instructional Conversations (i.e., discussion) for lower-achieving readers in a homogeneous, resource-room setting (i.e., special education classroom). Using a quasi-experimental research design, she compared student discourse from group discussions and recitation-style basal lessons of bilingual third-grade, learning-disabled students across a seven-month time period. Her analyses of the talk revealed the kinds of thinking students likely used during Instructional Conversations. For example, one finding revealed the ways five focal students used academic discourse about reading (e.g., displayed prior knowledge, referred to the text) more often during discussions than in the basal reading lessons. The focal students in the discussion group also spoke more often and produced more complete utterances than those in the comparison group. The findings did not show, however, the ways in which the use of academic discourse during discussions fostered students’ reading comprehension in oral recall measures (i.e., transfer measures). Both treatment and comparison groups of
students scored about the same on the oral recall measures. Echevarria concluded that bilingual learners who struggle with reading may benefit from discussions during reading instruction in ways related to English language learning.

Regarding the connections between discussions and writing for struggling students, one case study showed evidence that several fifth-grade students with Individualized Education Programs (IEPs) (i.e., students with identified learning disabilities) seemed to benefit from participating in discussions about texts in terms of their writing assignments about those texts in reading response journals (Goatley, 1997). Goatley (1997) used qualitative analyses of discussion transcripts and writing samples from reading journals to infer that the students’ participation in book club discussions over an extended period of time (i.e., one school year) fostered the students’ abilities to write elaborated responses (e.g., long responses) in their journals. She concluded that the prolonged use of discussions and other elements of the book club program fostered the students’ abilities to write extended responses in the journals. The study failed, however, to make claims about the quality of the students’ written responses. Did the students’ responses reflect a thoughtful approach to literacy? Moreover, did the students’ responses reflect ‘achievement’ in writing?

Although the previous studies have illuminated some of the benefits of discussions for lower-achieving readers in pull-out and regular classroom contexts (e.g., scaffolding, critical thinking), the earlier studies did not examine the quality of lower-achieving readers’ discourse during discussions in terms of their high-level thinking about text. Likewise, the prior study about writing showed the length of written responses in reading journals, but did not indicate the quality of the writing. Finally,
research has yet to identify particular features of the contexts of discussions that bear on the quality of the discourse in terms of lower-achieving readers’ engagement in high-level thinking about texts. In short, the motivation to conduct the present study was a result of the need to understand the ways lower-achieving readers use the discourse during discussions to think about text in ways that foster achievement in reading and writing. As such, there were still essential questions that needed to be asked and investigated. The following research questions guided this study:

Research Questions

1. What happens when lower-achieving readers, their peers, and their teachers engage in group discussions about literary texts?

2. To what extent do lower-achieving readers display high-level thinking about literary texts during group discussions?

3. Do lower-achieving readers appropriate features of the discourse of discussions and demonstrate the use of them in classroom writing tasks?

To address these questions, a multiple case study design was used to examine the extent to which, and the ways in which, lower-achieving readers used the discourse of discussions as a tool to think about and comprehend literary texts. The primary units of analyses were eight lower-achieving readers from two different intermediate-level classrooms (three students from a grade 5 classroom and five students from a grade 4 classroom) between October and May of the 2005-2006 academic year. The eight focal students’ participation in group discussions, both in whole-class and in small-group settings, was observed, and relevant data were collected and analyzed. The secondary
unit of analysis was the group discussion events themselves and the ways they were carried out in the classrooms between the teachers and students.

Several data sources were used. Fieldwork methods, such as participant observation, interviews, and document collection provided descriptive, qualitative data to inform an understanding about discussion practices from the teachers’ and students’ perspectives. These data were analyzed from an interpretivist stance, using analytic induction (Lincoln & Guba, 1985). In addition, many group discussions were digitally audio and video recorded. The data from these recordings elicited both quantitative and qualitative information related to the discourse of the discussions. The student discourse was analyzed with a coding framework that identifies specific features of the discourse that indicate high-level thinking (Soter, Rudge, Wilkinson, & Murphy, 2005) (Appendix A). Moreover, in order to explore whether a relationship could be established between group discussions and individual efforts to display high-level thinking in other literacy practices, namely writing, lower-achieving readers’ written work was collected and analyzed for traces of evidence (cf. Clare, Gallimore & Patthey-Chavez, 1996) that features of the discourse of group discussions transferred to classroom writing tasks.

Significance of the Study

The factors that contribute to reading difficulties and lower-achievement in reading are well-documented and recognized in the field of reading education (Pressley, 2002b; RRSG, 2002; Snow et al., 1998; Stanovich, 1986; Valencia & Riddle-Bully, 2004). This study documents some of the ways in which intermediate-level, lower-achieving readers used discursive practices to think about text in high-level ways. In my estimation, engagement in high-level thinking about text is a practice that encourages
reading comprehension. As such, the focus on discourse that reflects high-level thinking in this study makes a contribution to our theoretical understanding of how and under what circumstances lower-achieving readers construct and orally demonstrate meanings about text. This study also expands what we already know about the relationship between group discussions and reading comprehension and, further, extends this area of inquiry by placing the lower-achieving reader at the center of the investigation. As a result of this study, we will know more about the role of discussion in lower-achieving readers’ engagement in high-level thinking, the ways students use reading comprehension strategies in discursive interactions, and the ways discussion spawns high-level thinking in other contexts and during other school literacy tasks (e.g., writing).

This study also has important pedagogical implications for the participants in this study. The primary recipients of these implications are the two classroom teachers and the 44 students, eight of whom were lower-achieving readers, in their classes. I worked closely with the two teachers throughout the study. I met with them regularly, reflected with them, shared some of my ongoing findings, and sometimes solicited their perspectives and interpretations about my thinking not only as a form of member check but to benefit from the kind of knowledge that situates an investigation in the real purpose of any classroom inquiry – to advance the practices of teaching and learning (Dewey, 1916).

In a review of exemplary teaching practices in literacy education, Allington (2002) noted that the research community has fallen short of providing valuable information to teachers to support their understanding of classroom discourse and its relationship to reading pedagogy. The study, therefore, contributes to the practices of
other teachers who facilitate group discussions about texts in their classrooms and teacher educators who prepare pre-service teachers to facilitate reading instruction. The present study describes a range of discourse features that indicate high-level thinking and reading comprehension, and it describes the particular ways in which lower-achieving readers utilize these features. This knowledge will help teachers consider ways they should support and elevate lower-achieving readers’ discourse in group discussion contexts. This study also provides information to teacher educators about the kinds of classroom talk that promote engagement in high-level thinking about text.

Additionally, this study describes the enactment of group discussion and specifically, the things teachers and students do to build an infrastructure and culture that creates space for high-quality discussions. These descriptions have the potential to inspire teachers to consider ways they can prepare their classroom environments for high-quality discussions. Generally, the outcomes of the present study provide teachers with knowledge that arouses a deeper sensitivity and understanding to why they employ discussion practices and how they should organize the practices in order to maximize opportunities for lower-achieving readers to learn and grow in school literacy practices.

The results of this study might also impact teachers’ assessment practices in reading comprehension of lower-achieving readers. Pearson and Hamm (2005) wrote of comprehension assessment, “we seduce ourselves into believing that we have satisfied the fairness criterion” (p.61). Some findings inform our conceptualizations of fair comprehension assessment and bolster the argument that assessing group discussions for evidence of reading comprehension is as important as giving an informal reading inventory or assessing student writing for evidence of comprehension.
Finally, this study is aligned with some of the current objectives of the federal government’s Program of Research on Reading Comprehension (PRRC). The major goals of the PRRC are to investigate how students construct proficient reading comprehension, how comprehension can be taught more successfully, and how it can be assessed better (Sweet, 2005). I anticipate that this study will produce new ideas related to all of these goals.

**Assumptions**

Several assumptions about reading, teaching, enquiry, and learning framed the study.

1. An individual’s experience is understood to the extent an individual defines his or her interactions and the context of those interactions.

2. Reading is a complicated problem-solving activity, involving multiple cognitive, linguistic, and social processes. Likewise, multiple factors shape these processes (e.g., contextual, affective, text, cultural). As a result, the meaning of text is multiple, so there is no single best interpretation of any text. Further, one’s success with reading fluctuates; that is, a particular kind of text may be easily comprehended by an individual, but that same individual might struggle to make sense of another kind of text.

3. Participants in a school context construct their literacy practices. Drawing on Lemke (2005), in order to comprehend a text, readers must interpret signs (words, sentences, paragraphs) in relation to certain contexts, but the contexts vary frequently (school, home, after-school program, a small-group activity, large-group). Further, social status influences what goes on and who gets a “say-so” in any context and therefore affects the way in which one interprets
signs. Comprehension, then, is a fluid process that requires a reader’s ability to interpret signs in these persistently changing contexts. These ideas reflect what is meant by reading is a social practice.

4. Lower-achieving readers are students who have not been consistently well-served by schools and other organizations that support learning and development.

5. High-level thinking about text engenders a thoughtful approach to literacy and contributes to reading comprehension.

6. Teaching is a complex activity that requires not just a set of skills that can be used in any context, but a set of understandings about learning and group discussions that are meaningful to the teacher and the students.

Definitions of Terms

1. **Group discussion** (discussion event) – A coherent or bounded activity setting in the classroom where the teacher has established the goal of facilitating a discussion in order to promote high-level thinking, reading comprehension or other goals related to reading instruction. A small- or large-group discussion is either teacher-led or peer-led. Students have control of turns and topic. Students ask questions, support their claims, listen to each other, challenge each other, co-construct meaning, and ultimately have interpretive authority. Discussions can be about any kind of text, but are largely convened during reading group instruction, so texts are often literary in nature.

2. **High-level thinking** – A thinking process that involves “elaborating, adding complexity, and going beyond the given” (Resnick, 1987, p.42). Related terms are literate thinking, reflective thinking, and higher-order thinking.

3. **Intermediate-level students** – Students who are in the fourth and fifth grades.
4. **Reading comprehension** – Drawing on the RAND report and a recent volume from CIERA (2005), reading comprehension is a multi-dimensional thinking process about text. Cognitive, linguistic, contextual, text, and sociocultural factors influence the multiple processes involved in making sense of text.

5. **Lower-achieving reader** – Multiple indicators comprise the criteria that will define a lower-achieving reader in this study: 1) a standard reading score from the previous year's state achievement test in reading that is below 410 (a score of 400 is considered passing); 2), informal reading inventory scores administered in fall 2005 that indicate below-grade level scores on tests of comprehension, fluency, and word reading rate (e.g., less than a level P on the DRA fourth-grade inventory); and 3) teacher judgment. Students must meet all three criteria in order to be considered a lower-achieving reader and focal student of the investigation.

6. **School literacy practice** – A routine practice in a classroom context using reading, writing, listening, and speaking of largely print text forms.
CHAPTER 2

REVIEW OF LITERATURE

“What a preparation for life if students can learn to interact in a community where their ideas can stimulate new awareness and possibilities.” (Langer, 1995, p.44)

The larger aims of this project were to learn more about the participation of lower-achieving readers in discussions about literary texts and to assess the extent to which their responses during the discussions indicated engagement in high-level thinking about text. In my view, high-level thinking about text (e.g., going beyond a literal level of thinking about text) is part of a thoughtful approach to literacy which, educators in reading agree, is an approach that fosters achievement in reading at the intermediate grade levels (e.g., Allington, 2001). I also take the position that high-level thinking about text is a necessary part of the comprehension process at the intermediate grade levels. Therefore, in this chapter I describe recent conceptualizations of reading comprehension. I synthesize the research related to why comprehension of text is difficult for some intermediate-level students who struggle to achieve minimum standards in reading. Likewise, I briefly discuss models of comprehension instruction for intermediate-level students. I describe the role of group discussions as an instructional context for fostering learning, high-level thinking, and reading comprehension. I discuss three tenets of
sociocultural theory as a general theoretical framework and lens to explain the role of discourse and discussion for student learning. Finally, I describe the instructional framework of the discussions used by the teacher participants in this study.

**Reading Comprehension**

Multiple perspectives on, and an array of research traditions (e.g., psychology, sociolinguistics, education) in reading, make comprehension a complex process to study, and contribute to tensions and persistent questions in the field. One of the tensions relates to the processes of comprehension. Do readers decode the words on a page in order to comprehend or do they use the words to construct mental images and representations that ultimately evoke meaning (Snow & Sweet, 2003)? Likewise, do readers construct their own meanings or render meanings that the author has already written into the text (Anders, 2001)?

The RAND Reading Study Group (RRSG) report put forth an all-encompassing view of reading comprehension that might appeal to those from multiple traditions and perspectives (Sweet & Snow, 2003). The Study Group suggested that reading comprehension involves an interaction between three elements, *reader*, *text*, and *activity*. Reader factors include cognitive and linguistic capacities and motivation; text factors include text structures, text representations, and vocabulary; and activity factors include the purposes of reading. According to the RAND report (RRSG, 2002), these factors interact and work together as cogs in the reading comprehension process. Moreover, these three cogs or dimensions of comprehension are situated within a larger sociocultural context that both influences and is influenced by the reader. In short, the
RRSG defined reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p. 11).

Along similar lines, Kintsch and Kintsch (2005) noted that “comprehension is not a single unitary process” (p. 71), but involves interaction among one’s background knowledge, experience, the context, and other cognitive and linguistic processes. In fact, there is new consensus in the field that reading comprehension is indeed a multi-dimensional process (Scott & Stahl, 2005). Duke (2005) captured the essence of this multidimensional way of thinking about reading comprehension, writing, “Comprehension proceeds very differently for different kinds of texts, different topics, and different reading purposes” (p. 93).

At a macro-level of understanding, the interaction between the reader and the text is an important aspect of the multi-dimensional process of reading that fosters comprehension. Snow and Sweet (2003) suggested that the success one has with comprehension depends on the extent to which this interaction is forged. We know readers who comprehend well are active readers; that is, they engage with the text and think about their reading, and they make connections, mental images, and predictions about the text (Ketch, 2005; Pressley & Afflerbach, 1995; Pressley, 2002b; Strickland, Ganske & Monroe, 2002). Yet a range of perspectives shed light on the process of making meaning or comprehending text.

From a sociocultural perspective, becoming a reader is about acquiring a set of cultural practices, values, and beliefs (Bloome, 1985; Chang-Wells & Wells, 1993; Johnston, Woodside-Jiron & Day, 2001; Heath, 1990; Street, 1984). In terms of reading
comprehension, this means readers who comprehend well are adept at interacting with a particular kind of language and cultural practice shared by a particular group of people (Gee, 2002). Heath (1983; 1994) demonstrated the significance of the interaction between culture and language in her landmark ethnography of young, school-aged children in working- and middle-class communities in the southeastern United States. Heath (1983) claimed that communities have implicit rules for socially interacting and sharing knowledge about literacy, and these local ways of using literacy and the language about literacy have degrees of compatibility with the school’s ways of using language and literacy.

Describing and explaining this claim, Heath illustrated the literate and linguistic traditions in three communities, two of which I describe here: Trackton and Mainstream. In Trackton reading was a social activity for families. For example, adults read texts (e.g., a newspaper article) aloud to other adults in order to stimulate social interaction and conversation. Adults used the texts to provoke their own stories and engage in storytelling while their children observed these interactions. In Trackton, children were socialized into literacy practices that included talking about and around text. In Mainstream, literacy practices took a different direction. In this community the focus on literacy related to the view that reading was something to be enjoyed during adult-child interactions (e.g., bedtime reading). Through interactions with adults and texts, children from Mainstream learned how to talk about books, ask and answer questions about books, and listen as books were read aloud to them.
Heath’s descriptions of the literacy practices in Trackton and Mainstream underscore the ways literate traditions from diverse communities enculturate different literate identities. Furthermore, some of these identities are readily assimilated into school contexts because they “fit well” with the literate traditions and identities of schools and the school’s personnel. Heath argued the ways with language and literacy or the cultural practices in Mainstream were consistent and compatible with how language and literacy were “done” in school and therefore facilitated school literacy learning for the “mainstreamers.” Building on this conclusion, then, good readers in schools are perhaps those children who either have or create an understanding of the literate traditions of school and either have or develop an identity as a school reader. This perspective is at the heart of the sociocultural dimension of literacy learning, which bears on both reading comprehension and explanations of the persistent achievement gap in reading.

From cognitive and linguistic perspectives, readers who comprehend well combine the processing of the linguistic information from the text with their background knowledge about the content of the text in order to construct meaning (Duke, Pressley, & Hilden, 2004; Grabe & Stoller, 2002). Grabe and Stoller (2002) describe linguistic information as the lower-level, or bottom-up, element of reading, noting that lexical access, knowledge of syntax, and automatic analysis of words facilitate the comprehension process. Others have referred to this bottom-up processing as word recognition and decoding (Kintsch & Kintsch, 2005; Pressley, 2002b; Stahl & Hiebert, 2005; Vellutino, 2003).
Grabe and Stoller (2002) describe the background or prior knowledge a reader has stored in her memory as the **top-down** element of reading. Pressley (2002b) noted that readers who comprehend well use prior knowledge strategically, that is, they create in their minds what the author has not provided for the reader in the text. For example, in a novel, the author tells us information about the setting, but this is only a partial account of what the reader eventually creates in his or her mind about the setting. It is the use of one’s prior knowledge and world knowledge that elaborates the details of the author’s words about the setting. Using prior knowledge to elaborate what the author tells us is simply what good readers do when they make meaning (Anderson & Pearson, 1984).

Kintsch and Kintsch (2005) described the cognitive phenomenon of reading as an interaction between bottom-up and top-down processing, using the concepts of **textbase** and **situation model**. They proposed that readers create a textbase or a set of inferences about the connections between the different linguistic features of the text. The reader then elaborates this textbase with his or her background knowledge about the topic of the text, constructing what Kintsch and Kintsch (2005) refer to as a **situation model** or a more sophisticated mental model of what is going on in the text. These higher-level functions or top-down processes allow readers to construct and visualize main ideas as prior knowledge is retrieved from memory (Anderson & Pearson, 1984). As good comprehenders progress through the text, they string together a series of images and representations that are constantly shaped and reshaped as more inferences about the textbase and the situation model are made.

From cognitive and linguistic perspectives, it is this union of the textbase and the situation model or what is already inside the mind of the reader and what is on the page
that creates the ‘core’ of all reading comprehension processes (van den Broek & colleagues, 2005). I borrow an example from van den Broek et al.’s (2005) chapter about comprehension abilities in young children to illustrate the core process and describe the concepts of textbase and situation model. Consider the following pairs of sentences:

*Jack dropped the banana peel on the floor.*

*Mary fell on her back.*

Readers who comprehend this pair of sentences might assume that Mary fell on her back because she slipped on the banana peel that Jack dropped. Readers might make this inference because they create a textbase from the linguistic aspects of the pair of sentences. The textbase here might be the reader’s knowledge that a juxtaposition of these sentences usually means the two are related. Further, a reader adds to this initial inference with his or her background knowledge about the slippery nature of banana peels and prior experience knowing that people usually do not fall without a cause. At the end of this inference-making and relationship-seeking process, the reader has made a mental representation of these sentences and has had success with what we call ‘comprehending’ the text. van den Broek and colleagues (2005) argued that the core of all comprehension processes is this process of identifying and inferring important relations between the text and what is already known by the reader.

Other scholars in the field, past and present, have agreed that this core process takes place in the minds of readers during comprehension of text. For instance, Anders (2001) noted in her review of reading comprehension that comprehension is a problem-solving process. Likewise, Edward Thorndike, an early American researcher in education, suggested the following about reading in 1917: “Understanding a paragraph is
like solving a math problem....[the mind] must select, repress, soften, emphasize, correlate, and organize, all under the influence of the right mental set or purpose or demand” (1917/1971, p. 431). In sum, the view that comprehension is largely a linguistic and cognitive act contends the interaction between the bottom-up (linguistic information) and top-down (using prior knowledge) processes facilitate text comprehension (Duke et al., 2004).

The goal for reading educators is to use the knowledge of reading comprehension, explained from multiple perspectives and traditions, and transform it into reading comprehension pedagogy. Educators in North American contexts (e.g., Pressley, 2002a) have successfully done this, but reading difficulties, poor comprehension, and lower-achievement in reading prevail and have become a persistent worry for researchers, teachers, schools, families, and students. Why is reading comprehension challenging for some students? And why do some students get to the intermediate elementary grades (grades 4 and 5) without building a solid repertoire of reading skills and strategies that elicit comprehension?

The Nature of Reading Difficulties for Intermediate-Level Students

In a review of studies about reading difficulties, Chall and Curtis (2003) noted that poor instruction, poor word knowledge, home literacy practices, and an inability to apply reading comprehension strategies are factors that contribute to reading difficulties. Moreover, in the report Preventing Reading Difficulties in Young Children, Snow, Burns, and Griffin (1998) concluded that four major factors contribute to students’ reading difficulties. A student’s low motivation to read contributes to reading difficulties because if one does not choose to read then one rarely has an opportunity to practice (and
improve) reading skills. Failure to learn the alphabetic principle prevents decoding and word recognition abilities and subsequent success with reading comprehension. Others since the report have noted this difficulty as well (National Reading Panel, 2000; Stahl & Hiebert, 2005; Vellutino, 2003). A lack of word knowledge or vocabulary suppresses reading comprehension development, and finally, failure to acquire and use comprehension strategies (e.g., making inferences) limits one’s ability to engage with the text. The following several sections describe each of these factors in greater detail.

Motivation.

Guthrie and Wigfield (2000) noted that motivation, or the inclination to fulfill personal goals, desires, and intentions, is affected by several psychological constructs (e.g. self-efficacy, self-confidence, mastery orientation) that influence engagement with reading. The authors argue that motivation is the critical link between reading and reading achievement because if students are motivated to read, then they engage with reading tasks, and if students engage with reading, achievement in reading becomes an eventual outcome. However this process is short-circuited when years of reading difficulties compress, and this, in turn, suppresses motivation to read and reduces participation in school literacy practices (Snow et al., 1998). In simple terms, children become disaffected when reading difficulties routinely disrupt their success.

Motivation is also affected by the kinds of texts lower-achieving readers have access to in their classrooms (Allington, 2001). Many lower-achieving readers experience reading materials above their reading level, producing a deleterious effect on one’s motivation to read (Allington, 2001; Allington, 2002; Blachowicz & Fisher, 2000; Guthrie, 2004; Lyons, 2003; McCray, Vaughn, & Neal, 2001; Roller, 1996).
Word-recognition difficulties.

Some intermediate-level students are lower-achieving because they struggle to make sense of the words (e.g., using the alphabetic principle to decode words). In a review of reading difficulties, Stanovich (1986) noted that reading difficulties overshadow reading strengths when word recognition strategies compete with memory capacity for higher-level functions such as comprehension, and as a result, the reader painstakingly strives to merely “get through” the text. Of this idea, Stanovich wrote, “Slow, capacity-draining word-recognition processes require cognitive resources that should be allocated to higher-level processes of text integration and comprehension” (1986, p. 363). Simply, if the alphabetic principle, which facilitates rapid word recognition, is slow to be acquired and internalized or is not practiced sufficiently, students extend more of their cognitive energies to making sense of the words instead of the text. This situation is also known as word-level comprehension failure (Pressley, 2002b) and its relationship to poor reading achievement has been well established (National Reading Panel, 2000). Moreover, Pressley (2002b) emphasized that students in the intermediate grades who still struggle with word recognition read less because reading becomes unrewarding, thus practice with reading is avoided, precluding eventual growth and development. Stanovich (2000) referred to this phenomenon as a “downward spiral” for students, suggesting that if word-level difficulties are not overcome, the students’ experiences with reading become worse.
Vocabulary knowledge.

Research spanning five decades has routinely demonstrated that vocabulary knowledge is an important factor in reading comprehension (Vacca, Vacca, & Grove, 1995). Most recently, Snow, Griffins and Burns (2005) asserted low vocabulary knowledge is highly correlated with weak reading comprehension. Vocabulary knowledge, then, is a potential factor contributing to reading difficulties and lower-achievement in reading for some students.

One explanation for why students struggle with vocabulary or word knowledge is the nature of difficulties students have with metalinguistic knowledge or the ability to reflect on the structural features of language (Nagy & Scott, 2000). For instance, if students are unable to manipulate the structural features of words (e.g., morphological cues such as prefixes or suffixes), then vocabulary knowledge is difficult to develop. Blanchowicz and Fisher (2000) offer an alternative explanation for why lower-achieving students have difficulties with vocabulary. They contend that lower-achieving students are given reading materials above their grade-level, so the processing demands of unfamiliar words cannot be performed because students are generally overtaxed. Whatever the explanation, the important point is vocabulary knowledge supports reading comprehension development (Stanovich, 2000; Manzo, Manzo, & Thomas, 2006), so if a student’s vocabulary knowledge is impoverished, so too is his development in comprehending texts.

Comprehension skills.

Students in the intermediate-grades who are good word-callers (i.e., who rapidly and fluently read grade-level material) but struggle to recall what they have read, may
lack an understanding that reading is about making meaning and not about reading words (Duke & Pressley, 2005). Another explanation for this phenomenon is that these students either lack or do not employ comprehension strategies when they read (Allington, 2001). Donahue and Foster (2004) posit a third explanation. They argue students who have strong word recognition skills but struggle with comprehension generally lack background knowledge and metacognitive skills, suggesting these readers do not use top-down processing skills that assist in efforts to make mental models of the text.

This category of reading difficulties in the intermediate grades is important (Duke et al., 2004). In fact, Duke et al. (2004) synthesized results from several studies and subsequently hypothesized that 10 to 20 percent of struggling readers in the intermediate grades have good word recognition skills and fluency but poor comprehension skills. This is an important point to consider since educators at the intermediate levels tend to view reading difficulties at these levels as largely problems with word recognition (Ivey & Baker, 2004).

Dewitz and Dewitz (2003) illuminated this ‘good word caller, poor comprehender’ phenomenon in their studies of intermediate-level, struggling readers. Dewitz and Dewitz (2003) conducted a case-study of Mark, a fifth-grade struggling reader, that showed that Mark was able to read expository and narrative texts at both fourth- and sixth-grade levels on an informal reading inventory with accuracy, fluency, and expression (i.e., 98% accuracy with a mean reading rate of 132 words per minute). However, scores on the comprehension sub-tests revealed Mark was below his instructional level on five out of the six passages. The authors used a grounded theory approach to analyze Mark’s written responses on the comprehension portions of the
assessment, and they concluded from their analyses that Mark had difficulty with reasoning skills and it was this difficulty that prevented him from understanding the text. They also learned that when Mark was unable to make inferences, he relied on his prior knowledge to answer the assessment questions and this became problematic because the questions required him to make inferences across text events. In other words, Mark employed an inappropriate comprehension strategy because he was unable to use a full-range of strategies. The implications of Dewitz and Dewitz’s (2003) study are that intermediate-level students have reading difficulties that relate to both a lack of and misuse of comprehension strategies. For Mark, his inabilities to make inferences and his over-reliance on background knowledge were two such comprehension strategies that were inappropriately used.

*Inadequate instruction and assessment.*

Inadequate instruction and inappropriate classification of lower-achieving readers are school-level factors that also contribute to reading difficulties. Summarizing this perspective, Pressley (2002b) wrote, “The instructional environment counts for plenty, with the reading achievement of students very much affected by the teaching they experience” (p. 73). Regarding inadequate instruction, Allington (1983; 2001) and Finn (1999) have used their observations of school literacy practices to surmise that when we ask students to think little about reading, we in return get very little in terms of their thinking about text. Allington (1983) observed ‘low’ and ‘high’ reading groups in elementary schools and reported students in the low groups were corrected more often than students in the high groups and were asked to focus on the sounds of letters and other word-level skills more often than students in the high groups. Likewise,
observations of the students in the high groups showed these students were asked to make meaning about the texts more often than students in the low groups. Other studies since then have shown similar findings (e.g., Nystrand, 1997; Raphael & Au, 2005). In a position paper entitled *Phonics Instruction for Older Students? Just Say No*, Ivey and Baker (2004) summarized their experiences studying reading in middle schools and reported that middle-level, lower-achieving readers were required to practice word-level reading skills (e.g., segmenting words into syllables) too frequently during reading instruction.

Assumptions about the causes of lower-achievement in reading (i.e., word-level difficulties) conceal the true nature of reading difficulties for many students in the intermediate grade levels (Raphael & Au, 2005; Snow et al., 2005; Valencia & Riddle-Bully, 2004). Although decoding words rapidly is a necessary part of reading well, and some intermediate-level students struggle with this skill, research and practical wisdom from the classroom have shown that “more of the same” (referring to phonics instruction that is taught in the earlier grades to help children with word-level processing) will not work for all students. However, it is customary in US schools to homogenize the reading difficulties of intermediate-level students into a single ‘word-level’ category. This misguided view of reading difficulties is directly related to a poor instruction factor that contributes to lower-achievement in reading (Allington, 2001; Raphael & Au, 2005; Salinger, 2003; Snow et al., 2005).

Inadequate assessment practices also contribute to poor instruction for some readers because ultimately assessments inform instruction (Snow et al., 2005). Moreover, schools are required by local, state, and federal departments of education to
give several reading assessments throughout the year, yet these assessments do not always provide useable information for the teacher (Taylor & Pearson, 2005). The lack of quality information or the misinterpretation of the information prevents teachers’ abilities to fully recognize the needs of their students.

Illustrating this point, Valencia and Riddle-Buly (2004) found that a sample of fourth-grade students who “failed” a large-scale reading achievement test did so for multiple reasons. Additional assessments of the students and a cluster analysis of the results demonstrated that some of these students lacked fluency but comprehended texts well, albeit slowly. Others had trouble with word identification, while others still were proficient at both word identification and fluency yet lacked strong comprehension skills. Implicit in these findings is the notion that large-scale reading assessments do not depict a whole story about an individual reader, so instruction based on a single assessment, such as a large-scale achievement test, may be imperfect.

*Sociocultural factors.*

Bloome (1985) described three categories of meaning to explain the social aspects of reading and reading instruction. First, reading in schools takes place in a social context and the social interaction that surrounds the reading (e.g., reading groups) influences the kinds of interactions that the students and teacher create. These interactions ultimately affect what learners take up or engage, which impacts learning and development in reading. Second, reading is largely a cultural activity, which means that the reading practices in school are extensions of the day-to-day cultural activities of the school; consequently, the way the school “does reading” also influences student participation, and the nature of one’s participation also affects what is learned (Lave &
Wenger, 1991; Rogoff, 1995). Finally, reading practices are acquired through socialization into culturally-bound ways of thinking. Together, these categories suggest a social dimension of reading influences learning, providing an additional perspective on reading difficulties in school literacy practices. In short, the social interactions through which reading practices are generated influence the interactions one has with texts and these interactions shape reading outcomes and achievement.

The field of New Literacy Studies (NLS), which brings together sociocultural, sociolinguistic, and critical views of literacy in both school and out-of-school contexts (e.g., Schultz & Hull, 2002) and takes the stance that there are multiple literacies (e.g., Street, 1984) exposes underlying social factors that explain reading difficulties for some students. According to Gee (1999), “[NLS] seek to study literacy and literacy learning as they are integrated with oral language, social activities, material settings, and cultural forms of thinking, knowing, and valuing” (p. 358).

Ethnographies of literate practices that draw on NLS perspectives examine how ‘ways with language’ are embedded in sociocultural practices and discourses (Gee, 2002), and they often demonstrate that language and literacy practices vary across school, home, and community, and build on the values and beliefs of these different contexts (Boggs, 1985; Finders, 1997; Heath, 1983; Hicks, 2002; Lewis, 1998; Skilton-Sylvester, 2002; Zentella, 1997). In regards to reading achievement, what may appear to be weak reading skills, low motivation, or affect in the school setting can be more complicated and related to culture, social processes, identities, and language use across competing contexts (Gee, 2002). In uncomplicated terms, some students are precluded from practicing reading in the school context because the language and discourse, cultural
practices, and the ways of being in school are new for, misunderstood, or rejected by some students and therefore difficult to navigate and perform. Schools only sometimes reconcile these discrepancies in language, discourse, and culture that would help students engage the school literacy practices, potentially offsetting lower-achievement in reading.

Skilton-Sylvester’s ethnography (2002) of young Cambodian girls’ experiences with literacy in urban Philadelphia illustrated the divide between home and school literacies, illuminating sociocultural explanations for lower-achievement in literacy. In particular, Skilton-Sylvester used the narrative of Nan, a girl who did not achieve well in elementary school, to exemplify the implications of divergent home and school literacies. Rich descriptions of Nan’s home literacy skills and resources demonstrated Nan’s uses of vibrant oral language, which she used to build and maintain relationships with her family and friends. Further, descriptions of Nan in the school context demonstrated that the school missed opportunities to build on her home literacy skills. Skilton-Sylvester concluded that Nan’s progress and achievement in school literacy suffered because her teachers across three consecutive grade levels did not use Nan’s previously developed literacies to help Nan navigate the school discourse and the school’s way with literacy, both of which were unfamiliar to Nan as an immigrant and English language learner. Others taking a sociocultural view of reading might conclude from the descriptions of Nan that the school did not apprentice Nan into the ways that participants in a school context take meaning from the environment nor did the school provide Nan with an opportunity to create an identity as a literate person in a US school context (Heath, 1983; Lave & Wenger, 1991; Rogoff, 1995).
Another argument from NLS is that reading is ideological, which means that status and power, among other aspects of ideology, make the discourse of school literacy complex and, in some cases, difficult to appropriate. This notion impacts the way in which students engage with the school literacy practices that often promote reading comprehension (Hornberger, 2000; Lemke, 2005; Lewis, 1998; Toohey, 2001). Lewis (1998) conducted a classroom-based ethnography and used its findings to explain how power and status within students’ relationships in a fifth-sixth grade combined language arts classroom affected one student’s motivation to engage with school literacy practices. One theme of Lewis’ work was ‘asymmetrical relationships with peers’ (in terms of power and status), and she utilized descriptions from triangulated data sources to suggest that one student had difficulties engaging in literacy events in the classroom because his peers persistently positioned him at the less powerful end of their relationships. Having lower status during literacy events, the student was precluded from practicing the ways of thinking and talking about texts that he had acquired in earlier grades. Lewis did not examine the student’s reading comprehension or achievement directly, but her rich descriptions of his persistent lack of participation compared to the rest of the students’ participation in the classroom literacy events leads readers of her work to consider the student’s status in the classroom as a factor in his reading achievement.

In my view, research from New Literacy Studies perspectives explore the sociocultural factors that may create tensions and gaps between students and some teachers or schools, and these tensions and gaps have the potential to shape reading comprehension instruction because they bear on the experiences students have with literacy in school. For many students, the social experiences in classrooms are positive
ones, but for others, participation may be deleterious, the context may be difficult to understand and engage in, or the school culture may be misunderstood. When we discuss these particular aspects of reading instruction in school contexts, it is clear that sociocultural realities affect participation, learning, and eventual achievement in reading.

Viewed together, the cognitive, linguistic, and sociocultural factors of reading and reading instruction comprise a complex amalgam of perspectives that explain reading difficulties and characterize why reading pedagogy that supports high-level thinking and comprehension growth in the full-range of students is a challenging enterprise. In my view, Marie Clay (1987) summarized the nature of reading difficulties well. Clay wrote, “If you take a class of 11-year old children and divide off the poor readers and try to separate out two distinct groups with different types of reading problems you cannot do it. You must accept that the group includes the stay-aways, the life’s trauma children, the I-hate-school or I-hate-reading groups as well as those with specific reading disorders” (p. 159). Clay’s message here reminds us to consider the array of explanations for lower-achievement in reading.

Comprehension Instruction for Intermediate-Level Students

Many researchers in the reading pedagogy field agree that the most important goal of reading instruction is to help learners develop abilities to derive meaning from texts (Pressley, 2002b), and most would argue this goal is considered seriously in the fourth and fifth grades. For the past 15-20 years, the thrust of comprehension instruction has been in the area of strategy instruction, which emphasizes the teaching and learning of a set of strategies that good readers rely on when they engage with texts (e.g., summarization, prediction, asking questions). The National Reading Panel (NRP) report
(2000) noted that several comprehension strategies have proven effective in cultivating comprehension growth in all students. The strategies include: a) activating background knowledge, b) asking questions, c) searching for information in the text, d) summarizing, e) organizing information from the text, and f) understanding the structure of stories.

In addition to the strategies described in the NRP report, Gaskins, Gensemer, and Six (2003) synthesized several features of reading instruction that are vital for the older, lower-achieving readers in intermediate-level classrooms. They concluded teachers should provide and be provided: a) prolonged amounts of class time devoted to reading and writing, b) interaction with peers, c) variety in instruction and text, d) explicitness in instruction, e) long-term support, f) appropriate knowledge of strategies, and g) support in motivating learners. Many of these strategies and ideas are at the center of several frameworks for instructional practice in reading comprehension. Three frameworks I discuss below are reciprocal teaching, transactional strategy instruction, and concept-oriented reading instruction.

Reciprocal Teaching (RT) is a reading comprehension pedagogy based on strategy instruction (Palinscar & Brown, 1984), and perhaps the first formal instructional method targeted at struggling readers. In their landmark study of RT, Palinscar and Brown (1984) found that poor readers in the intermediate grades who were provided expert-led supports or “scaffolds” in developing a way to actively think through the text with specific strategies (summarizing, clarifying, predicting, questioning) gained significant ground on measures of reading comprehension after a 20-day period of RT instruction. While reading, small groups of students learned and practiced the four comprehension strategies as the teacher provided guidance through modeling and
feedback, but over time the teacher eventually shifted the responsibility of the thinking about the text to the students. In short, the study demonstrated that cognitive thinking skills can be learned if the teacher appropriately “scaffolds” those thinking skills. Since this initial display of RT as an empirically justified way of teaching reading comprehension, the approach has been used with intermediate-level students who are developing strategic approaches to comprehension. In a reflection of their landmark study of RT strategy instruction, Palinscar (2003) noted that strategies are a way to provide students “entrée” to the text and should not be mistaken as the end goals because comprehension is the larger goal. The strategies are merely the steps good readers take on their way to comprehension. As such, they are a means to an end in the comprehension process.

Anderson and Roit (1993) in their report about transactional strategies instruction (TSI) defined a strategy as a “thoughtful and effortful mental act designed to maintain existing mental competencies when those competencies are taxed” (p. 126). In TSI these ‘mental acts’ (e.g. questioning, clarifying, interpreting) are coached through cycles that begin with the teacher explaining and modeling the strategies involved in processing text during small reading groups. Over time, the teacher gives feedback to students about their own use of the strategies. For example, during a small-group reading lesson, a teacher might stop her reading and summarize a paragraph in a “think-aloud” of her own process of selecting a few important ideas from the paragraph to include in her summary. The teacher will slowly release responsibility for this way of thinking to the students as they practice her thinking process aloud and then ultimately on their own. During this transition, the teacher gives feedback to students to help them fully understand when and
how to use a particular strategy. Anderson (1992) conducted a three-month experimental study of the effects of TSI on reading-disabled students in middle and high school and found that gains on comprehension measures were greater for those in the TSI group than the gains students made in the control group.

Concept-oriented Reading Instruction (CORI) (Guthrie, Wigfield, & Perencevich, 2004) is another instructional approach that has been used with lower-achieving readers and their higher-achieving peers in all grades. This approach to reading instruction grew out of the strategy instruction movement, but has gone on to merge the strategies of thinking about text with other strategies that support student motivation and engagement. The developers of CORI argue that students who are motivated to read will engage with reading, and this principle combined with good strategy instruction will foster thoughtful literacy and better reading comprehension for both struggling and non-struggling readers. Student choice, diverse texts, student collaboration, and connecting texts to students’ real-world experiences are the principles that drive motivation and engagement to read in the CORI program. Additionally, CORI has a differentiated model of instruction that helps the older, lower-achieving reader who has trouble with fluency and decoding.

Research on strategy instruction has shown that a long-term focus on strategies helps struggling readers become strategic readers (Allington, 2001; Pressley, 2000). Some researchers contend that the development of strategic thinking about text relates to the quality of the teacher’s and students’ shared language or discourse that is created in the classroom about strategic thinking and reading (Gutierrez, Baquedano-Lopez & Turner, 1997; Raphael & Au, 2005). For example, Raphael and Au (2005) described their research about Question Answer Relationships (QAR), another comprehension
instruction model, and provided insight about the links between thinking and discourse. Raphael and Au (2005) suggested that a shared language about high-level thinking of text between teachers and students is the requisite factor of reading comprehension instruction, especially for diverse readers. According to the authors, “The vocabulary of QAR gives teachers and students a language for talking about the largely invisible processes that constitute listening and reading comprehension across grades and subject areas” (p. 208).

*Group Discussions about Texts*

Group discussions about texts are what I refer to as a kind of “pedagogy of classroom discourse.” Empirical research of classroom discussions has established linkages between the pedagogy and its effects on student learning and reading comprehension (Alvermann, Dillon, & O’Brien, 1987; Barnes, 1992; Langer, 1995; Mercer, 2000). This section compares two classroom discourse practices, recitation and discussion, in order to broadly describe and characterize the discourse of group discussions about text. Drawing on Cazden and Beck (2003) and Gee (1996), I define classroom discourse here as both turn-taking and speaking rights (i.e., language-in-use) and a way of using language that expresses an identity. This section provides a critique of recitation discourse and an historical perspective about discussion practices. I then discuss the empirical investigations that have shown relationships between group discussions and their cognitive, affective, and social benefits for students before finally discussing the empirical studies related to group discussions and high-level thinking and reading comprehension.
Recitation.

Consider the following interaction between a group of kindergarten students and their teacher talking about the picture book, *Little Black Sambo* by Helen Bannerman, which the teacher read immediately before the interaction took place (Chang-Wells & Wells, 1993).

Teacher: What did the first tiger take off Little Black Sambo?
Student 1: Shirt
Student 2: His coat
Teacher: His coat that his mummy made. Do you remember when his mummy made it – what color was it?
Students: Red.
Teacher: Red, yes….What did the second tiger take?
Students: Trousers.
Teacher: His trousers…What did the third tiger take?
Students: Shoes.

The above interaction represents what Cazden and Beck (2003), in their review of research on classroom discourse, have labeled *recitation* discourse, which is identified as such because there is a predictable and inflexible pattern of talk between the teacher and the students. In this kind of interaction, the teacher asks a question, (e.g., ‘what did the first tiger take off?’), and one or more students respond with the answer before the teacher follows with an evaluation of the student response. In the above case, the teacher followed a student answer with ‘yes…what did the second tiger take?’ This kind of classroom interaction is also known to teachers and researchers as the Initiation-Response-Evaluation (I-R-E) participation structure (Cazden, 2001).

Notice in the above transcript how the teacher controls the turn-taking with each question that is asked. Students have an opportunity to speak if they bid for a turn, and they can only respond in ways that connect to what the teacher is asking. As such, the teacher controls the topic, which means students rarely get a chance to ask their own
questions and talk about their own interests. We can also infer from the above example that the questions the teacher posed likely have only one right answer that can be found in the story, which means that the teacher or text has interpretive authority. Moreover, students rely on their memories of the story to recall the right answers and therefore have little opportunity to critically think about the text or engage in thoughtful literacy (Allington, 2001). In sum, the role of the teacher in recitation is to manage the turns, topic, and the interpretation of the content or story. The student’s role is to “keep up” with the teacher’s orchestration of the lesson in order to bid for the floor and demonstrate an understanding.

Although traditional recitation-style discourse can serve a pedagogical purpose in that it has the potential to display important information from the text for the benefit of the group (Wells, 2000), recitation has largely been viewed as a discourse that restricts student thinking, precludes collaboration, and denies the co-construction of meaning (Almasi, McKeown, & Beck 1996; Cazden & Beck, 2003; Mercer, 1998; Nystrand, 1997; Tharp & Gallimore, 1989; Worthy & Beck, 1995). In a study of recitation discourse in four fourth-grade classrooms, Chinn et al. (2001) noted that in contexts where recitation dominates the discourse, students have an awareness of what the teacher has predetermined as the acceptable answer, and as a result of this awareness, the students become acculturated into a discourse that limits genuine thinking because they have been forced to honor what others (e.g., their teacher, the author) have already thought. Almasi et al. (1996) made a similar claim from their observations of classroom recitations, noting that students who participated in I-R-E sequences of dialogue came to view the purpose of the interaction as arbitrary and, superficially, for the benefit of the
teacher. Worthy and Beck (1995) observed recitations in fourth-grade classrooms and concluded that recitation contributed to passive student behaviors and limited student interactions.

Nystrand (1997) pointed out that recitation is not always ineffective, but the discourse pattern does carry with it an epistemology that knowledge is transmitted by the teacher or author of the text, and subsequently, “received” by the students. Nystrand considers classrooms that use I-R-E patterns to transmit knowledge as the kind of classrooms that short-circuits the development of ideas, and consequently, reifies a “banking model” of education (Freire, 1970). Tharp and Gallimore (1989) also suggested that the transmission epistemology inherent in the I-R-E discourse pattern does little to promote intellectual development and high-level thinking. Moreover, Gee (1996) argued that discourse environments replete with I-R-E patterns are problematic because within them children learn roles, values, and beliefs that restrict development in literacy. Ultimately, what counts as effective classroom discourse, according to Nystrand (1997), is the extent to which classroom interactions move beyond a recitation-style discourse environment that perpetuates a “banking model” of teaching and learning.

The recitation script, or I-R-E pattern of interaction, has a long and well-established history in American classrooms (Nystrand, 2006; Tharp & Gallimore, 1989). Historically and culturally, recitation reflects the early American value educators placed on individualism and democracy. Early American educators believed that recitation was a more democratic pedagogy compared to lecture formats in European education systems. It was believed that a recitation style of discourse permitted students to display knowledge that they learned from the textbook and, although ill-conceived, it was
assumed this style of discourse gave all students an equal opportunity to participate (Nystrand, 2006).

Although most early educators used recitation in their classes, others eschewed the practice. John Dewey (1990), an early 20th century philosopher of education, claimed in his manuscript The School and Society (1990) that traditional recitation was “a place where the child shows off to the teacher and other children the amount of information he has succeeded in assimilating from the textbook” (p. 54). Dewey maintained that children should be free to use language as they would in a natural conversation instead of in a traditional recitation script because as he noted, “having something to say is more important than having to say something” (p. 56).

Dewey would be disappointed to know that over a hundred years later, American educators still embrace the ubiquitous recitation as if it were a teleological entity. In a comprehensive study of 58 eighth-grade classrooms in the Midwest, Nystrand and Gamoran (1991) found that open, dialogic discussion averaged a scant 15 seconds a day of the entire classroom discourse. Nystrand (1997) concluded that most classroom discourse is monologic, or, recitation-oriented. Other researchers who have examined group discussions and classroom discourse have also found traditional recitation discourse to be the norm in many classrooms (Almasi, 1995; Cazden, 2001; Goldenberg, 1992; Tharp & Gallimore, 1989; Worthy & Beck, 1995).

Discussion.

An alternative discourse pattern that can take place in classrooms and during instruction in reading is labeled here simply as discussion or group discussion. Bridges (1979) offered a definition of discussion that contrasts sharply with the definition of
recitation discourse. He stated that in a discussion individuals “are putting forward more than one point of view upon a subject…[and] are at least disposed to examine and to be responsive to the different points of view put forward with the intention of developing their knowledge, understanding, and/or judgment on the matter under discussion” (p. 16). Almasi (1996) claimed a profound difference between recitations and discussions lies in the perception of how meaning is created and who has the authority for that meaning. In a discussion about a literary text, participants each contribute ideas that in the end allow the group and individuals within the group to formulate meaning and acquire a new way of thinking about the text (Chinn et. al, 2001; Mercer, 1998; Nystrand, 1997). As such teachers and students share the roles of ‘interpreter’ and ‘evaluator’ of what counts as meaning and knowledge. The essential characteristic of a classroom that supports authentic discussion is the underlying epistemology that affirms knowledge and meaning are co-constructed (Langer, 1995; Mercer, 1998).

The following is an example of a discussion between a teacher and a small-group of students, and it provides an appealing contrast to the recitation transcript at the beginning of this section. It is an excerpt taken from a longer transcript of a second-grade discussion (Eeds & Wells, 1989) about *Me and Neesie* by Eloise Greenfield, a short story of a girl and her imaginary friend. The teacher and students in the class are trying to understand why Neesie, Janell’s imaginary friend, is at school with Janell for the day.

| Austin: | But nobody knew about her but Janell. And how could the teacher put her name down on the thing outside for her to be in the classroom if she didn’t know about her? |
| Ashley: | Well, actually, if only Janell could see her, why would Neesie be in the other classroom if Janell was the only one that could see her? |
| Austin: | But what if she didn’t go to school when Janell did? |
| Beth: | But she did go to school when Janell did. |
Chad: And nobody can see her, only Janell.
Ashley: Yeah, but why would they be in different classes if Janell’s the only one that can see her? Why would she be in a different class?
Austin: I know.
Teacher: I think you’re all agreeing, really, that the question doesn’t make sense.
Justin: But the one who put her in the class can’t see her.
Ashley: Yeah, but just Janell can.
Austin: The teacher wouldn’t know about her.
Justin: I know! She would have snuck in – if she’s invisible.

This transcript portrays a discussion about a text and not a recitation because the students are largely engaged with each other about formulating an understanding of the characters and events in the story. Moreover, the teacher is present but not dominating the talk. This kind of student-to-student interaction pattern is known as an open participation structure (Chinn et al., 2001). The students also take on multiple roles. They vacillate between the roles of facilitators, evaluators, and interrogators as they construct an understanding of why the imaginary friend, Neesie, is in school with Janell and the fictional teacher allows Neesie to attend class for the day. Likewise, they build on each other’s comments and challenge each other’s views in order to make sense of the text. Finally, we see in the above example that the role of the teacher is distinctly and purposefully inconspicuous. The classroom teacher’s only response in this short dialogue positions her as a summarizer of the talk (“I think you’re all agreeing, really, that the question doesn’t make sense.”) instead of the authority and evaluator of the content of the story and the regulator of the topics and turns as is often found in recitations.

Group Discussions and Learning

Researchers who have examined classroom discussions generally agree that dialogue, like the one depicted above, provides cognitive, social, and affective benefits
that relate to learning for both the group and individuals within the group as a result of participating in the discussion (Alvermann et al., 1996; Alamsi, 1995; Alamsi et al., 1996; Chinn et. al, 2001; Echevarria & McDonough, 1995; Eeds & Wells, 1991; Goatley et al., 1995; Pathey-Chavez & Clare, 1996; McKeown, Beck, & Sandora, 1996; Mercer, 2000; Nystrand, 1997; Reznitskaya & Anderson, 2001; 2002; Wheelock, 1999). In comparing recitation with the group discussion instructional framework called Collaborative Reasoning, Chinn et al. (2001) found that fourth-grade students who participated in Collaborative Reasoning discussions about literary texts made more elaborations and predictions of the story during discussion and offered more alternative viewpoints as to what the text suggested than those same students had during recitations. They also concluded that students were more engaged during discussion because their analyses showed students held the floor for longer periods of time, spoke more words per turn, and spoke at a quicker pace than the same students had during recitations.

Similarly, in an empirical investigation of Questioning the Author (QtA), another discussion approach, McKeown et al. (1996) found that the QtA discussion format helped teachers and students ask questions that extended meaning about the text, allowed students to hold the floor for longer periods of time, and encouraged students to ask more questions and talk to each other instead of talking directly to the teacher. Similarly, Echevarria and McDonough (1995) noticed the same kind of interaction patterns between students and teacher in a special education classroom. Students in special education classes who engaged in instructional conversations about text demonstrated increased oral participation and more student to student interaction. Moreover, teacher participants in the study reported that instructional conversations seemed to validate the students'
contributions, and the students seemed to develop a sense of themselves as thinkers and learners, which the authors noted is important for learning-disabled students who are accustomed to struggling in school.

A discussion is interesting and engaging for the participants because it usually involves an idea or concept that is relevant for students (Goldenberg, 1992; Nystrand, 1997; Tharp & Gallimore, 1988). In a qualitative examination of group discussions during language arts in two fourth-grade classrooms, Almasi et al. (1996) investigated student engagement, or the state of deep involvement and commitment, during literature discussions. Following a series of systematic classroom observations followed by teacher and student interviews, they concluded that engagement occurs during a discussion when students are allowed to challenge each other’s comments, question, and evaluate the text’s meaning. They also reported that periods of engagement during discussion clustered around the use of what they called “interpretive tools”; that is, when students were relating the text to their experiences, using the text to confirm or reject their assertions and predictions, and piecing aspects of the text together to formulate hypotheses, there was engagement and increased investment in the discussion, story, and classroom.

After conducting student and teacher interviews following the implementation of a Junior Great Books (JGB) program in four Chicago elementary schools, Wheelock (1999), noted the affective benefits of group discussions. Wheelock reported that there was more student engagement in JGB discussions during the first year of the program’s implementation than before the implementation of JGB in the schools. The reason for
this was expressed in several student interviews. One student participant reported of the JGB program that she liked and participated in discussions because “we can discuss…we can have our own feelings” (p.50).

Students in middle and high school generally perceive classroom discussions about text favorably, demonstrating the affective benefits of discussion (Alvermann et al., 1996). Alvermann and her colleagues used a multiple case study to understand students’ perceptions of how they experience discussions. Analytic induction from field notes, transcripts of interviews and discussions, and detailed site descriptions led the researchers to conclude that students generally enjoyed talking to their peers in both peer-led and teacher-led classroom discussions. However, the students’ interests in the topic of discussion seemed to affect the students’ participation in discussion. Students reported the topic of discussion mattered because it influenced their interest in talking.

Summarizing this perspective, one of the focal students in the study stated, “I guess the discussion depends on the topic; if the topic is boring, you ain’t going to hear nothing” (p. 259). Students across the sites also reported discussion helped them understand what they read, alluding to the cognitive benefits of discussion about text. As one student from the study put it, “discussions help us look at something from a different point of view” (p. 261).

Several studies have demonstrated that group discussions offer opportunities for students to improve individual reasoning skills, illustrating the cognitive benefits of discussions (Anderson et al., 2001; Chinn & Anderson, 1998; Chinn, O’Donnell & Jinks, 2000; Reznitskaya & Anderson, 2002; Reznitskaya, Anderson, McNurlen, Nguyuen, Archodidou, & Kim, 2001). Reznitskaya et al. (2001) used a quasi-experimental study of
fifth-grade students to compare the effects of the discussion approach called Collaborative Reasoning on individual reasoning. Reasoning abilities were measured by the quality of argumentation in student writing. The results indicated that students who participated in the Collaborative Reasoning discussions used significantly more strategies in their writing than did students in the comparison classes. Reznitskaya et al. (2001) concluded that reasoning is fundamentally dialogical, so interaction during discussions promotes individual reasoning abilities. This study is important because it underscores the cognitive benefits of group discussions practices and suggests the possibility of transfer (i.e. what is learned in one context appears in another context) from discussion to independent tasks. In sum, many investigations have demonstrated the cognitive, affective, and social benefits of classroom discussions for students of all ages and ability levels.

*Group Discussions and Literacy Learning*

Discussion practices have been shown to influence reading comprehension in a full range of readers, but with mixed results in terms of student improvement in comprehension skills (Clare, Gallimore & Patthey-Chavez, 1996; Ellis, 1999; Goatley, 1997; Langer, 1995; Nystrand, 1997; Nystrand & Gamoran, 1991; 2003; Raphael & McMahon, 1994; Saunders & Goldenberg, 1999; Strickland, Ganske & Monroe, 2003). Nystrand and Gamoran (1991) found that in dialogically-organized middle-school classrooms, those with an open, co-constructing discussion model, students recalled the texts they had read and they understood their reading in more depth than those students in classrooms that lacked discussion about literary texts.
Similarly, in a quasi-experimental study of 116 fourth- and fifth-grade students in transitional bilingual contexts across four different conditions (group discussion only, literature logs only, basal lessons, and discussions with literature logs), Saunders and Goldenberg (1999) reported that the use of group discussions about text (instructional conversations) impacted student performance on factual and interpretive comprehension measures more than the use of literature logs did on the same comprehension measures.

Saunders, Patthey-Chavez, and Goldenberg (1997) also studied the effects of instructional conversations on 27 fourth-grade transitional bilingual students in a quasi-experimental study comparing student gain scores on traditional comprehension assessments. The students participated in one of two conditions: instructional conversations or basal-style reading comprehension lessons. The researchers also compared several kinds of written responses to questions about the story between the two groups. Results on traditional multiple-choice reading comprehension measures did not indicate that discussion improved the students’ performances on reading comprehension more than the basal-style lesson. Moreover, post-lesson results on a short answer, literal comprehension test indicated that both groups scored about the same, however, analyses of post-lesson essays about friendship, the theme of the lessons, showed that those students in the discussion condition wrote more in-depth and multifaceted essays than those in the basal lesson condition. The authors concluded that the effects of discussion
could be traced to students’ writing, and the variations in the quality of the students’ writing indicated that discussion may have contributed to a richer understanding of the story.

Ellis (1999) characterized teachers’ perspectives about the effects of group discussions on individual reading comprehension. In this mixed-method study investigating the effects of Junior Great Books shared-inquiry discussions of third- and sixth-grade students, Ellis interviewed the teacher participants about the discussions and showed that the teachers believed student comprehension of texts improved because students prepared for discussions with more care; that is, they read and then re-read the texts in order to get ready for the shared-inquiry discussions. Teachers thought it was this kind of careful preparation that supported the students’ reading comprehension.

Echevarria (1995) and Commeyras et al. (1992) studied the effects of discussion on lower-achieving readers in pull-out, homogeneous contexts. Although they did not find evidence that discussion impacted the students’ test scores on reading comprehension measures, they found, through fine-grained analyses of student talk, that the students engaged in critical thinking and academic discourse. Commeyras et al. (1992) suggested lower-achieving students participated during discussion in ways not unlike their higher-achieving peers; that is, they put forth arguments, used text evidence, and were engaged during discussions. In other words, the lower-achieving readers were engaged in a kind high-level thinking about the text that reflected active interaction with the text (Langer, 1995).
In a review of teaching methods in reading that assist struggling readers, Duffy-Hester (1999) pointed out that the Book Club Program (Raphael & McMahon, 1994) is an instructional approach that fosters reading comprehension growth in older, lower-achieving readers. The Book Club program is an integrated approach to literacy instruction that includes study of literature, whole-class discussions, small-group discussions, writing, and direct instruction (McMahaon & Raphael, 1997). The goal of instruction in Book Club is to support students’ response-making and engagement with text in ways that allow students to make connections between the text and their own lives. The rationale is that the ability to make connections between text and self (i.e. a transaction) is a critical element of reading that fosters reading comprehension.

In a study of lower-achieving reading during Book Club instruction, Goatley (1997) used a case-study methodology to examine the participation of three special education students in a fifth-grade, mainstream classroom that implemented the Book Club program for one academic year. Goatley triangulated the fieldwork data sources (e.g., observations, interviews, and written documents) in order to make the assertion that Book Club supported the special education students’ reading comprehension. In particular, transcripts of the group discussions during Book Club showed focal students’ increased their participation in the discussions, and a collection of their response journals and writing assignments demonstrated that their writing became more elaborated (e.g., longer, more detailed) over time. Goatley concluded the exposure to and practice with high-level thinking during discussions and practice in making connections between the text and themselves fostered growth in comprehension for the three focal students. Goatley also claimed that discussion impacted the three special education students’
ability to write elaborated responses. The important aspect of the Goatley (1997) study for the purpose of this investigation was her argument that discussion influenced the writing abilities of students.

There have been several studies that have made similar claims about the effects of discussion on students’ writing (Clare et al., 1996; Chesser, Gellatly & Hale, 1997; Reznitskaya et al., 2001; Saunders et al., 1997). Chesser and colleagues examined aspects of a middle school curriculum in order to explain the school’s high writing achievement test scores compared to other schools in the district. Their analyses led them to conclude that Paideia Seminars (Billings & Fitzgerald, 2002) influenced the school’s writing scores. They speculated the goals of the weekly Paideia discussions (i.e., to provide support and evidence, to give reasons) were parallel to the goals of the state’s writing achievement tests. In their view, Paideia Seminars provided students with rigorous practice in the forms of discourse they were required to display in their writing.

Patthey-Chavez et al., (1996) claimed that instructional conversations develop students’ reading comprehension. They analyzed transcripts from instructional conversation (IC) lessons and student writing about the texts in one class of fourth-grade students. They analyzed transcripts of the discussions and written essays for themes related to the concept of friendship and concluded that students used the discourse of ICs to write about complex, problematic, and moral themes. Patthey-Chavez and colleagues used the concept of “tracers,” or thematic elements of a discussion that students invoked in their writing, to suggest that cognitive activity can be traced “across the boundaries of time and instructional events” (p. 337).
Reznitskaya et al. (2001) used a quasi-experimental study to examine student writing of fifth-grade students in order to show that discussions during reading instruction had an impact on students’ abilities to write persuasive essays. They learned that students who participated in discussions used different argument strategies and used argument strategies more frequently in their writing than did students from non-discussion groups. The findings here suggest that students appropriate more than thematic content from the discussion into their writing.

In concluding this section, I argue that questions remain about the impact of group discussions on intermediate-level, lower-achieving students. Overall, we know from the studies reviewed above that lower-achieving readers, like their higher-achieving peers, exhibit good thinking about text during group discussions. We also know that group discussions, in some cases, facilitate reading comprehension, however, the linkages between lower-achieving readers’ participation in group discussions and the kinds of high-level thinking that demonstrate engagement in strategic reading remain unclear.

Sociocultural Theory: A Theoretical Framework for Understanding the Benefits of Group Discussion

Sociocultural theory is a suitable framework for understanding the benefits of group discussion. Sociocultural theory is a collection of related ideas and themes that explain how people within a social context learn as a result of their participation in and interactions with others in that context. Very broadly, the theory posits that an individual’s thinking and learning are shaped by the historical and cultural elements embedded within social interactions and contexts. Donato (2000) described the central premise of sociocultural theory stating, “human mental functioning is related to the
cultural, institutional, and historical settings in which human action is mediated by tools made available through participation in these contexts” (p. 28). Three interpretations of the theory inform the framework used here and help develop an understanding of lower-achieving readers’ participation in group discussions and appropriation of the discourse during discussions. The three interpretations I use include: a) Vygotsky’s interpretation of language as a primary and mediating aspect of development, b) Bakhtin’s notions of language use in context, and, c) Rogoff’s descriptions of communities of practice and guided participation.

*Vygotsky*

Two key themes from Vygotsky’s work (1962; 1978) are particularly relevant to understanding the literacy learning in group discussions that occur in classroom contexts. The first theme is *higher mental processes in the individual originate in joint activities in social contexts*, and the second is *tools and signs mediate thinking*. Vygotsky was a psychologist, so he used these two themes to explain human development, but educators have used the themes to explain, explore, and describe what takes place between teachers and learners in a classroom (Wells, 2000).

Vygotsky (1962) believed that human development is closely linked to concept formation in the mind, and although he acknowledged that development was partly biological, he contended that concept formation is likewise a result of historical, social, and cultural processes. This reconceptualization of development suggested complex
sociocultural processes influence what takes place in the mind. Simply stated, maturation or growth in one’s thinking occurs as a result of interactions with others in a social context.

Vygotsky characterized the thoughts one creates during social interaction as verbal thoughts, and he hypothesized that the patterns of activity performed during social interaction are transformed by the individual into verbal thoughts or a kind of inner speech that stimulates concept formation and learning (Wertsch, 1985). Extending this, Vygotsky theorized that an individual’s verbal thought is a remnant of what takes place between two planes of interaction in the social context. He referred to these two planes or spaces of human interaction as the *interpsychological plane* and the *intrapsychological plane* (Vygotsky, 1978). According to Vygotsky, it is on the intramental level that verbal thoughts spark concept formation (Wertsch, 1985). Gallimore & Tharp (1990), researchers of group interactions during language arts activities in classroom settings, noted that the conceptualization of two planes of interaction is the core process of learning from a sociocultural perspective. Moreover, this theme of sociocultural theory suggests that much of what we learn is a result of our interactions with others, or as Wertsch summarized, “higher mental functions are internalized social relationships” (1985, p. 66).

This idea is relevant to our examination of group discussion practices. The language of debating, reasoning, questioning, or explaining that is often heard during group discussions creates a rich interpsychological plane of interaction. Any individual who is part of the discussion, then, has the opportunity to appropriate aspects of the interaction and construct his or her own verbal thoughts from that activity. Researchers
have used this theoretical assertion to argue that group discussion discourse affects independent learning (Anderson et al., 2001; McMahon & Raphael, 1987; Mercer, 1998; 2000; 2002; Reznitskaya & Anderson, 1998; 2001).

Mercer (1998, 2000, 2002), a researcher of classroom discourse in the United Kingdom, explored this phenomenon in the context of children’s collaborative talk in peer-group interactions. Mercer (2002) argued that conversations between children who collaborate in group contexts create intermental development zones (IDZs), which are conceptually related to Vygotsky’s conceptualization of the interpsychological plane and zone of proximal development. Mercer described the IDZ as framework that encourages joint activity and allows talk to become a vehicle for co-reasoning or “interthinking” among participants. The co-reasoning, in turn, supports the intrapsychological development of the individual.

Mercer et al. (1998) tested this assertion in quasi-experimental investigations of discussion-based, problem-solving activities, which they referred to as Talk Lessons. Their analyses showed that a child’s abilities to perform on independent problem-solving tasks improved as a result of participating in the Talk Lessons. In short, their investigations provide empirical support for Vygotsky’s theoretical claim that development occurs first in the social context and is then internalized, thus giving way to individual growth in higher-mental functioning.

Vygotsky (1962) described the shift from the social world to the individual as a phenomenon where inner words die as meaning takes shape. Considering this, Mercer’s IDZ becomes a worthwhile notion of what takes place cognitively during group discussions. If children enact a discourse that elicits co-reasoning and high-level thinking
about text within the framework of an IDZ, then participation in that IDZ would indeed ignite the flow of verbal thought, the ultimate epistemic function that inspires individual learning. Furthermore, if this verbal thought is about text and reading comprehension processes, then it is conceivable discussions about text would foster growth in reading comprehension.

Chang-Wells and Wells (1993) used this theme of sociocultural theory to describe how learning takes place during school literacy practices. As a result of analyzing the discourse of classroom talk where children were collaborating, they claimed that interactions between people about texts “provide opportunities for the internalization and subsequent utilization of literate modes of thinking and communicating” (p. 63). Moreover, Chang-Wells and Wells (1993) used their studies to argue that a participant within the social interaction does not “copy” into the mind what a speaker says, but instead attunes or adjusts his own representations of ideas against those of the speaker. This is an important theoretical notion because it suggests participants in a discussion about text have an opportunity to extend their own thinking about reading and text as they listen to what others in the group say about the text.

Students display literate thinking or a kind of thinking that indicates active use of language as an “intentionally controlled tool for thinking and feeling” during discussions (Wells & Chang-Wells, 1992, p. 77). Chang-Wells and Wells (1993) suggested that the knowledge of a literate way of thinking is both propositional (knowing a topic) and procedural (knowing how). An important question to consider at this point is does the public display of procedural knowledge about reading comprehension transfer to an
individual’s reading comprehension process? If so, then this theme of sociocultural theory has important implications for reading development in discussions.

In their review of “thinking aloud,” an instructional strategy that fosters reading comprehension, Kucan and Beck (1997) wrote about this theme of sociocultural theory. Kucan and Beck contend that as students and teachers communicate their understanding of text as they think aloud, it is possible that students construct an understanding of the text and an understanding about the process of making meaning from the text. This perspective posits a powerful explanation for learning in discussions, and is recapitulated by Pontecorvo (1993) who suggested that the “forms of discourse become forms of thinking” (p. 191).

Dewey (1916) wrote, “The development within the young takes place through the intermediary of the environment” (p. 26). The word intermediary is an important one in Dewey’s statement because it evokes the notion of mediation, a second theme of sociocultural theory from Vygotksy’s work (Wertsch, 1998). Wells (1999) and others (e.g., Lantolf, 2000; Moll & Whitmore, 1993; Wertsch, 1995; 1998; Wink & Putney, 2002) have interpreted the concept of mediation as the mechanism that allows learners to make use of new information from the interpsychological plane in order to transform mental functions within the intrapsychological plane.

Wink and Putney (2002) characterized mediation as an individual’s appropriation of tools from the environment, such as an artifact, a word, a system of counting, or a human gesture. Wells (1999) summarized mediation as the use of tools or resources that “are viewed as mediational means for the achievement of collective and individual goals” (p. 138). Individuals appropriate or take up these tools, directing them inward as

Wertsch (1991) argued that Vygotsky’s expansion of his ideas about mediation were cut short by his untimely death, so they are limited in their capacity to explain completely thinking and learning. Wertsch and other neo-Vygotskian theorists have elaborated the fundamental theme of mediation to a more comprehensive concept referred to as semiotic mediation (i.e., sign-based mediation). Wells (1999) argued that language becomes the sign that mediates our thinking and development most often. By their very nature, discussions about texts become an important framework for the classroom in regards to the signs that learners take up as they make meaning about text.

To explicate this idea, I have included an excerpt from a transcript of students talking about a story of a girl and her imaginary friend from Eeds and Wells’ research (1989). Notice how each student turn or utterance connects and builds on the previous turn. In sociocultural terms, each utterance mediates or shapes what the participants think and say about the story.

Austin: But nobody knew about her but Janell. And how could the teacher put her name down on the thing outside for her to be in the classroom if she didn’t know about her?
Ashley: Well, actually, if only Janell could see her, why would Neesie be in the other classroom if Janell was the only one that could see her?
Austin: But what if she didn’t go to school when Janell did?
Beth: But she did go to school when Janell did.
Chad: And nobody can see her, only Janell.
Ashley: Yeah, but why would they be in different classes if Janell’s the only one that can see her? Why would she be in a different class?
Consider the last two turns of the excerpt. Chad notes that “nobody can see her, only Janell,” which is taken up by Ashley, who adds, “but why would they be in different classes if Janell’s the only one that can see her.” The interaction between Chad and Ashley typifies the notion that mental processing is semiotically mediated by language during social interaction. Chad’s words become a tool for Ashley and they influence her thinking about the character in the story, which allows her to respond and build on to Chad’s idea.

In sum, group discussions provide the potential for semiotic mediation to take place. Together, this idea and the others about the relationship between social interaction and individual learning are aspects of sociocultural theory that shed light on thinking about and learning from texts during group discussions. In the next section, I describe Bakhtin’s notions of the relationships between language, dialogue, and thinking as a lens to understanding learning and thinking in group discussions.

*Bakhtin*

The theories and orientation toward language of another Russian language scholar and philosopher, Mikhail Bakhtin, demystifies semiotic mediation to some extent with clear and elegant descriptions of how verbal interaction shapes the understandings and thinking of its participants, contributing another component of the theoretical framework used here. Bakhtin (cited in Nystrand, 1997) put forth the idea that every utterance (i.e., a turn) in a dialogue is connected by what goes on in the minds of the participants. What Bakhtin means here is individuals create utterances based on their understanding of what comes before an utterance and what they anticipate will come after the utterance. In Bakhtin’s words, “utterances are not indifferent to one another, and are not self-
sufficient; they are aware of and mutually reflect one another” (1986, p. 91). In other words, participants “refract” each other’s voices through their own utterances, contributing to what is known as the dialogicality of the discourse (Wertsch, 1991). Dialogic discourse is dialogue that shapes both language and thought (Nystrand, 1997).

Turn-taking, though, is not the measure of dialogism (Nystrand, 1997). Bakhtin (1986) emphasized that in order for a dialogic interaction to manifest, participants in a conversation must feel the tension between themselves and others as they struggle to assert their voices. Using this theme of Bakhtin’s perspective, Nystrand (1997) suggested individuals forge understanding and meaning during group discussion when they make bids for the floor. In order to make this idea concrete, consider the above excerpt of the discussion about children discussing an imaginary friend. The meaning about the status of the imaginary friend was co-constructed between the students because each utterance appeared contingent on the other utterances. The participants’ utterances were linked in that each one was picked up as a tool, appropriated, and then reformulated in order to create the subsequent utterance. For example, Chad spoke; Ashley picked up what Chad said and then elaborated his utterance with her own idea, which will be picked up again by another student in the chain of dialogue. But the other two students, Austin and Beth, took in what their two classmates said and perhaps prepared their own responses; perhaps they were even trying to bid for the floor. We could say the four students were engaged in a dialogic encounter because their thinking was connected and constructed by the threads of their dialogue, which is indeed multi-vocal because the participants prepared or produced unique utterances.
Of these ideas, Bakhtin stated, “When the listener perceives and understands the meaning of speech he simultaneously takes an active, responsive attitude toward it. He either agrees or disagrees with it…augments it, applies it, prepares for its execution, and so on” (1986, p. 68). From a Bakhtinian perspective, discussion is dialogic, or thought-shaping, because in order to put forth an utterance, one must prepare the utterance. It is at the moment a person conceives of what he or she wants to say in his or her mind that meaning is forged. During a discussion, participants are constantly taking in what others say as tools from the environment, preparing what they might say by reconstituting or appropriating the tool as a sign, and then competing for a space in the discussion to share their ideas, and it is this complicated process that is thought-shaping.

Langer (1993; 1995) evoked Bakhtinian perspectives on language in empirical studies in high-school English classes to conclude that when readers discuss what they have read, they use the discourse of the discussion to juggle a range of interpretations from their classmates. For some students, it is this juxtaposition of exploring one’s own thinking while listening to other students’ perspectives that cultivates high-level thinking about text and reading comprehension.

Wertsch (1991) writes about an additional concept from Bakhtin’s theories that make his ideas provocative from a sociocultural view of learning. The concept is known as social language, which Wertsch described as “a way of speaking that is characteristic of a particular group in a particular sociocultural setting” (1991, p. 95). We might say that classroom discourse constitutes a social language, which means that students who have access to this language enact a way of speaking that is characteristic of classroom spaces. Wertsch (1991) contends that enacting a social language has major implications
for an individual’s cognition because it is the nature of a group’s social language that makes the learning a situated and semiotically-mediated endeavor.

James Gee (1996; 1999; 2002) argues when people read, write, or speak they are reading, writing, and speaking a specific form of language that fits specific activities and connects to a specific identity. Currently, you are reading a specific form of academic writing that connects you and me, the writer, in a specific sociocultural activity. We are right now both engaged in a social language (i.e., academic discourse). Either one of us could fail at making meaning of this task if we did not understand the social language through which it is communicated. School and literacy learning, then, according to Gee (2002) and others (e.g., Delpit, 1986), is about learning and being scaffolded to use a social language that involves ways with printed words. The question that evolves here is: are classroom discussions stable enough to consider as a kind of social language, and if they are stable enough, do teachers scaffold lower-achieving readers to learn and use this social language during discussions in order to practice high-level thinking about text?

*Rogoff*

Rogoff’s (1990; 1991; 1996) research about learning events that occur outside of school contexts provides the third theme of sociocultural theory that is relevant to this investigation. Rogoff’s view of learning and development is that people participate in the sociocultural activities of a community (1990), and it is through their participation that people learn. Lave and Wenger (1991) referred to the sociocultural activities of a community as *communities of practice*, and define the concept as a “participation framework” (p. 20) where learning is a result of increased access to participation in
sociocultural activity. In regards to literacy learning, one’s participation in a culturally
defined system of practice (e.g., group discussion) supports literacy learning.

Like Lave and Wenger (1991), Rogoff contends that participation in sociocultural
activity ultimately transforms one’s understandings and roles, which she regards as
*participatory appropriation* (Rogoff, Matusov, & White 1996). Writing of this Rogoff
(1991) noted, “The appropriation perspective views development as a dynamic, active,
mutual process involved in peoples’ participation in cultural activities” (1995; p. 153).
For Rogoff, development occurs as individual participate in sociocultural practices.
Subsequently, an individual’s participation in one context supports the individual’s
thinking in another context. Another claim in Rogoff’s work is that participation in
cultural activities needs to be guided by others in what she calls *guided participation*.

Guided participation often occurs between an adult and a child. The child learns
through the course of participating in problem-solving events, and it is the adult who
provides access between familiar skills and those needed to solve new problems (Rogoff,
1990). Using guided participation as a concept, Gutierrez et al. (1997) suggested that
literacy education should be organized as contexts for learning that lead to full
participation in the literacy learning process.

As a child and adult interact over time, Rogoff contends that an implicit and
mutual understanding in the joint activity evolves (Rogoff, 1995). This mutual
understanding is created through communication and coordination of the learning and
creates a sense of shared, collaborative involvement between participants. The goal of
this shared involvement is referred to as intersubjectivity. Intersubjectivity is “the space
where we connect and create mutual understandings” (Wink & Putney, 2002, p. 124), and it is an aspect of social interaction that supports participation and subsequent learning from the intermental plane.

The Kamehameha Elementary Education Program (KEEP) in Hawaii and California during the 1980s was an example of a school-wide literacy program that made use of ‘guided participation’ within a ‘community of practice’ (Tharp & Gallimore, 1988). One tenet of KEEP was the egalitarian relationships teachers and students created during literacy instruction. For instance, in an activity setting known as Center One, KEEP teachers worked with small groups of students using instructional conversations. The emphasis in instructional conversations is to create “mutual participation by teacher and children in the task” (Tharp & Gallimore, 1988, p. 120). The goal of this interaction, mutual participation, recasts teacher-student interactions from the more traditional toward a community of practice where adults and children work together on joint tasks. The outcome of which are involvement and learning. The KEEP program used this sociocultural approach successfully, assisting many young children with development in literacy.

*An Instructional Framework of Group Discussions that Supports High-level Thinking*

Drawing on the work from a project funded by the US Institute of Education Sciences, *Group Discussions as a Mechanism to Foster High-level Comprehension* (Wilkinson, Soter, & Murphy, 2001), this section describes a recently-developed instructional framework for group discussions that the teacher participants in the present study used in their classrooms.
So far in this review, I have mentioned several group discussion approaches, (e.g., Junior Great Books, Collaborative Reasoning, Instructional Conversation, Book Club). Although the historical roots of these approaches are different, all of the approaches are similar in that several of the same parameters define their frameworks. Many of these parameters were classified by Chinn and colleagues (2001); they include: the nature of literary stance toward text, who has interpretive authority, who has control of topic, and who controls turns for speaking. Other parameters include: who chooses the text, what are the group sizes and arrangement, (i.e., homogeneous or heterogeneous), and is the group teacher-led or peer-led. Together, approximately 13 parameters have been used to define and characterize group discussion frameworks (Wilkinson & Reninger, 2005).

Wilkinson, Soter, and Murphy (2004) reviewed the empirical and non-empirical literature on nine discussion approaches and subsequently characterized the approaches on the 13 parameters. Likewise, they synthesized important details about the nine discussion approaches. Using the original parameters and then adding two more (pre-discussion and post-discussion activities), Wilkinson et al. (2004) created an instructional framework for discussion. The instructional framework is summarized in Figure 1.

Soter, Wilkinson, and Murphy (2005) also reviewed empirical research on discussion and classroom discourse and subsequently identified discourse features that characterized high-quality discussions in terms of students’ learning and comprehension. They argued that particular features of discourse could serve as proximal indices of student learning and high-level thinking since there was good theoretical warrant for believing the features were linked to high-level thinking and good empirical research
demonstrating that connection. According to Soter et al. (2005), nine discourse features
in student talk comprise high-level comprehension. The features include: 
authentic
questions and uptake (Nystrand, 1997), high-level thinking questions (Nystrand, 1997),
elaborated explanations (Webb, 1991), reasoning words (Wegerif & Mercer, 1997),
exploratory talk (Mercer, 2000), and extra-textual connections (affective response, inter-
textual connections, and previously shared knowledge). In effect, these discourse
features provide a kind of discourse framework that promotes an understanding of good,
productive talk about text in terms of high-level comprehension. The discourse features
are summarized in Figure 2 and appended (Appendix A).

Taken together, the discourse features and instructional framework constitute a
model of productive discussions that is intended to promote student learning and high-
level thinking about and around text. The teacher participants in the present study
participated in an intensive, year-long professional development program that supported
an understanding of the discourse and instructional frameworks in order to enhance their
classroom discussion practices about literary texts.
<table>
<thead>
<tr>
<th>Event Description</th>
<th>Value</th>
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</tr>
<tr>
<td>CHOICE OF TEXT:</td>
<td>Teacher</td>
</tr>
<tr>
<td>CONTROL OF TOPIC:</td>
<td>Teacher</td>
</tr>
<tr>
<td>INTERPRETIVE AUTHORITY:</td>
<td>Students</td>
</tr>
<tr>
<td>CONTROL OF TURNS:</td>
<td>Students</td>
</tr>
<tr>
<td>WHOLE CLASS/SMALL GROUP:</td>
<td>Small group</td>
</tr>
<tr>
<td>TEACHER/PEER LED:</td>
<td>Either, but begin with teacher-led</td>
</tr>
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<td>GROUPING BY ABILITY:</td>
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<tr>
<td>READING BEFORE/DURING:</td>
<td>Either</td>
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<tr>
<td>GENRE:</td>
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<td>FOCUS ON AUTHOR INTENT:</td>
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</tr>
<tr>
<td>POST-DISCUSSION ACTIVITY:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Figure 1. An instructional framework of group discussions that guided the teacher participants’ discussion practices in the present study.
Questions (Teachers and/or Students)
- Authentic Questions
- Uptake Questions
- High-level thinking Questions (generalization, analysis, and speculation)

What Productive Questions May Elicit (from Students)
- Affective Response
- Inter-textual Response
- Shared Knowledge Response
- Elaborated Explanations
- Exploratory Talk
- Reasoning Words

Figure 2. Discourse features that promote student learning and high-level thinking.

Conclusion

This review of the literature revealed concepts, theories, and studies that bear on this investigation. First, we know that reading comprehension is a multi-dimensional thinking process that consists of reader, text, activity, and sociocultural factors (RRSG, 2002). We also know that intermediate-level students who are lower-achieving in reading struggle for numerous reasons. Poor instruction and assessment, difficulties with word recognition, poorly developed comprehension strategies, limited vocabulary, low motivation, and a variety of sociocultural factors contribute to reading comprehension difficulties of the thousands of fourth and fifth-grade children in the US. We also know that several instructional approaches, including group discussions, have been used to help these students gain access to and ability to process strategically the texts they encounter.

Regarding the efficacy of discussions, the extant research on group discussions suggests that when given an opportunity to participate in real conversations about text,
intermediate-level students participate in ways that display their abilities to comprehend text. We do not know all we need to know, however, about lower-achieving readers’ discourse in order to take full advantage of the benefits of this approach for these students. What do the discourse features of high-level thinking about text, as proposed by Soter et al. (2005), tell us about the discourse and high-level thinking of lower-achieving readers? Moreover, what are the contextual foundations of the discussions that facilitate the discourse that promotes high-level thinking?

Most of the studies about group discussions and lower-achieving readers conducted thus far have been short in duration, lasting anywhere from a couple of days to a few months, and they have been quasi-experimental in design. Prolonged engagement (6-7 months or three-quarters of the school year) within a multiple case-study design will contribute details about classroom discussion practices and lower-achieving readers’ display of high-level thinking that could not be assessed in shorter investigations or investigations that use quasi-experimental frameworks. Likewise, central aspects of the ways in which students and teachers create a discourse community have been under-discussed in the field (Allington, 2002). How do the teachers create spaces for meaningful discussions? How do they encourage students to engage in discussions?

Further, the instructional contexts of the few longer-term, qualitative examinations of lower-achieving readers during group discussions have been similar in that they have examined these readers in pull-out contexts. The pull-out context is not necessarily flawed, but the frequency with which this context has been investigated is a concern. The reality for classroom teachers is that most lower-achieving readers at the intermediate grade levels participate in the regular classroom for reading instruction.
CHAPTER 3

METHODOLOGY

“Ultimately, the value and purpose of research in an applied field is to improve the quality of practice of that discipline” (Merriam & Simpson, 1995, p. 7).

This chapter is organized in four sections. In the first section, I describe the research design. In the second section, I describe the two sites and participants of the study. I then describe my role as the researcher and my ethical commitments to the participants. In the last section, I describe the data collection, analysis strategies, and trustworthiness criteria. All names throughout the dissertation are pseudonyms. In addition, throughout the dissertation, I refer to segments of the data with abbreviations (e.g., T {transcript}, N {Northview}, 12/3/05 {date collected}).

Research Design

A multiple case study design (Yin, 1989) was used for this investigation because the goals were to describe the discourse of a particular group of students (i.e., lower-achieving readers) within the context of group discussions about text. Yin (1989) characterized a case study as a method of inquiry that investigates a phenomenon within its real-life context. Stake (2000) described the major characteristic of a case study as a
unit around which there are boundaries. Lower-achieving readers comprised the primary unit of analysis in this study, and discussion practices as conceived by the two teachers and student participants comprised the secondary unit of analysis.

Yin (1989) argued that multiple case study designs employ replication logic, which means outcomes from a collection of individual cases elicit an understanding about a general phenomenon or entity. Stake (2000) referred to the “joint study of a number of cases in order to investigate a phenomenon, population, or general condition” (p. 437) as a collective case study. As such, the present investigation is a multiple case study or a collective case study of eight lower-achieving readers. The underlying assumption in collective case study research is the notion that deeper understanding of several students will lead to better, albeit partial, understanding and theorizing about a larger collection of cases (Stake, 2000).

During fieldwork, the eight lower-achieving readers were routinely embedded in multiple discussion and classroom contexts, so the observations of the readers in these contexts necessitated a secondary unit of analysis – discussion practices. Often in case study designs, an understanding of something other than the original cases develops through the process of enquiry (Stake, 2000). Stake (2000) suggested the cases (i.e., lower-achieving readers in this study) provide opportunities to study a second entity or interest. Yin (1989) claimed that these secondary interests are embedded features within the cases. As such, the persistent focus on the lower-achieving readers’ participation and discourse in discussions shed light on discussion practices generally, including what
happened when lower-achieving readers, their peers, and their teacher engaged in group discussions about text. Discussion practices and events became the embedded features in the cases of the lower-achieving readers.

The three research questions required an array of data sources in order to describe lower-achieving readers’ high-level thinking and comprehension in discussions, so I integrated both quantitative and qualitative ways of knowing into the case design. I observed participants, collected documents, recorded classroom discussions with audio and visual equipment, and conducted semi-structured and ongoing, informal interviews. As such, I elicited descriptive data that informed the first research question (‘what happens when participants engage in group discussions) and the third research question (‘do lower-achieving readers appropriate features of discourse and use them in their writing’). In addition, the videotaped and audiotaped discussions elicited descriptive data that were largely quantitative in nature, informing the second research question (‘to what extent do lower-achieving readers display high-level thinking about text’). To examine these data, I analyzed 22 full-length transcripts of discussions from the classrooms, using a coding framework to identify discourse features in participants’ talk that indicated high-level thinking about text (adapted from Soter, Rudge, Wilkinson, & Murphy, 2005) (Appendix A).

My dominant approach to understanding the cases was largely interpretive, which means I committed to learning about the cases via the participants’ perspectives. Bakhtin (cited in Nystrand, 1997) wrote, “truth is not born nor is it to be found…it is born between people collectively searching for truth, in the process of their dialogic action” (p. 25). I consider my interpretive approach to be dialogic in nature. Together, words from
the participants and my own language were used to express the findings about the contexts, creating meaning about lower-achieving readers’ participation and high-level thinking in group discussions. Moreover, I filtered the participants’ perspectives and words through my experiences as a former intermediate-level classroom teacher, a teacher educator, and researcher. My professional interest in teaching and learning processes also influenced the fieldwork and subsequent interpretations of the fieldwork.

**Description of Sites and Participants**

The case studies took place in two intermediate-level classrooms, one fourth- and one fifth-grade, in different schools within two diverse public school districts between October and May of the 2005-2006 academic year. The fifth-grade class was part of Westlake Intermediate School, which is one of five intermediate schools (grades 5 and 6) in a large district that is located in a metropolitan area of over one million residents. The district serves students in suburban and urban communities. Westlake Intermediate opened in 2001 and is a modern two-story, red brick and glass building surrounded by expansive, park-like grounds. The school is situated approximately one-half mile from the center of a mostly middle-class, suburban community of approximately 30,000 residents. When looking at the neighborhood that surrounds the school, one sees many newer two-story homes on quarter-acre to half-acre, landscaped yards. At the time of the study, Westlake’s student enrollment was 618 students and there were approximately 50 teachers, 20 support staff professionals, and two administrators that worked in the school. All of Westlake’s teachers had the appropriate licenses to teach their respective grade levels and subject areas at the time of the study.
Regarding the student body at Westlake Intermediate School, approximately 92% of the students were White, and 8% of them were Black. Approximately 5% of the students were English language learners. Nearly 38% of the students participated in the federal free/reduced lunch program, and nearly 13% of the students had identified learning disabilities. In regards to Westlake students’ achievement in reading, almost 72% of the fifth-grade students performed at or above a proficient level in reading during the 2004-2005 academic year.

The fourth-grade class was from Northview Elementary School, which is one of five elementary school buildings (pre-K – 4) in a medium-size school district located in a small city of approximately 25,000 residents. The district also serves students in adjacent semi-rural communities. Northview Elementary opened in 1913, but was completely renovated in the late 1990s. The school is located at the heart of one of the city’s oldest neighborhoods. One hundred years ago the city’s railroad station and several sets of railroad tracks criss-crossed the center of the neighborhood. Today, the old buildings around the rail station, which has since been converted to a flower nursery, consist of a laundromat, a convenient store, several bars, a pet groomer, and a bakery. The neighborhood comprises predominantly Caucasian residents from both middle-class and working-class backgrounds. A blend of older, modest clapboard single-family homes and duplexes with small yards and mature trees characterize the housing in the neighborhood, and on the east edge of the neighborhood is a large trailer park. Busy streets surround Northview Elementary, so a high chain-link fence protects a small, paved playground in the front of the building. Another small yard and play area at the back of the building are also protected by a high, chain-link fence.
Almost 300 students attended Northview Elementary School during the time of the study. Nearly 95% of them were White. At the time of the study, there were no English language learners. Twenty-nine percent of students participated in the government’s free/reduced lunch program, and roughly 13% of the students had identified learning disabilities. At the time of the study, there were no English language learners at Northview. In regards to reading achievement, almost 73% of fourth-grade students achieved at or above the proficient level in reading during the 2004-2005 school year. There were 21 teachers, nine educational support staff professionals, eight administrative support personnel, and one principal working at Northview at the time of the study. All of Northview’s teachers had the appropriate licenses to teach their respective grade levels and subject areas.

Westlake Intermediate and Northview Elementary were selected as research sites because of my work as a graduate assistant and discourse coach for a federally-funded research project, *Group Discussions as a Mechanism for Promoting High-Level Comprehension of Text* (Wilkinson, Soter, & Murphy, 2001). One component of this project was a professional development course that convened several times throughout the 2004-2005 school year for 16 intermediate-level teachers from several school districts in the region. At the final professional development session in May 2005, I informed the teachers of my upcoming dissertation project and my interest in learning more about lower-achieving readers and their participation in group discussions, implying that I would be interested in working in one or more of the teachers’ classrooms during the subsequent school year. Not knowing what kind of interest the teachers would have with
a second year-long project and me, I invited all the teachers from the project to contact me if they were interested in working with me for the purposes of the dissertation project.

Within approximately one week after the final professional development session, eight of the 16 teachers, two literacy support specialists and six regular classroom teachers, enquired about my dissertation and volunteered to work with me. As the teachers contacted me, I informed them of my intent to study classroom discussions and lower-achieving readers’ participation in those discussions during an entire school year. The teachers seemed attracted to the inquiry because of their interests in discussion practices and lower-achieving readers. All eight teachers invited me into their classrooms the following school year for the purposes of my dissertation project.

From those initial volunteers, I selected two teachers, Mrs. Lara Reinhart (4\textsuperscript{th}-grade) from Northview Elementary School and Mrs. Diane Pearson (5\textsuperscript{th}-grade) from Westlake Intermediate School, for several reasons. First, Mrs. Pearson and Mrs. Reinhart demonstrated exemplary facilitation of group discussions during the 2004-2005 group discussion and professional development study. As participants in the professional development study they received ongoing, individualized professional learning experiences with a ‘discourse coach’ approximately 10 times during the school year, supporting their pedagogical understanding of group discussion practices. They also attended a graduate-level course at a large university aimed at providing the teachers with theoretical and philosophical perspectives about classroom discourse and group discussions. Likewise, both teachers integrated discussions into most areas of the school curriculum, and they anticipated they would each have three or four lower-achieving readers in their classes during the 2005-2006 school year. Finally, as a discourse coach
during the professional development study, I had formed professional and collegial relationships with Mrs. Reinhart and Mrs. Pearson. I later learned Mrs. Pearson and Mrs. Reinhart each had 20 years of teaching experience in primary and intermediate grades at the time of the study, and they both had earned master’s degrees in education. Moreover, Mrs. Pearson and Mrs. Reinhart had been recognized and honored for their commendable teaching practices. Mrs. Reinhart received a local teaching award from her district in 2004, and Mrs. Pearson received National Board Certification in 2003.

Mrs. Reinhart was the fourth-grade teacher from Northview Elementary School. Mrs. Reinhart had 18-21 students in her classroom (three students moved out of the school’s neighborhood during the year). Six girls and 12 boys comprised the class of 18 students for most of the year. Five of the 18 students (four boys and one girl) were lower-achieving readers. Mrs. Pearson was the fifth-grade teacher from Westlake Intermediate School. There were three lower-achieving readers (one boy and two girls) in her class of 24 or 25 students (one student moved mid-year).

In all, there were 42 student participants who returned signed consent and assent forms, eight of whom were focal students, and two teacher participants in the study. The focal students (i.e., lower-achieving readers) were selected based on the following criteria. First, I identified a standard score from the previous year’s state achievement test in reading that was below 410 (a score of 400 is considered passing, but a score between 400 and 409 is considered too low at both school districts). Second, I identified a score on an informal reading inventory assessment, as in the Developmental Reading Assessment (DRA) (Beaver & Carter, 2002), that indicated a below grade-level score based on tests of comprehension, fluency, and word reading rate (e.g., less than a level P
coming into fourth-grade on the DRA), and third, I queried the teachers’ judgment of the assessment scores. In September 2005, I asked the teachers to review the assessment scores and tell me the extent to which they agreed with those scores based on their work with and observations of the students. Complete descriptions of the focal students, their reading assessment scores, and Mrs. Pearson’s fifth-grade and Mrs. Reinhart’s fourth-grade classes comprise the next chapter.

I met with Mrs. Pearson and Mrs. Reinhart separately in June 2005 to negotiate access to their classrooms and to discuss the nature of my participant observation in their classrooms. At those meetings, both teachers invited me to observe all aspects of their teaching and discussion practices any time during the weeks and days of the forthcoming academic year. They also agreed to conduct discussions about literary texts once per week, but we anticipated that holidays, illnesses, or changes to the school’s schedule would preclude weekly discussions. Indeed, two or three unforeseen events did prevent the teachers from facilitating discussions every week of the school year (e.g., Mrs. Pearson had jury duty for two weeks in October). We decided that I would visit each classroom once per week for approximately two hours at a time during mainly language arts instruction, but I would be able to return during the week, if necessary (e.g., if a second discussion was planned for the week).

In September 2005, I organized and conducted two class meetings for all the students in each of the two classrooms. At the meetings, I described the project as a research study that would help me learn from teachers and students about discussions in the classroom. I informed the students I would take notes, talk to individual students and their teacher, conduct interviews, collect and copy student writing, and record discussions
with video and audio recording equipment. I informed the students of the assent and consent forms that they and their parents needed to sign. I also mentioned that I had been a teacher in New York before moving to Ohio and becoming a student at the university.

*Ethical Considerations*

All students from the two classrooms were invited to participate in the study. However, the eight lower-achieving readers were focal students for the multiple-case study. Student participation was voluntary and appropriate informed assent from students and consent from parents were obtained. Students and parents knew they could withdraw or withdraw their children from participation in the study at any time. Of the 43 students in the two classes, 42 students and their parents returned signed forms and participated during the entire study, including the eight focal students. All student participants in the study participated in classroom discussions, were audio and video recorded during discussions, provided me with samples of their writing that I photocopied, and participated in ongoing and semi-structured interviews with me throughout the year. Teacher participants were audio and video recorded and participated in ongoing, informal interviews. Both teachers returned signed consent forms. To assure confidentiality and privacy of the participants, one master list of participants was kept in a secure and private location. As interviews and recordings were transcribed, pseudonyms were assigned and maintained throughout the study. All data were stored, whether as hard copies or computer files, in a secure office.

An ethical priority for me and the teachers was to keep the identities of the focal students confidential. Before beginning the study, I had separate conversations with Mrs. Reinhart and Mrs. Pearson about the focus on the lower-achieving readers, and at this,
they both communicated strong feelings about keeping the identities of these students private. Both teachers argued that students who traditionally struggle in school are sensitive to having labels affixed to their learning abilities, and considering all of the focal students already had labels given to them from the school (e.g., “remedial reader,” “at-risk reader,” “speech student”) an additional label such as “focal student” did not seem appropriate to Mrs. Reinhart, Mrs. Pearson, or me. Hence, the students, other students in the building, and other teachers knew of the larger intention of the study, which was an enquiry in the classrooms to observe, record, and ask questions of all the participants in order to learn more about discussion practices in the intermediate grades, but the students did not know about my focus on lower-achieving readers.

Researcher’s Role

The research design, data collection strategies, and ethical considerations for what was best for the students in terms of their learning and the classroom teachers in terms of their work style defined my role as a researcher. Because I had already worked with Mrs. Pearson and Mrs. Reinhart during the 2004-2005 school year, my initial and primary goals were to establish rapport and productive relationships with the 42 student participants in the two classes. As a former classroom teacher, I drew on my experience and success with working with intermediate-level students in public school contexts to help me establish these relationships and rapport. In this section, I describe the nature of my work and role with the students first and then describe the role that characterized my work and relationships with Mrs. Pearson and Mrs. Reinhart.

My relationship with the students was not completely teacher-like, nor was I their friend (although I was always friendly during my visits). Furthermore, I was unlike other
adult visitors to the classroom (e.g., parent volunteers, tutors, aides). If resembling anyone, the students initially saw me as someone who seemed like a student teacher because I was attending Ohio State and they were accustomed to student teachers from Ohio State, but I sounded different (I was generally quiet when I observed) and I did different things (e.g., sat and wrote notes, set up or took apart recording equipment). Not completely like anyone with whom the students were familiar, the students and I were able to create a unique role for me.

Looking back at my role and positionality in the classrooms, I characterize it in the following way. I was a part-time member of the classroom community who cared about the students and teachers, but at the same time I avoided acting like a teacher, even suggesting to students they refer to me as ‘Kristin’ instead of ‘Mrs. Reninger’ (although many students preferred the more formal mode of address). From the first days of fieldwork to the end of the study, I avoided making judgments, evaluations, corrections, or those otherwise teacher-like statements that would have positioned me as another “teacher” in the classroom. Yet, the student participants knew I was an adult who had relationships with their teachers, they knew my purposes for coming to their classrooms (e.g., I had several class meetings to remind students of my goals and to give them opportunities to ask me questions), and they occasionally watched me as I helped students in the classroom. Evidence of this unique role with the students became clearer when, at different times in the year, many students invited me to interact with them in places teachers typically did not participate.

At Westlake Intermediate, for example, one focal student and two non-focal students (all girls) invited me to sit at the “fish table” with them during lunch period in
the cafeteria. Students earned a seat at the fish table, a large table covered with painted fish shapes, by demonstrating friendship to others, and it was a place of privilege for many students. On learning about my invitations (I had several throughout the year) to eat lunch at the fish table, Mrs. Pearson mentioned that it was uncommon for teachers to be invited to sit there. At Northview, several focal and non-focal students (both girls and boys) invited me to stay and play chess and Chinese checkers during indoor recess, activities I did not observe Mrs. Reinhart doing. When the weather was warm, students from Northview sometimes asked me to stay during outdoor recess and play kickball, which I did several times during the year. Invitations from students to do activities that teachers did not normally do indicated that my role with the students was characterized by our mutual respect for and interest in each other’s activities while at school.

With that said, however, there were times this role needed to shift when, during my observations, I noticed the occasional student who needed help or redirection. Mrs. Reinhart and Mrs. Pearson also invited me into classroom conversations and interactions as a “teacher-like” person (e.g., to offer input about a previous discussion). When I behaved more like a teacher, I generally assisted students in need. The following excerpt from field notes illustrates this behavior:

While the class was munching on snack and reading quietly, I partner-read with Troy [non-focal student] for about 15 minutes to help him catch up from being absent for the last two days” (FN-N, 12/5/05).

I was mindful of how my actions affected the research context and careful about affecting discussion practices, but I was unwilling to idly watch students who needed a
helping-hand when I could quietly walk to their seats, offer assistance, and return to the side of the room. The following occurred at Westlake on February 14, 2006 and characterizes a shift in my role:

I stopped observing [independent work time] for a few minutes because I noticed that John was having trouble with his social studies assignment. His head was in his hands and he was pulling at his hair -- tensely. I walked over to his desk and asked if needed “another opinion” about the questions. He said ‘yes,’ so I pulled a chair close to his desk and scaffolded him through the first couple of questions on the worksheet. He seemed relieved that I had helped him; the stress just dissipated. [I later told Mrs. Pearson that I helped John with some of his assignment, and at this, she responded positively.] (FN-W, 2/14/06).

The stance I took here fostered relationships built on trust and respect, which I believe affected the extent to which students wanted to talk with me, interact with me, talk in front of a video camera during discussions, and act “normally” when I was in the room. Overall, I believe my role with the students gave me access to becoming a member of the classroom community as a “trusted person” (Glesne, 1999).

Although I believe Mrs. Pearson and Mrs. Reinhart also trusted me, my role was different with them than the role I had established with the student participants. Mrs. Reinhart and Mrs. Pearson had expectations of and assumptions about me as a professional colleague (i.e., as a former professional development coach), and this shaped my role as researcher with them. They saw me as an expert in the areas of discussion and reading instruction, and they knew I had extensive classroom teaching experience. I explained to both of them at meetings in June and September 2005 that my role would be different than the one we had created together during the previous study, and even though
I described my primary role in their classrooms as largely an observer and recorder of discussions, we still occasionally reflected together about the students’ discussions, behaving more like colleagues.

Mrs. Reinhart and Mrs. Pearson, for reasons related to their professional growth or their genuine curiosity, asked me what I was learning or what I thought about the discussions in the classes. A typical example of this occurred January 12, 2006 when Mrs. Pearson asked me, “Do you think there are enough ‘elaborated explanations’ in the discussions?” (FN-W, 1/12/06). I responded to Mrs. Pearson’s enquiry honestly. I told her I did not have an answer to the question, but I could look at several transcripts of other discussions from a related study to count how many ‘elaborated explanations’ they had (later that day I sent her an e-mail message with what I found). Generally, I struggled with these kinds of questions from the teachers, knowing that my input could affect their discussion practices. I worked hard at creating a balance between being honest with Mrs. Reinhart and Mrs. Pearson and remaining neutral toward their work around reading and discussion practices. In my view, Mrs. Pearson and Mrs. Reinhart were experts at discussion and reading instruction in their own rights and they did not need my input.

When I was in the classrooms, there were times that Mrs. Reinhart and Mrs. Pearson invited me to act like a colleague, doing things that teachers normally do in classrooms. For the most part, the teachers asked me to step into the role of fellow teacher for practical reasons. For example, on December 13, 2005 the following occurred at Westlake:

Mrs. Pearson was setting up a video of a discussion to show the class and to debrief about. All the students were sitting at their desks, waiting for the video to
begin. Mrs. Pearson was called out of the room to talk with a parent volunteer just as she was about to start, so she asked me if I could get things going. I said, ‘sure,’ and gave an introduction to the video viewing [to the class] (FN, 12/13/05).

Other times, I volunteered to be more like a teacher because I believed it was the right thing to do. For example, the following occurred on October 26, 2005 in Mrs. Reinhart’s class:

At 2:45, the class packed up to go home for the day and then reconvened at the center carpet for read-aloud. I picked up *Ruby Holler* [the read-aloud book], sat down on the carpet, and began reading (Mrs. Reinhart had a bad cold today, so thought I would help out). I read until dismissal at 3:10 (FN, 10/26/05).

Finally, in Mrs. Reinhart’s classroom, there was a fourth reason for participating as a teacher might participate. At the beginning of the study, I sensed that Mrs. Reinhart was uneasy about my presence in the classroom, persistently worrying about my evaluation of her teaching even though I avoided making judgments of her work or class. I felt her discomfort in the comments she made to me as she passed by the table where I sat for observations (e.g., “I hope you don’t write that down.”), and I subsequently learned that she was nervous when colleagues from Northview visited her room. An entry from my field log and journal illustrates this observation:

Mrs. Reinhart seemed very nervous to have the new principal and the literacy support specialist visit her room this week. I asked her if she didn’t want them in her room and she said to me, ‘it’s okay [if they visit] as long as I’m not being evaluated; (pause) I don’t like worrying about what others think of my teaching as I’m teaching.’ I got the sense that Mrs. Reinhart felt the same about me, as long as I was not evaluating her work, I was welcome (FL/J, 10/12/05).

As a result of these perceptions of her feelings, there were several times early in the school year that I intentionally participated as a fellow teacher in order to establish myself as a participant who worked alongside Mrs. Reinhart. I believed my participation
as a teacher could show Mrs. Reinhart my own fallibility, which would help belie notions that I was in the room to evaluate her teaching. To this end, following a period of classroom observation during my field work, I took extra time to assist with a reading group, read aloud to the class, lead another discussion group, or help individual students during writing workshops or partner reading (I did this mostly with focal students to help me get to know them as readers and writers better). By December, Mrs. Reinhart seemed more comfortable with my observations and my role, so I participated less and observed more in her class, and from that point through May, I participated as a “teacher” in her class only a few more times.

In sum, I characterize my role with the teachers as such: I was a colleague, but one who observed more of their teaching, listened more to their perspectives, and thanked them more than most colleagues get a chance to do. I gave advice, but sparingly, and only when asked. Some might consider the advice I gave as pointers or reminders about what we had experienced together in the previous 2004-2005 professional development study. I resisted giving input that would have fundamentally altered the course of their discussion or reading practices, although I suspect, that my pointers may have influenced their discussion practices in small ways. It is important to note here that Mrs. Reinhart and Mrs. Pearson planned every aspect of the discussion events that I observed and recorded, including the goals for the discussions, text selections, pre- and post-discussion activities, group arrangements, frameworks, questions, follow-up activities, and assessments.
Data Sources and Methods of Data Collection

Participant observation and field notes.

Wolcott (1995) wrote the following about participant observation, “Do not believe for a minute that there is any such thing as ‘just observing’” (p. 96), which means to me that the person observing a context affects and shapes the context just by being present, so the inclusion of the word ‘participant’ in front of ‘observer’ is more honest. Spradley (1980) described the method as one where there is observation of activities, settings, and people within those settings and participation or engagement in appropriate activities of the context. My dominant stance in the classrooms was ‘observer participant,’ but as mentioned earlier, I also became a participant observer when the teachers invited me into the class conversations or interactions, when I chose to participate for ethical reasons, and when my participation helped build relationships with the students. Bogdevic (1999), writing about fieldwork, stated that “moving about the [participant-observer] continuum is necessary” (p. 56). Reflecting on participant observation as a fieldwork technique, I am convinced teachers, focal students, and non-focal students talked with me and shared their perspectives about the discussions, showed interest in my work, and generally became invested participants because, at times, I participated in the life of the classroom. My goal with using this fieldwork technique was to establish accurate descriptions of focal students and discussion practices in the two classrooms in order to acquire a new way of thinking about discussions and lower-achieving readers as participants in those discussions.
Ongoing participant observation took place once per week in each of the two classrooms for approximately two hours each visit during mainly language arts instruction, but also during social studies and science lessons. Group discussions also took place during times I was not in the classroom, but for the two teachers in this study, a lengthy group discussion (30 minutes) about literary texts took place once per week when I was present in the classrooms. During the observations of discussions, I watched attentively the students’ interactions and the focal students’ participation and interactions with students and the teacher. I also tried to note any body language from focal students, their peers, and the teachers. I did not transcribe the content of the discussions while making notes because I was almost always recording them for review at a later time. These observations took place between October 5, 2005 and May 5, 2006.

In keeping with a sociocultural approach to understanding discussion practices, I looked beyond the discussion events, defined here as specific times when students and teacher engaged in discourse that was epistemologically constructivist in purpose (Nystrand, 1997), and observed other parts of the teachers’ language arts instruction (e.g., guided reading lessons, writing workshops, spelling lessons). The focus during language arts instruction was on the focal students’ work habits, their interactions with others, and their observable reading and writing habits and behaviors.

In all, I observed classroom discussions and language arts instruction in each of the classroom settings for nearly 29 consecutive weeks (the figure here includes a break in December, a week off for the Ohio Achievement Tests in March, and a week off for spring break), or 52 days, which generated 93 hours of participant observations (FL/J, 10/5/05 – 5/5/05). I also observed classroom discussions during social studies lessons on
five different days (three times in the fifth-grade class and twice in the fourth-grade class) and discussions during science lessons on four occasions in the fourth-grade classroom. Each week, the teachers told me the day(s) they had planned discussions for the following week so I could plan my schedule accordingly.

I produced field notes of all my participant observation work, typed them in a word processing program, and then imported them into NVivo 2 (QSR International, 2002), a software program for qualitative data organization and analysis. While in the classrooms, I carried a notebook and a binder of double-entry log paper with me at all times so I could write descriptive notes (notes with low-level abstraction), quotations, transcriptions of talk, and important ideas to expand and elaborate after my time in the field. Almost always, I expanded the notes within 24 hours of my time in the field (FL/J, 10/5/05-5/5/06), elaborating the descriptive and analytic notes and creating narrative vignettes of classroom activities (Erikson, 1986). While observing, I also sketched scenes of the classrooms and group arrangements during discussions in order to document discussion events and to help me later visualize the setting. Most two-hour observations generated 4-5 single-spaced, typed pages of elaborated notes. In all, I typed 156 single-spaced pages of elaborated field notes, and I sketched 13 classroom scenes on notebook paper. I have appended an example of a page from my field notes (Appendix B).

*Interviews.*

I conducted a formal, semi-structured interview with all of the student participants took place during April 2006 in order to illuminate the students’ views on their participation in more than 30 different peer-led and teacher-led discussions. I chose to
conduct these semi-structured interviews in focal group arrangements of three students per group in order to expedite the interview process and limit the time students were out of the classrooms. In all, I conducted 14 such interviews with the students. These interviews lasted approximately 20-30 minutes and were audiorecorded and later indexed, which means that as I listened to the recordings of the discussions, I typed key words and phrases in a word document, noting the speakers and summarizing the content of their turns for every one to two minute time intervals. I later transcribed five of the interviews that included focal students and imported the transcriptions of these interviews into NVivo 2 for storage and later retrieval. I also imported into NVivo 2 the interview indexes from the other interviews. The semi-structured interview protocol is appended (Appendix C).

Many informal interviews took place throughout the year with teachers and students as questions emerged from observations and other data sources or at times when the participants’ perspectives would help me understand observations, field notes, or transcripts better. These informal interviews had a conversational quality and lasted between a few minutes and 30 minutes. Informal interviews with teachers took place during times when the teachers initiated a conversation with me (e.g., in the hall as I was walking into the building) or times when I had specific questions for them (e.g., after or before school). With students, the informal interviews took place before classes, between classes, or at the end of the day when students packed up to go home. My approach to initiating informal interviews is summarized in the following example: In the fifth-grade class I asked a focal student who had just finished participating in a discussion [he had not said anything during the discussion], ‘What did you like about the discussion?’ (FN,
3/14/06). He responded to the question, we chatted about it, and then I walked to my field work binder and wrote as much as I could remember about our brief interaction. I integrated notes about and quotations from these kinds of interviews directly into my field notes.

**Discussions.**

I personally audio or video recorded 62 peer-led and teacher-led discussions from the two sites, 36 of those discussions were recorded in the fourth-grade classroom and 26 were recorded in the fifth-grade classroom. I lent Mrs. Reinhart and Mrs. Pearson audio recording equipment in case there were discussions they wanted to capture when I was not in their rooms. On their own, the two teachers recorded an additional 15 discussions, which they saved for me. Several of the audio recordings the teachers made were difficult to hear, so I did not include them in the data corpus. In total, there were 70 audio and video recorded discussions in the data corpus (38 from the fourth-grade and 32 from the fifth-grade). Most of the discussions were audio recorded with a hand-held digital recorder and microphone attachment. The recordings were downloaded into a PC and converted to wave files. Eight of the discussions were video recorded (two in Mrs. Reinhart’s class and six in Mrs. Pearson’s class) with a microphone attachment and then later digitized onto CD-ROMs using Macintosh’s iMovie software. I video-recorded fewer discussions in Mrs. Reinhart’s classroom because she preferred I record with the less-obtrusive audio recorder, whereas Mrs. Pearson requested that all participants in the study be video-recorded at least once during the year. These preferences reflected the teachers’ discussion practices and teaching styles.
Most of the 70 discussions included the focal students, although several discussions were recorded without focal student participation because of the composition of the groups. From Mrs. Pearson’s fifth-grade class, I recorded roughly an equal mix of discussions from whole-class, small-group homogeneous (in terms of reading level), and small-group heterogeneous group arrangements. From Mrs. Reinhart’s fourth-grade class, I recorded very few whole-class discussions and roughly an equal number of small-group homogeneous and heterogeneous groups. Mrs. Pearson considered 4-5 students as a small-group and Mrs. Reinhart considered 4-8 students as a small-group. Likewise, almost all of the discussions in Mrs. Reinhart’s class were teacher-led, whereas in Mrs. Pearson’s class a mix of teacher-led and peer-led discussions was recorded. These differences also reflect the teachers’ preferences, discussion practices, and teaching styles. The recordings ranged in length from approximately 10 to 45 minutes, but most discussions were 20-35 minutes in length.

I indexed 50 discussions. I chose to index the 50 discussions of a more typical length (i.e., 20-35 minutes) and ones where at least one focal student participated. I chose to do a deeper analysis of many of those discussions, transcribing the talk from three small-group, homogeneous group discussions (in terms of reading level), three small-group, heterogeneous group discussions, and two whole-class discussions of which each of the focal students participated.

Several factors influenced my decision to transcribe the discussions I did. Focal students did not always participate in the same discussion events, so I made sure I transcribed three homogeneous groups, three heterogeneous groups, and two whole-class discussions from each of the classrooms and in which each of the focal students
participated. Likewise, I intentionally chose to transcribe discussions that were between 20-35 minutes long, representing the typical length for discussions about text in the two classrooms. Of the discussions that were a more typical length, I chose to transcribe those of which I understood in more detail. There were times I arrived in the classrooms and I had just enough time to set up the recording equipment and get myself settled to observe before discussions began. At other times, I arrived in the classrooms in time to observe the events leading up to the discussions, the pre-discussion activities, and post-discussion activities and other follow-up work related to the discussions. In short, I aimed to transcribe typical discussions of which I understood the details about the ways the discussions related to the broader reading-language arts instructional context.

In total, with the help of two master’s level graduate students, we transcribed 22 discussions (7 video recorded and 15 audio recorded). I spent roughly one hour training the two graduate students to transcribe classroom discussions with consistent transcription conventions (Appendix D). Regardless of the transcriber (including myself), I reviewed and edited all transcripts for accuracy in content of the talk and transcription at least once. The goal was to produce a verbatim transcription of the turns with accurate identification of the speakers. I defined a turn as any utterance that contained a complete sentence, a clause, or a partial phrase (e.g., “I do not agree with that,” “I think,” “But wait a-”). Most transcripts were 12-14 single-spaced pages in length.

Overall, the completeness of the transcripts reflected the excellent quality of the recordings and thoroughness of the transcribers, but, in places, several audio recordings were difficult to hear because of background noises, so some speakers could not be
identified and some of the speakers’ turns were incompletely transcribed. Missing
information in the transcripts is a limitation in the study, but after reviewing the
transcripts, I found that ‘unidentified speaker’ turns accounted for a small percentage of
the total number of turns. In fact, in a random sample of roughly 20% of the audio-
recorded transcripts (n=2), I found that ‘unidentified speaker’ turns accounted for an
average of 8.24% of the total number of turns in the transcript. A typical discussion (20-
35 minutes long) generates approximately 250-350 turns. Identifying students in the
videotaped discussions was easier and almost always generated 100% accuracy in
identification of the speakers. I imported the 22 transcripts and 50 indices into NVivo for
storage and later retrieval and analysis.

Post-discussion reflections.

Part of Mrs. Pearson’s discussion practice was to play back segments of the audio
and video recorded discussions to the class in order to generate a reflective discussion
about the processes of talking in a small, peer-led group arrangement. Mrs. Pearson
generally framed these follow-up discussions to the students as ‘identify what was
working or not working’ in the discussion groups. Mrs. Pearson and I referred to these
sessions as “debriefings.” I audio recorded six debriefing sessions. They became an
invaluable source of information about the students’ perspectives on the content and
process of group discussion as a language arts practice. I listened to the six debriefing
sessions and typed notes about them, storing these notes in NVivo.

Writing Assignments.

I collected and made photocopies of the following three kinds of writing
assignments from the eight focal students: a) writing assignments that were related to
discussions (e.g., pre and post-discussion writing assignments); b) writing assignments that were related to the state’s reading or writing achievement tests (e.g., assignments modeled on the achievement tests); and c) writing assignments that were practice assessments for the state’s reading and writing achievement tests. Generally, I collected and photocopied 1-2 writing assignments per student from the two classrooms each month. These collections yielded approximately 100 pages of text over a seven-month period.

I chose to photocopy these writing assignments because previous research has shown intermediate-level students appropriate the topic of discussions (e.g., Clare and et al., 1996) and a schema for argumentation (e.g., Anderson et al., 2001) developed during discussions and apply them in their classroom writing tasks. I believed collecting the writing assignments about the discussions in the present study would build on the previous research and help answer the third research question related to the appropriation of features of discussion discourse in writing events. I chose to collect writing assignments related to high-stakes testing because many of the intermediate-level assessments in the state require students to write a claim and support the claim with evidence from the text, which was the same genre of discourse that Mrs. Pearson and Mrs. Reinhart wanted students to develop in discussions (i.e., state a claim and give reasons and evidence from the text to support the claim).

Both teachers incorporated reading response journals into their reading instruction. For the most part, students used the journals to respond informally to texts, and the teachers did not assess the writing in the journals (although they did sometimes read them). I read the focal students’ journals at least monthly in the two classrooms in
order to understand the students’ writing styles and their ongoing thoughts about reading and the texts of the classroom. I photocopied some of the focal students’ journal entries, thinking some entries might help me reconstruct what I had learned about their writing or reading.

Much of the photocopying was done at the schools, so I typically returned the documents to the students within the same day. Within a day or two of fieldwork, I wrote notes about the writing assignments in order to remind myself of their purposes, contexts, and other details (FL/J, 10/5/05-5/5/06). I attached my hand-written notes to the assignments and cataloged and stored them.

Field Log and Journal.

I started the study keeping a journal in a word file in my computer where I wrote about my ideas, concerns, questions, and subjectivity. The entries contained “think pieces” about possible and ongoing interpretations of my observations from the field. I also reflected on my subjectivity and biases, noting what or whom I was seeing or not seeing, asking or not asking, and doing or not doing. The field log was a table of dates, times, and brief descriptions of all my activities in the field and from my office where I reflected on the fieldwork. In December, I combined the journal and field log into one document because I thought it was easier to write in my field log about the day’s events and then write a reflective piece about those events. After combining the journal and field log the document consisted of 12 single-spaced, typed pages. I imported the journal and field log into NVivo 2 for storage and later retrieval.
Copies of assessments and assessment scores.

I collected several copies of reading and writing assessments the teachers used in the classes and copies of the students’ assessment scores in reading and writing throughout the school year. I stored these assessments and score sheets in my field work binder for later reference. Table 1 is a summary of the data corpus.

<table>
<thead>
<tr>
<th>Data</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Notes</td>
<td>93 hours of participant observation comprise the 156 typed, single-spaced pages of field notes</td>
</tr>
<tr>
<td>Semi-structure, focal group interview</td>
<td>14, 20-30-minute interviews with groups of 3 students</td>
</tr>
<tr>
<td>Recorded discussions</td>
<td>38 fourth-grade and 32 fifth-grade discussions</td>
</tr>
<tr>
<td>Post-discussion reflections</td>
<td>6 fifth-grade post-discussion reflections</td>
</tr>
<tr>
<td>Writing assignments</td>
<td>Approximately 100 pages of focal student writing.</td>
</tr>
<tr>
<td>Field log and journal</td>
<td>12 typed, single-spaced pages of text</td>
</tr>
<tr>
<td>Copies of assessments and assessment</td>
<td>Approximately 6 different assessments and several pages of assessment scores from each of the two classrooms</td>
</tr>
</tbody>
</table>

Table 1. Summary of Data Corpus

Data Storage and Management

As mentioned, I used, NVivo 2 (QSR International, 2002), a qualitative data analysis software program to help me manage the data corpus. The benefits of using NVivo 2 in the data collection and analysis phases of this study included but were not limited to the following features. I stored and easily retrieved all forms of data, including
typed field notes, transcripts, indices, my journal and field log, and other reflective memos. I coded all of the forms of data that were imported into the program, and I searched the data corpus for all instances of data that shared a particular code (or did not share a code). Moreover, the software allowed me to employ Boolean logic in order to identify multiple and overlapping codes, and it gave me an ability to search for and store instances of the co-occurrence of these codes, which facilitated the establishment of key linkages between data sources.

Data Analysis

One perspective that guided my analysis of the qualitative data was a belief that analysis is a recursive process that co-occurs with data collection and continues throughout and after the data collection time frame (Glesne & Pehskin, 1992). This kind of recursive process allowed me to shape the study as it proceeded. For example, I routinely read and reflected on sets of field notes or discussion transcripts from my weekly fieldwork in the classrooms. Reading and re-reading the data elicited emerging ideas or thoughts about the focal students or discussion practices that I wanted to monitor in future observations or upcoming conversations with the teachers and students. When I say ‘monitor’ I mean I kept a “careful eye” attentive to aspects of the emerging idea during my visits to the classrooms. Following a day or two in the schools, I returned to my office to read sets of notes and transcripts in order to make sense of what I had learned in relation to the emerging idea. To illustrate this process, consider the following example. Early in the study (October 2005) while reflecting on my field notes, I noticed that I was recognizing patterns in the ways focal and non-focal students engaged in discussions. I labeled and described these patterns in my journal as “always engaged,”
“inconsistently engaged,” and “rarely engaged” (FLJ, 10/25/05). I used these early labels during my observations of discussions as a lens, placing a careful eye on discussion events, and specifically, the times when, the places where, and the students who exhibited the kinds of engagement I characterized in my journal. I also asked teachers about their perceptions of student engagement during discussions in informal interviews, and I asked students about their ‘like’ or ‘dislike’ for particular topics in the discussions. This kind of teetering between thinking about the field and the actual fieldwork characterizes the back-and-forth movement between data collection and analysis that facilitates the emergent nature of ideas and themes in qualitative work, and it is this aspect of qualitative work that unearths local, situated meanings, which are essential aspects of interpretivism (Wolcott, 1995).

Likewise, analyses that flank data collection, as in the above example, contributed to the trustworthiness of the findings. A recursive loop between fieldwork and reflections on that fieldwork allow a researcher to interpret the data while she is a member of the context, and this gives her an important opportunity to check and re-check, establish, and re-establish, refine, clarify, and negotiate categories of meaning from not only her own view but also the participants’ points of view. This kind of approach to data analysis is a powerful means of creating rigor and credibility within an interpretive study, and one in which I capitalized throughout the study.

I made sense of the data and posited inferences about the data through a process called analytic induction, which is the reasoning process that generates empirically-based assertions about data (Erickson, 1986). Of analytic induction and interpretive work, Erickson wrote, “One basic task of data analysis is to generate [empirical] assertions,
largely through induction” (p. 146). Drawing on the thoughts of Erickson, my assertion-making process, or the practice of inferring important concepts about the data, consisted of the following activities. At different time points in the study, I read the entire data corpus. At the end of the study, I also read and re-read the entire data corpus. This reading and re-reading revealed patterns across the hundreds of pages of text, and as I noted these patterns, I labeled or coded sections of the data accordingly (e.g., ‘ground rules for discussion,’ ‘pre-discussion activity,’ ‘reading process,’ ‘lower-achieving readers’ participation,’ ‘transformations in thinking’). I stored the coded sections of these data in nodes or place holders within NVivo 2 for later retrieval. This process of reading and early coding gave me insight and eventual confidence in making assertions about the data. After making those assertions, I reexamined and re-read the data, looking for evidentiary warrants in the data or the fragments of data that justified the assertions.

To help me with the search for and organization of evidentiary warrants, I created large poster-like displays, which helped me visualize this analytic work. I wrote the assertion at the top of the poster and then searched for evidence in the data corpus that would support the assertion. As I re-read the data and noticed fragments of data that supported the claim, I referenced the fragment with an abbreviation (e.g., FN-W, 4/23/06) on the poster. At the end of this process, the poster looked like a large semantic web or graphic organizer. Erickson (1988) described the links between analogous examples of the same phenomenon as key linkages or the analytic construct that strings data together and builds plausibility in the assertions and eventual interpretations, which is another way to think about triangulation of data sources.
As the search for evidence intensified, early codes were refined, merged, renamed or deleted as I generated a fine-grained analysis. Furthermore, searching the corpus for evidence allowed me to notice disconfirming evidence and negative cases (Erickson, 1986), which helped refine the early codes and assertions. For example, one of the early assertions I made was, “student enactments of ground rules in discussion foster high-level thinking.” Additional reading of the data and searching for evidence in the corpus, however, allowed me to notice the instances when students did not follow the ground rules, yet the discussions still generated large amounts of high-level thinking from the lower-achieving readers (disconfirming evidence). This evidence elicited a reexamination of the data and more thinking and reasoning, which then helped me to refine the original assertion, qualifying a particular ground rule the students seemed to follow in the discussions where there were high quantities of high-level thinking. Simply stated, the process of searching for evidentiary warrants helped me reframe, rewrite, or throw out assertions that were simply not plausible and codes that simply did not work. The perspectives I share here provide an overall approach that I used to make sense of most of the data. Other strategies about how I analyzed specific data sources are described in the next two sections.

*Analysis of field notes, interview transcripts and indices, field log/journal, writing assignments, and discussion transcripts and indices.*

The use of field work methods generated data that helped me make sense of lower-achieving readers’ and their teachers’ perspectives about discussion events and practices. They helped me describe the ways in which the participants engaged in group discussions, and they helped me interpret the ways in which discussion influenced the
multiple school literacy practices of lower-achieving readers. I read, re-read, and reflected on the data corpus throughout the year of the study, coding all data sources in order to reduce the data, note patterns in the data, build larger categories of meaning, and render linkages between categories and codes. Coding is the process of defining and describing units of analyses (Strauss & Corbin, 1994). Of coding, Glesne and Peshkin (1992) wrote, “Coding is a progressive process of sorting and defining and defining and sorting those scraps of collected data” (p. 133). I drew on my knowledge of theories of learning, discussion, reading comprehension, critical literacy, and related fields to help me define and sort the data (e.g., one of my codes was ‘reading process’). With that said, however, there were times theory did not inform the coding, but the data informed the codes. Put another way, some codes and categories emerged from patterns in the data (e.g., the code I labeled ‘infrastructure for discussion’).

The coding process I used is referred to as ‘open coding,’ and it is a technique that stems from grounded theory analysis (Strauss & Corbin, 1994). The tactic of open coding is to read and re-read the data corpus in order to locate patterns in the data and compare these patterns in order to make assertions about the phenomena (Erickson, 1986). Early in the year, I read the data corpus several times and established four or five codes (e.g., ‘students make analogies in discussions’) and wrote about them in NVivo 2 using the tools of the software as a code book. Over time, the number of codes doubled and then doubled again as the data corpus grew and as I read and reflected on the data throughout the year. In May 2005, I had established 77 codes. These initial codes became the foundation for my early assertions, which I then used to search the data corpus for evidence to warrant those claims. This searching process generated new
categories or logical groupings of codes called ‘code clumps’ (Glesne & Peshkin, 1992). Toward the middle of this process, I had merged, cut, or renamed the 77 codes, retaining 44 codes and creating 11 larger categories. Figure 3 shows a screen shot from NVivo 2 of an organizational structure that shows several categories and codes from about this stage in the analysis process.

I also wrote personal reflections about the data in memos. These memos consisted of my thoughts and questions about the codes and potential assertions and evidentiary warrants that I noticed as I read and wrote about the data corpus. Corbin (1986) noted that categories are discovered during memo writing, so I wrote dozens of memos about the data in word documents and added those documents to NVivo 2 and a data analysis binder after many analysis sessions. I noted through the continued scrutiny of the data and the reflecting and memo-writing process, the categories and codes that were linked together.

The use of data displays (e.g., taxonomies, conceptual drawings, contingency tables, frequency tables) also helped me during this phase of analysis. Displays gave me a visual sense of the codes, categories, and themes that developed during my analytic induction work and open coding. Furthermore, the displays provided graphic representations of the relationships between codes and categories, assisting me in the sense-making and assertion-making processes. For example, I created several taxonomies, one of which is appended in Appendix E.
My analysis of the discourse of group discussions enabled me to make sense of the ways the students and teachers constructed meaning, using discourse as a tool for thinking and learning. To this end, I read and coded the transcripts of the discussions in two ways, employing two ways of thinking about the discourse. As noted in the previous section, I used an inductive process, coding the 22 full-length discussion transcripts as I

Figure 3. Screen shot from NVivo 2.

Analysis of transcripts from audio and videorecorded discussions.

Of classroom dialogue about texts, Palincsar and David (1991) wrote, “[dialogues in classrooms] can serve as a window on the verbal thought in which children are engaged as they attempt to understand text, providing unique diagnostic opportunities (p. 127).” My analysis of the discourse of group discussions enabled me to make sense of the ways the students and teachers constructed meaning, using discourse as a tool for thinking and learning. To this end, I read and coded the transcripts of the discussions in two ways, employing two ways of thinking about the discourse. As noted in the previous section, I used an inductive process, coding the 22 full-length discussion transcripts as I
had other data sources. I read and re-read the transcripts, noting similar kinds of patterns that I had coded in the field notes and other data sources, and I noticed emerging patterns that seemed to be unique to the transcripts. Drawing on the analysis techniques for classroom discourse from Mercer (1995), I coded speech acts (e.g., challenge, request), the topics students discussed (e.g., family, friends, pets), the nature of interactions between participants, and my perceptions of what the participants valued as they talked. I stored sections of the coded transcripts in place holders or nodes NVivo 2 for later retrieval and linkage-making.

In addition to this inductive analysis technique, I adapted Soter, Rudge, Wilkinson and Murphy’s (2005) discourse coding scheme to analyze the nature of students’ thinking during discussions as manifest in student talk. Soter et al. (2005) studied research from the group discussion literature, gleaning from these studies the features of classroom discourse (e.g., intertextual connections) that other investigators had validated empirically, or endorsed from widely-accepted theoretical perspectives, as indicators of high-level thinking. They used these features to create a coding scheme that consists of nine discourse features that index high-level comprehension (Soter, Wilkinson, Murphy, Rudge, & Reninger, 2006). These features reflect three dimensions of talk during discussions (see Table 2): a) the kinds of questions students ask (and teacher, if teacher-led discussion), b) the kinds of responses students make, and c) the kind of reasoning students employ.
<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Discourse Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTIONS</td>
<td>1. <strong>Authentic Questions</strong>: Teacher or student asks a genuine question that has no known answer or offers multiple ways in which to answer.</td>
</tr>
<tr>
<td></td>
<td>2. <strong>Uptake</strong>: Teacher (sometimes the student) asks a follow-up question to a previous student response, incorporating a part of what was said previously into the follow-up question.</td>
</tr>
<tr>
<td>RESPONSES</td>
<td>3. <strong>Generalization/Analysis</strong>: Student response shows evidence that the student has tied aspects of the story, background knowledge, etc. together (generalization) or has broken ideas from the story down (analysis).</td>
</tr>
<tr>
<td></td>
<td>4. <strong>Speculation</strong>: Student response shows evidence that the student hypothesized or speculated about an aspect of the text.</td>
</tr>
<tr>
<td></td>
<td>5. <strong>Inter-textual connections</strong>: Student response shows evidence that the student connected the current topic of the discussion or text to another text (e.g., media, art, print).</td>
</tr>
<tr>
<td></td>
<td>6. <strong>Affective connections</strong>: Student response shows evidence that the student connected the current topic of the discussion or text to his or her feelings or personal experiences.</td>
</tr>
<tr>
<td></td>
<td>7. <strong>Shared-knowledge response</strong>: Student response shows evidence that the student connected the topic of the discussion or text to a previous discussion, topic in the classroom, or knowledge the students have shared.</td>
</tr>
<tr>
<td>REASONING</td>
<td>8. <strong>Elaborated Explanations (individual reasoning)</strong>: Student response shows evidence that the student explained his or her thinking in a coherent form. The turn comprises a claim and at least two reasons or a combination of reasons and evidence from the text that support the claim.</td>
</tr>
<tr>
<td></td>
<td>9. <strong>Exploratory Talk (collective reasoning)</strong>: Several students (and sometimes with the teacher) in the group talk to each other in order. Students share relevant information, challenge each other’s ideas, provide reasons for their ideas, and provide alternative ideas.</td>
</tr>
</tbody>
</table>

Table 2. Dimensions and Discourse Features that Indicate High-level Comprehension
I adapted the Soter et al. (2005) scheme in three ways for my own analysis. First, I coded individual turns. Soter et al. (2005) coded question events, defined as question-answer exchanges, to determine the overall productivity of the discussions. However, the aim of the present study was to characterize the students’ talk, so I needed to code individual turns rather than question events. In addition, I did not code instances of uptake as in the original coding scheme. Uptake is usually an intentional move on the part of the teacher to create space for student participation (Nystrand, 1997). In student talk, I determined instances of uptake were subsumed under the feature ‘authentic questions’ -- if a student asked follow-up questions, those questions were also ‘authentic.’ Hence, in my judgment, coding instances of uptake would not provide further information beyond that provided by the coding of authentic questions. Third, I added a code for ‘reference to text’ to the original coding scheme. Anderson et al. (2001) noted that a student’s move to refer to the text to bolster a claim or an argument (e.g., I think Fern is a good friend because in the book it said…) in a discussion is an argument stratagem, or a feature of reasoning, that invites others to consider a situation from the perspective of the text. In my view, in order for students to use specific events or quotations from the text as a tool to reason, they need to generalize and analyze the discussion topics and text events in order to generate their own original ideas that include explicit references to the text. Examples of this are found in talk when a student says something such as “I agree because in the story it said [summarizes text details],” or “No, because it said that [reads a section of text].”

In all, I coded nine discourse features: authentic questions, speculation, generalization/analysis, affective responses, intertextual responses, shared knowledge
responses, references to text, elaborated explanations, and exploratory talk. In my view, the nine discourse features that I used in the analysis of the discourse reflect the students’ high-level thinking during discussions. Although students may display high-level thinking in other ways, the features of discourse as described here situate the analyses of discourse in theoretically-sound and empirically-justified constructs.

I did not code aborted turns or those turns where the speaker faded out (e.g., “I think”…), interrupted turns unless the words before the interruption reflected a complete thought or idea (e.g., “I think that it’s wrong ‘cause” --), or overlapping turns (i.e., where students spoke at the same time). I read each turn of the transcript and in a top-down fashion, I labeled or coded the turns when appropriate, identifying each turn in relation to a discourse feature or features that indicated high-level thinking. For instances of exploratory talk, I coded many turns together in the transcripts because exploratory talk consists of several students reasoning together about the text or topic of discussion that relates to the text.

An example of my application of the above-described coding scheme is presented in Table 3. Table 3 comprises an excerpt of a transcript from Mrs. Pearson’s fifth-grade classroom, and it illustrates the way I analyzed the discourse of the students, and moreover, is representative of the way I analyzed the other 21 discussion transcripts from the two classrooms. The excerpt is from a fifth-grade, heterogeneous and small-group discussion about the novel, *The Giver*, by Lois Lowry. At the beginning of the discussion, Mrs. Pearson posed the authentic question, “What does Jonas mean by ‘We really have to protect people from wrong choices?’” Notice the way I analyzed each student turn within the discussion using the features that indicate high-level thinking.
Table 3. An Excerpt of a Coded Transcript

This kind of coding generated an analysis of the discourse that portrayed the focal students’ responses in discussions in terms of their engagement in high-level thinking about the texts (i.e., they went beyond the literal details of the story). I calculated the frequencies of these features in the lower-achieving readers’ discourse and their peers’ discourse in order to describe the way in which and the extent to which lower-achieving readers engaged in and displayed the features of high-level comprehension about text. I examined the features as distinct elements of the students’ discourse, so I sometimes refer to the features as ‘indicators’ of high-level thinking because the use of each feature in talk suggests the student has gone “beyond the given” (Resnick, 1987) about text.
Using this scheme presupposes the following: a) the analysis of discourse coding scheme consists of key features of student talk that reflect high-level thinking, b) it is possible to identify the features reliably, and c) the features are stable elements of discourse, so it is possible to use them as a mechanism to characterize the thinking that underlies student talk. A second expert analyst of the discourse of discussions coded a 20% random sample of the 22 transcripts to gauge the reliability of my coding. I calculated percent agreement for codes on all codable turns in the sample of transcripts for the nine discourse features. The percent-agreements were: authentic questions, 86%; generalization/analysis, 77%; speculation, 72%; affective responses, 100%; intertextual connections, 88%; shared knowledge connections, 100%; references to text, 83%; elaborated explanations, 98%; and exploratory talk, 91%.

Establishing Trustworthy Findings

Becker (1969, cited in Atkinson, Coffey & Delmont, 2003) posed a serious tension with qualitative analysis, the dominant analysis style used in the present study, creating uncertainty about the findings for readers of qualitative reports today. He wrote of the issue, “Faced with such a quantity of ‘rich’ but varied data, the researcher faces the problem of how to analyze it systematically and then to present his conclusions so as to convince other scientists of their validity [sic]” (p. 246). In stating this, Becker challenges researchers who situate themselves in an interpretive or other post-positivist paradigm to consider and to explain the ways they make the analysis process with qualitative data visible, credible, and trustworthy. Moreover, Lincoln and Guba (1985) defined the concept of trustworthiness in naturalistic enquiries as a demonstration of the researcher’s systematic analysis within a study in order to show readers that the findings
are “worth taking account of” (p. 290). Trustworthiness criteria in the study ensure ‘credibility,’ ‘dependability,’ and ‘confirmability’ in the findings (Lincoln & Guba, 1985). The ways researchers ensure trustworthiness include, but are not limited to, triangulation of data sources and methods, demonstration of time spent in the field to show prolonged engagement, negative case analyses, alertness to my own subjectivity, and member checks or data audits.

In the present study, I established trustworthy findings by persistent observation and prolonged engagement. As mentioned earlier, I was part of the classroom environments for nearly 30 weeks of the school year (except for a few school holidays and a break for testing). I observed and recorded discussions during every week of the study (with the exception of two weeks in Mrs. Pearson’s class because of her jury duty), acquiring over 60 hours of recorded discussions. I listened to all of the recorded discussions, indexed most of them, and transcribed 22 of them. Fieldwork allowed me to witness how the two classrooms’ discussion practices unfolded, evolved, and became significant for the participants over a substantial amount of time.

Prolonged engagement also gave me an opportunity to create and collect multiple data sources (e.g., multiple interviews, multiple transcripts), which I then triangulated during the analysis phase of the project. This means I used different data sources to show the same phenomena. As mentioned, I scoured the data corpus for evidence that warranted the assertions I had made about lower-achieving readers and discussion practices. I noted the fragments of data from multiple sources on data displays, illustrating the way in which I triangulated the data. The process of triangulation creates credible findings in a study where fieldwork methods dominate the methodology.
During the process of triangulation, an analyst finds negative cases or disconfirming evidence. These negative cases are not obstacles, but opportunities to add richness, depth, and credibility to eventual findings. As I searched for evidentiary warrants to support the assertions I made (Erickson 1986), I noted cases and sections of data that disconfirmed patterns I thought I was seeing in the data, and on noticing these cases, I refined and improved the inferences I had already made. Lincoln and Guba (1985) refer to this trustworthiness safeguard as a “process of revising hypotheses with hindsight” (p. 309).

Another procedure to assure trustworthy findings is to solicit confirmation from the participants of the study about the researcher’s ongoing interpretations as a form of member checking (Lincoln & Guba, 1985). Several times throughout the year, I gave the teachers copies of discussion transcripts, copies of the videotaped discussions, and some sections of field notes so they could get a sense of how their classrooms appeared on paper and on video. When I provided these data, I usually said something as in, ‘I just want you to have a copy of this, so you can see if it is the way you saw it.’ Mrs. Pearson and Mrs. Reinhart accepted the data, but rarely responded to me about the data because, in my opinion, their work schedules were demanding of their time and I did not directly ask for their comments or review. When they did respond, their comments were positive ones. For example, after briefly reviewing a discussion transcript, Mrs. Pearson commented, “When I read this, it seemed better than I thought it was.” (FN-W, 12/10/06). I think the few remarks from the teachers about the data signified their trust in
my work because if Mrs. Pearson or Mrs. Reinhart had been concerned about the ways their classes were represented, they would likely have reviewed more of the data I had provided or made more comments to me.

At times, I also asked the teachers about early patterns in the data I had been noticing, asking them more directly for their explanations and interpretations. As such, I asked Mrs. Pearson and Mrs. Reinhart specific questions as in “Did I get this right?” or “Do you see it this way?” or “How would you explain this?” I did not ask them about all patterns or ideas, but if I was puzzled about something, I asked. Consider an example of this member checking procedure from my field notes at Northview Elementary. In Mrs. Reinhart’s class, I noticed one of the focal students repeated verbatim what others said during the discussions, and he did so frequently (FN 2/15/06). This had become a pattern, and I was curious and puzzled about it. I subsequently e-mailed a section of one of the discussion transcripts to Mrs. Reinhart where the student seemed to repeat what his classmates had said, and I asked her in the e-mail message if she thought the focal student repeated what others had said, and if so, did she have ideas about why he repeated the ideas of other students. She replied to my enquiry in an e-mail message with her ideas about the transcript, and I saved a printed copy of the e-mail message along with the day’s field notes where I wrote about that observation and emerging pattern. She had agreed that the focal student repeated what other students said and interpreted this situation “as a signal that he is listening.” She went on to write, “but I notice that other kids and myself don’t let him elaborate either like they do Jasmine or Matthew.”

A critical part of trustworthiness is what we have learned from the postmodern critique of naïve realism. In essence, how do I ensure trustworthy findings in light of the
fact that my subjectivity impacts the interpretations? How does my subjectivity affect
data collection and analysis? How does my involvement in the classroom shape the
research? Harry Wolcott (1995) in the *Art of Fieldwork* reminds fieldworkers that there
will always be “blind spots” during observations, and as such, encourages us to “turn
attention back on ourselves to see what it is we are attending to and why our attention has
been drawn that way” (p. 96). My tactic in avoiding unchecked subjectivity was this: I
challenged myself to believe that blind spots existed, and I considered the ways I created
those blind spots. For example, after reviewing the data corpus in January 2006, I typed
a question at the top of a clean page in my field log and journal (FL/J, 1/25/06). The
question asked, “Why am I not seeing Elena in the classroom?” I wrote this question
because the review of the data corpus at that point helped me see one of the blind spots I
had unconsciously created.

Glesne and Peshkin (1992) suggested to the new researcher that “how one
pursues subjectivity matters less than that one pursues it.” (p. 106). To this end, I
reflected and wrote in my field log and journal about what it meant to me to be a ‘human
instrument.’ Specifically, I problematized the categories that evolved from the coding
process, and I considered my assumptions about codes, themes, and assertions. I
searched for my biases and persistently asked how my biases played out in the field work
and analysis. Generally, my empathy for the work of the teacher became a prevailing
bias in my work. In reviewing field notes, I realized there were days when I had
observed more of the teachers’ interactions with students than the focal students’
interactions during discussions. I worked hard to keep the field work focused on lower-
achieving readers and discussion practices even though I was drawn to observe the
teaching practices. I also had preconceptions about lower-achieving readers and discussions as a result of my participation in a previous study. Simply, I believed lower-achieving readers could participate in discussions in high-level ways.

In concluding this section, I share a belief. The research questions and ethical commitments to the participants shaped the research design, which in turn, established a set of data collection techniques. My experiences as a teacher and teacher educator and my perspectives on data analysis guided the way in which I made sense of the data. Together, these characteristics of my work as an enquirer made me fully realize the potential of research in the natural settings of school spaces. The findings in the next two chapters extend from this belief and perspective. In the next chapter I shall describe the two classroom contexts, describing the fourth-grade classroom first, and the eight focal student participants from the two sites. In chapter 5, I shall discuss the findings as they relate to and illuminate the specific research questions. Chapter 6 is the conclusion, and largely, the place I discuss the implications of the findings.
CHAPTER 4

THE STUDENTS AND THEIR CLASSROOMS

“Unless university-based researchers attend to how knowledge is shaped by the context in which teachers and students work, there is little hope of bridging the gap between theory and practice (Alvermann, 1999, p. 136).

This chapter is divided into two sections. The first describes the fourth-grade classroom, its literacy practices, discussion practices, and five focal students from that class, and the second describes the fifth-grade classroom, its literacy practices, discussion practices, and the three focal students from that classroom. The primary purpose of this chapter is to describe representative examples of the work I observed the teachers and students doing in their classrooms related to this investigation. These examples will provide a backdrop on which to consider the findings directly related to the three research questions, which are presented and discussed in the next chapter. The secondary purpose of this chapter is to describe the eight focal students in detail as students, readers, and writers in Mrs. Reinhart’s and Mrs. Pearson’s classrooms.
I heard students’ footsteps and whispers in the hallway as they approached the classroom door. “Ben, Elena, please stop at the door,” Mrs. Reinhart called out. She walked to the front of the student lines and said in a hushed voice, “Okay, when you go into the classroom, start thinking about reading and writing. Put your things away and meet me at the center carpet.” Some students entered the room quietly whereas others entered the room finishing their conversations from the hallway or the lunchroom. The room quickly became filled with the sounds of fourth-graders: children’s voices, sneakers scuffing the carpet, seatbacks of metal chairs clanging on table edges as students swiftly pushed them in, and zippers of backpacks opening and closing as lunch bags were hurriedly put away. Mrs. Reinhart’s voice rose above the din, “Okay, if you’re not yet at the center carpet, you have five seconds to get there.” Several students started counting down from five. “Five, four, three, two, one,” they announced. Within the few seconds, all 18 children sat down on the center carpet, forming a misshapen circle. It was 12:50 in the afternoon. The language arts or literacy block lasted until 3:00.

Mrs. Reinhart sat down on the carpet and began to organize the students with several directions. She talked about the goals for the three different reading groups, the writing assignment, the word study activity, independent reading, and the social studies timelines that students must work on throughout the afternoon. These assignments and goals were written on the blackboard. Most students appeared attentive to the directions, and at Mrs. Reinhart’s request, some students repeated the directions, some students asked questions (e.g., “what if we have our narrative stories done?”), and others began to
shuffle their bodies back and forth on the carpet as they anticipated the next chance to move to their tables where they sit in small clusters of 4 to 5 students for independent work. The language arts block was about to begin.

Mrs. Reinhart started every afternoon in a way similar to what I described above, bringing the students together as a group, hearing the goals for the afternoon, and asking and answering questions about the language arts block. Overall, most students in Mrs. Reinhart’s class seemed to understand the expectations for the language arts block, and with few exceptions, the students worked well, that is consistently and with few distractions, during the roughly 30 language arts blocks that I observed (FL/J). The language arts block or literacy block is a name for a fairly common practice and way of organizing literacy instruction in many intermediate-level classrooms in North American schools. It follows a workshop-style format where the teacher organizes a work period called a ‘block’ that includes various and simultaneous literacy activities (e.g., reading, writing, word study). These work periods are flexible and evolve based on the pace of work and needs of the students. During each literacy block, Mrs. Reinhart typically facilitated 2-3 (generally 3) different reading groups for a total of 80-90 minutes and then reserved the last 30-40 minutes of the 130-minute block for writing workshop, read-alouds, mini-lessons related to word work and reading, or a group discussion. Group discussions also took place during the reading groups.

Following the district’s reading instruction guidelines, Mrs. Reinhart used a guided reading model (Fountas & Pinnell, 1996) to organize small groups of 4-8 students into homogeneous groups, based on reading achievement scores, for the core of the students’ reading instruction. To determine the composition of the groups, Mrs. Reinhart
used instructional time in September to determine the students’ reading levels, strengths, and difficulties. She administered the Developmental Reading Assessment (DRA) (Beaver & Carter, 2002), an informal reading inventory, to all the students to determine independent and instructional reading levels and then consulted with Northview’s literacy specialist about the scores before forming the instructional groups. Mrs. Reinhart re-administered the DRA in January and April and supplemented these assessments with monthly running records of most students’ oral reading performances. Mrs. Reinhart’s ongoing assessments created flexible groupings, giving students the opportunities to work with and practice literacy with different students throughout the year. In addition to small-group, guided reading instruction, Mrs. Reinhart also facilitated whole-class reading instruction where all students shared the same text (e.g., short-story, chapter book) and Mrs. Reinhart read the text aloud or the students read in partners or independently before commencing discussion or other instruction.

Mrs. Reinhart chose the chapter books for the reading groups and added to these literary texts many short-stories, folktales, fables, poems, and magazine articles. A complete list of chapter books from Mrs. Reinhart’s whole-class and small-group reading instruction is organized in Table 4 in the order of their use in the classroom. The next narrative describes a typical reading group lesson with students who had the lowest scores on reading assessments.
<table>
<thead>
<tr>
<th>Text Title and Author</th>
<th>Reading Group</th>
<th>Subject of analysis in next chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ruby Holler</em>, Sharon Creech</td>
<td>All groups</td>
<td>yes</td>
</tr>
<tr>
<td><em>Alpha I</em>, Alfred Slote</td>
<td>Low</td>
<td>no</td>
</tr>
<tr>
<td><em>Castle in the Attic</em>, Elizabeth Winthrop</td>
<td>High</td>
<td>no</td>
</tr>
<tr>
<td><em>Lost Treasure of the Emerald Eye</em>, Scholastic Inc.</td>
<td>Low</td>
<td>yes</td>
</tr>
<tr>
<td><em>Sideways Stories from Wayside School</em>, Louis Sachar</td>
<td>Low/Middle</td>
<td>no</td>
</tr>
<tr>
<td><em>Cherokee Folktales</em>, authors unknown</td>
<td>All groups</td>
<td>no</td>
</tr>
<tr>
<td><em>Stone Fox</em>, Jack Reynolds Gardiner</td>
<td>Middle</td>
<td>yes</td>
</tr>
<tr>
<td><em>Fantastic Mr. Fox and The Twits</em>, Roald Dahl</td>
<td>Middle</td>
<td>no</td>
</tr>
<tr>
<td><em>A Lion to Guard Us</em>, Clyde Robert Bulla</td>
<td>Low/Middle</td>
<td>yes</td>
</tr>
<tr>
<td><em>Sign of the Beaver</em>, Elizabeth George Speare</td>
<td>Middle/High</td>
<td>no</td>
</tr>
<tr>
<td><em>A Long Way from Chicago</em>, Richard Peck</td>
<td>High</td>
<td>no</td>
</tr>
<tr>
<td><em>Weasel</em>, Cynthia DeFelice</td>
<td>All groups</td>
<td>yes</td>
</tr>
<tr>
<td><em>Because of Winn Dixie</em>, Kate DiCamillo</td>
<td>Low</td>
<td>yes</td>
</tr>
<tr>
<td><em>Jip</em>, Katherine Patterson</td>
<td>All groups</td>
<td>no</td>
</tr>
<tr>
<td><em>Poppy</em>, Avi</td>
<td>Middle</td>
<td>yes</td>
</tr>
<tr>
<td><em>The Landry News</em>, Andrew Clements</td>
<td>All groups</td>
<td>yes</td>
</tr>
<tr>
<td><em>Maniac Magee</em>, Jerry Spinelli</td>
<td>All groups</td>
<td>no</td>
</tr>
</tbody>
</table>

Table 4. Texts from Mrs. Reinhart’s Class in the Order of Use during the Year.
Reading Group Instruction in Mrs. Reinhart’s Room

Students walked, some scuffing their sneakers across the carpet, to the large, brown table in the middle of the room with their own copies of the mystery book, *Lost Treasure of the Emerald Eye*, their photocopied graphic organizers, their reading notebooks, and pencils. Mrs. Reinhart started the group in the following way, leaning her upper body toward the table and the seven students around the table, talking quietly:

Hello, everyone. Are you ready to do some reading and thinking? [students nod and some say, ‘yeah.’]. Okay, we need to read two chapters today - ‘First Dawn at Sea’ and ‘Fresh Clams, Anyone?’ [Mrs. Reinhart asks the group to help her say a brief summary of the previous chapters]. Then we are going to talk about our story boards. Okay? Any questions? [Several seconds of wait time.] Let’s get started and let’s read in parts today.

Mrs. Reinhart instructed the five students to scan the chapter to see which characters had parts, and then students nominated themselves to “be” certain characters and to read the characters’ parts. Lucas calls out, “I’ll be the narrator.” Colin says, “I’m Geronimo!” Elena says, “I’m Thea!” Matthew volunteers, “I’ll be Benjamin.” Kyle says quietly, “I’ll be Stilton.” Students then begin to orally read the first chapter. Mrs. Reinhart follows along in her own copy of the text.

About 10 minutes into the reading lesson, Mrs. Reinhart stopped the group from reading to ask a question. “Do you agree with the decision Geronimo made here?” Students responded without raising hands and when they talked over each other, which they did frequently at this point in the year, Mrs. Reinhart reminded the students about the ground rules for group talk by saying things like “listen to each other,” “wait for a space to talk,” or “don’t look at me, look at everyone.” After several minutes of discussion, Mrs. Reinhart instructed the group to change their parts for reading. All students seemed enthusiastic to read. Mrs. Reinhart stopped the group from reading-in-
parts at the last page of the chapter and said, “Let’s read this page together.” After the students read the page, Mrs. Reinhart said, “Let’s read that one more time.” The students read the page a second time; this time they read more fluently.

About 20 minutes into the lesson, the students had finished reading the second chapter. Mrs. Reinhart asked the group, “What is this chapter mostly about?” Using a bright blue marker, Mrs. Reinhart wrote the ideas that three of the five students shared on chart paper, which was clipped to a large easel near the table. Lucas was looking around the room. Mrs. Reinhart then began to “think aloud” to the students about her own process in selecting an idea the chapter was “mostly about.” She then instructed the students to look at their graphic organizers (a long, rectangular sheet of paper with empty boxes in horizontal rows) and told the students to put the second chapter title in an empty box on the organizer. She said, “Now it’s your turn to write a summary sentence of the chapter or the best words for the best idea to describe the chapter.”

Mrs. Reinhart’s reading groups tended to flow well, they were goal-directed, and students generally showed enthusiasm to participate with Mrs. Reinhart even though some students occasionally seemed distracted from some of the lessons. Mrs. Reinhart’s goals for the Lost Treasure group were “to build students’ fluency” and to begin to practice and understand “how to create summaries” of chapters (FN –N, 11/9/06). When I asked Mrs. Reinhart why she had the students read in parts, she replied “Students make inferences when they’re reading about who says what…they reflect on why and what characters say, do, and think.” With the groups of students with lower reading scores, Mrs. Reinhart used time during reading group instruction to listen to students read orally in order to make informal assessments of student progress and to give students a chance
to practice fluency, a skill Mrs. Reinhart noted some of the lower-achieving students needed. With other groups, and later in the year with the lower-achieving readers, Mrs. Reinhart used reading group instruction to discuss what students had read independently prior to coming to the small-group instruction. In addition to reading in parts and independently, students frequently read in pairs, and in few cases, Mrs. Reinhart called on students to read orally one-by-one.

It was common for Mrs. Reinhart to use graphic organizers in all her reading groups, and when there was not a particular graphic organizer, students responded to the texts in their reading notebooks. The organizers I saw and collected throughout the year related to story structure, character traits, theme, identifying cause-effect and rising and falling action, making inferences, and identifying word meanings. In the reading notebooks, students typically responded in ways that gave them practice with specific reading comprehension strategies. For example, in a lower-achieving reading group, the students wrote quotations from the characters in the text and then their own words to describe meaning of the quotations, clarifying and inferring ideas in the story (FN-N, 12/7/05).

In addition to graphic organizers, Mrs. Reinhart asked students to write questions, new words, thoughts, or ideas about the text on post-it notes either while they were reading or after they finished a chapter or section of text. If students read independently before reading groups, they typically brought their books to reading group filled with dozens of post-it notes sticking out in all directions from the pages of the text. At times, Mrs. Reinhart spent several minutes of reading group instruction talking about the post-it notes and sometimes the students used the post-it notes to generate a big question for
discussion. Whether Mrs. Reinhart and the students used their post-it notes, graphic organizers, or reading notebooks, the overall goals for the reading group lessons were to help students engage and practice reading strategies and response to text.

Group Discussion Practices and Events

Group discussion events are coherent activity settings, with a beginning and end, concentrated on one primary objective: to have a discussion about the {chapter, story, text, or read-aloud}. In Mrs. Reinhart’s classroom, discussion events took place weekly within either reading group lessons or after the students finished reading a book or a story as a culminating experience. I sent an e-mail message to Mrs. Reinhart asking her if there was a difference between discussions within reading group lessons and discussion events she planned as a culminating experience in her classroom (FN-N, 3/20/06), and she responded to me in an e-mail message with a half-page response. In Mrs. Reinhart’s view, there was a difference between the two kinds of discussion events. Discussions during reading group lessons, she wrote, “allow me to intervene and direct/guide thinking more….all this to hopefully build and solidify comprehension of text” (FN-N, 3/20/06).

Earlier in the year, Mrs. Reinhart said to me, “I feel I sometimes talk too much during [reading group] discussions, but at the same time I feel I need to teach too….I guess at times I feel reading group needs more guidance or instruction” (FN-N, 2/2/06). Mrs. Reinhart shared a related idea during an informal interview on May 5, 2006. She said, “Discussions during reading instruction are a way of practicing comprehension” (AR-N, 5/5/06). Mrs. Reinhart also believed the reading group discussions provided quieter students with a “smaller and safer environment to share ideas” (AR-N, 5/5/06).
Conversely, Mrs. Reinhart believed the end-of-book or culminating discussions were “different events.” She wrote, “during end of book [discussions], I am letting [the students] go, after introducing a big idea…I help to guide only when needed, and am there to challenge their thinking and act like a participant by asking authentic questions” (FN-N, 3/20/06). I observed and recorded roughly an equal mix of discussions that took place during reading group lessons (i.e., discussions about chapter(s) of instructional texts) and discussion events that took place after the students finished reading a book or story (i.e., culminating experience). I, too, observed differences between the two kinds of discussion events and reflected about these observations in my field log and journal. On January 12, 2006:

...discussions during reading group lessons seem different than the discussions like yesterday about *Victor* [short-story, culminating experience discussion]. They both include the same parts (e.g. authentic questions, uptake, students’ connections), but the discussions following a story or book are more interesting to observe, and I’m not sure why. Students seem more passionate when they share in the discussions at the end of a story compared with the reading group lessons. There’s a different quality or tone that is difficult to describe. Not sure what this is or means yet and not sure about lower-achieving readers’ participation in the two [kinds of] discussions (FL/J, 1/12/06).

The goal here is to provide a description of a discussion event that represents the discussion practices in the fourth-grade classroom. The following narrative describes a typical ‘culminating experience’ kind of discussion (T-N, 1/11/06; FN-N, 1/12/06). The discussion is about the short-story *Victor*, by James Howe, which is a short story about Cody, a young boy who is incapacitated, unconscious, and in the hospital for his 13th birthday. Cody seems to create a world in his mind to help himself get through his
illness. He refers to the world as the Land Above, inspired by the ceiling tiles in the hospital, and is mysteriously visited by Victor, a man who gives Cody hope and strength to overcome his illness.

The students walked into the classroom from lunch and sat down on the center carpet. Mrs. Reinhart announced, “It’s discussion day!” Several students, in hushed voices, said “Yesss!” I didn’t hear any groans, although Ben appeared to roll his eyes on hearing that it was time for discussion. Two days ago, the students read *Victor* in pairs, and yesterday the students read *Victor* in pairs or independently a second time and, at Mrs. Reinhart’s direction, each wrote questions, memories, and comments and they highlighted similes, metaphors, and interesting words or phrases on their own copies of the stories. Matthew highlighted the words ‘dramatic,’ ‘IV dripping,’ ‘my life was like one big ache,’ and wrote the question, ‘How could that happen?’ Elena wrote mostly questions. “What does Victor look like?” “Why do they even give Cody birthday presents?” Most students had written or highlighted several items in the margins of their stories. Students then met as a whole-class and, with Mrs. Reinhart’s guidance, they synthesized many of their questions or comments on large chart paper. The charts, attached to the blackboard, were labeled with the different main characters in the story – “Victor,” “Cody,” “Max,” “Mom and Dad,” and the “Land Above.” Written beneath the labels, in Mrs. Reinhart’s handwriting, were dozens of questions, comments, words, and phrases along with some of the post-it notes that the students had written.

After announcing “discussion day,” Mrs. Reinhart proceeded with a pre-discussion activity to help students remember the story and the ways they had responded to it. She asked for several volunteers, one-by-one, to stand up and read the questions
and comments from the charts. After about 15 minutes of the students re-reading the questions and making comments about all the charts, Mrs. Reinhart gave the directions for the literacy block: “While one small group discusses, everyone else at their seats needs to work on guided reading work for reading groups, which will start again tomorrow.” Mrs. Reinhart passed back the Victor stories and then called out the members of the first group. The first discussion group, comprised of nine students (three focal students and six non-focal students) got underway at 1:15 at the center table.

Mrs. Reinhart began the group discussion with a review of the ‘ground rules’ for conversation, which she and the students created together in September and had reviewed at the beginning of every discussion I had observed since that time. She asked the group, “What do we need to remember today as we’re talking?” Several students respond, including Jack, a focal student, “Listen to each other,” “don’t need to raise hands,” “talk to the group not the teacher,” “respect each other,” “if someone’s not talking, ask them a question,” and “it’s okay to disagree.” Mrs. Reinhart added, And try to back up what you say with reasons or evidence from the text or your experience. Okay, let’s get started, yesterday, many of us wrote questions about Victor, so let’s start there and see where we go. So, who is Victor?

The students began their conversation about Victor, the main character, suggesting he is either a real person, an angel, or an imaginary friend, but they quickly focus on why Cody’s father does not cry in the story even though the situation with Cody is sad. Thomas said, “He [the dad] was weeping inside.” Mrs. Reinhart then asked, “What makes you think so?” Kyle responds, “Somewhere in the story it said…maybe on page 80… it said (reads from text) Max really let loose and mom too and they had themselves a good cry but not dad, I could hear his silence loudest of all.” Ashley then asked, “How
can you hear the silence the loudest?” Most of the group members spent several minutes sorting out this phrase, and they seem eager to talk about it. The pace of the turns is spirited, some students overlap each other, some students get louder, several students lean toward the table, and Kyle leans toward the table while propping himself higher onto his knees. Colin is the only student in the group who does not seem engaged.

Several minutes later, Colin entered the conversation about the dad crying with a question, “Didn’t he cry when the box, when he found out the box was empty?” The students talked about this for several turns and then there seemed to be a let-up with the topic and lull in the conversation. Mrs. Reinhart asked, “Anything else about the dad crying?” At this, Matthew, a focal student, responded, “He was probably embarrassed to cry.” Ben agreed. “Yeah, men don’t cry!” The same passionate tempo as before returned to the conversation as the students discuss whether men cry and if it is ever okay for men to cry, many drawing on their personal experiences with seeing their fathers, grandfathers, or uncles cry. The discussion spiraled away from the content of the text as students shared stories about men crying, but not for long – maybe three minutes. Mrs. Reinhart enters the conversation, “What else do we think about Victor, Cody, or the Land Above? We need to pull ourselves back to the text and talk about other thoughts we had.”

With 15 minutes left to go in the discussion, all of the students, including Colin appeared focused on the talk. Kyle asked a question, “Where did Victor go after Cody healed?” The students discussed this question for about a minute and then Elena’s question, “Why did the mom and dad offer Max Cody’s gifts on his birthday?” The students discussed this for several minutes and then begin talking about whether Cody
died or not. In between students’ questions and turns, Mrs. Reinhart periodically pressed students to reach farther with their thinking asking, “Why do you think that,” “Is there evidence for that in the story,” and “Do you agree?” Other times, Mrs. Reinhart reinforced the students’ thinking, saying, always quietly, “nice reason for your thinking,” “good evidence,” “I like how you went back to the text there.” As for the student turns, sometimes they overlapped each other and sometimes they interrupted each other, but for the most part, the students “waited for a space” to enter the conversation.

With just five minutes left in the discussion, I noticed that most students appeared attentive to the different speakers. The gazes of the students’ eyes usually followed the different speakers, and when they did not, I wondered if students were not listening or unengaged at those times. In the Victor discussion, Thomas and Colin consistently averted their gazes down, making it difficult to determine if they were listening or engaged. However, I think Thomas must have listened because he routinely entered the conversation with comments and questions, whereas Colin neither entered the conversation nor followed the different speakers with his gaze. Christy did not speak once during the discussion, but her gaze and body language suggested she was listening. About 25 minutes after beginning the conversation, Mrs. Reinhart began to wrap-up the discussion. She said, “Are there any final thoughts?” Thomas made one last connection to Cody and the story. He told a story about Prickles, his pet lizard, and what would happen if Prickles died. The students laughed in a friendly way. Mrs. Reinhart laughed a little as if she was thinking, ‘kids say the funniest things.’ Mrs. Reinhart thanked the group and sent them back to their seats. She got ready for the next group discussion.
Mrs. Reinhart facilitated discussions in her classroom in a way that communicated to students they were in charge of the topics of discussion, the turn-taking, and the meaning they eventually created. Of the dozens of discussions I observed in Mrs. Reinhart’s room, none of them reminded me of an I-R-E discourse pattern and students rarely “chased the right answer” that Mrs. Reinhart had in her mind. Even though Mrs. Reinhart asked many questions during the discussions (most genuine, meaning there was no pre-specified right answer), students asked their own questions, determined the topics of their conversation, and seemed to do most of the thinking.

Mrs. Reinhart facilitated most of the discussions in her class, challenging the students, asking questions to push their thinking, and reminding them of the goals or ground rules if their talk strayed too far from the text or lost its focus. In an interview with Mrs. Reinhart, I asked her how she knew when she needed to enter a discussion, and she replied, “I listen to what the kids are saying and if they are mixed up about the text or too far from the text, they need redirection, so I’ll step in” (AR-N, 5/5/06). Mrs. Reinhart tended to, in her words, “guide” the discussions in the reading groups more than the culminating experience discussions. Yet the reading group discussions were also open and flexible, meaning Mrs. Reinhart often followed the students’ interests about the characters, events, and themes in the stories, weaving her interests as a teacher and curriculum expert around their enthusiasm for reading and talking about their reading. In sum, Mrs. Reinhart reported that she felt strongly about using discussion as a literacy practice for many reasons. One reason that is important to include here is a comment from our last interview: “I would tell every teacher to do discussion. They’re too important…it’s wrong not to allow kids to talk about ideas they have” (AR-N, 5/5/06).
Fourth-grade Focal Students

Five focal students from Northview Elementary were lower-achieving readers with varying kinds of reading difficulties that became problematic for them in different contexts and at different times. None of the focal students from Northview had Individualized Education Programs (IEPs). From the school’s perspective, it was assumed the students did not have learning disabilities, which means they were able to learn reading skills and strategies without the support of a special education class or teacher. Two of the five focal students, however, attended reading support classes once a day for 30 minutes with a literacy specialist for most of the school year. Another focal student attended support classes for one-quarter of the school year. From Northview’s perspective, the focal students I describe as lower-achieving readers were identified as at-risk readers.

Below I have created sub-sections to describe each of the five focal students from Northview Elementary School as students, readers, writers, and discussion participants. I describe these characteristics of the students because the next chapters will present data related to discussions, reading, and writing. Table 5 summarizes the students’ scores on the state’s reading achievement tests.
<table>
<thead>
<tr>
<th>Focal Student</th>
<th>3rd grade Achievement Test</th>
<th>4th grade Achievement Test</th>
<th>Developmental Reading Assessment (September 2005)</th>
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<tr>
<td>Jack</td>
<td>409</td>
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<td>Colin</td>
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<td>Elena</td>
<td>408</td>
<td>403</td>
<td>Level O</td>
</tr>
</tbody>
</table>

Table 5. Fourth-grade Focal Students’ Scores on the State’s Standardized Reading Achievement Tests and the Developmental Reading Assessment

*Jack.*

Jack was overall a good student from a teacher’s perspective, which means he generally followed Mrs. Reinhart’s lessons, her directions, and her expectations during the times I observed. During a reading group lesson about the book *Poppy*, I wrote, “Jack appears very engaged with the lesson. As Mrs. Reinhart writes on the chart, Jack’s eye gaze follows her actions and different students as they participate in the lesson. He seems active and involved in this lesson” (FN-N, 2/1/06). Sometimes Jack’s focus and interest shifted toward his peer group, which disrupted his focus on school tasks and affected the quality of his work and participation from a teacher’s perspective. When Jack sat next to his close friend, Kyle, the two of them would typically exchange notes,
have side conversations, or draw pictures as they whispered to each other while Mrs. Reinhart was teaching. In a reading group lesson, I observed the two passing notes without Mrs. Reinhart’s knowledge.

Kyle and Jack, sitting next to each other, were passing notes during the lesson. The note looked as if it was telling Jack about what they will do after school at Kyle’s house [could see note from where I was sitting]. This exchange of notes went on for several minutes as the other students [in the group] read in parts (FN-N, 11/30/05).

Mrs. Reinhart also thought Jack was overall a good student, but at times, she felt Jack’s focus on his peers interrupted his school work. In fact, Mrs. Reinhart told Jack’s father something similar to this observation at a parent-teacher conference in January 2006 (FN-N, 2/1/06). Despite the occasional lapses in focus on school tasks, Jack was a hard-working and polite student who seemed to enjoy learning, and to some extent, he affirmed this characterization during an interview when he said proudly, “I’m someone who actually likes school” (I-N, 4/8/06).

As a reader, Jack’s reading assessments indicated that his reading allowed him to make meaning, but he was a somewhat slower word caller than his peers at the beginning of the year and he had trouble expressing what he comprehended from the text in writing (Mrs. Reinhart mentioned the writing difficulties several times during the year). Jack scored a 409 on his 3rd grade achievement test (March 2005), and a level “O” on a DRA in September 2005, reading the assessment at 97 words per minute (wpm). A level “P” is a district expectation for students entering the fourth-grade on the DRA, and Mrs. Reinhart’s looks for a word reading rate of 100 wpm for most students entering fourth-grade. In January, Jack was reading 126 words per minute and scored a level “P” in the DRA. In April, Jack was reading at a level “R,” and he scored a 448 on his 4th-grade
reading achievement test. Taken together, the assessments suggest that Jack improved considerably during the year in reading, he did have reading strengths, but he struggled, especially earlier in the year, with fluency (e.g., slower word-calling). I think Mrs. Reinhart explained Jack’s difficulties with achieving grade-level expectations on some of the assessments best: “Jack struggled the most [this year] with focus [or attention to his work] and written expression” (AR-N, 5/5/06). In my view, Jack is a capable reader who has some difficulty expressing in writing a model or representation of what he understands.

Jack generally did not seem to enjoy the writing process or writing assignments.

On December 14, I observed a typical writing workshop scenario for Jack:

Jack really looked frustrated today during the writing part of the literacy block. While most students were busily writing or conferring with Mrs. Reinhart about their writing [narrative assignment], Jack sat with a pout on his face and his hand clutching his forehead. I sat down next to him. He was sitting at a table by himself, and I asked “Would you like some help?” He said to me, “I don’t know what to write!” I said, “What’s your story about?” Jack proceeded to tell me, in great detail, about two scientists who were stranded on an island trying to catch a rare lizard species. After telling me a lot about the plot of his story, I suggested he write what he could remember of what he had just told me, and he said, “I can’t.” [I learned the following week that Jack finished a draft of his story] (FN-N, 12/2/06; 12/9/06).

Throughout the school year, I observed Jack’s writing experiences as I had in the above description. He would get the assignment done, but generally appeared exasperated with the process. Mrs. Reinhart also believed Jack struggled with writing, telling me in September and again in May when I asked her a question about the focal students’ greatest difficulties with literacy. “Jack struggled the most with written expression. He
seemed to lack any confidence as a writer, but over time grew with more clarity in his written responses – although he also decided to write larger and each word wider!” (FN-N, 5/5/06).

Despite Jack’s frustration with writing, he enjoyed the discussions. As soon as discussions started, Jack’s mood and appearance brightened immediately. He was almost always an enthusiastic participant during discussion, often challenging students, reminding the group of the discussion ground rules, posing new questions, connecting the text to his parents, sisters, or his two shar-pei dogs, and supporting his ideas with reasons or evidence from the story. During discussion, it was not uncommon to hear Jack say, ‘But on page 75, he said….,’ or ‘I think that ‘x’ is like what happens when….’ Mrs. Reinhart also noted discussion events as strong academic ones for Jack. “Discussion is his thing and he motivated lots of other thinking from everyone with some nice challenges and ideas” (AR-N, 5/5/05). Further, Mrs. Reinhart wrote to me in an e-mail message, “It [discussion] was great today. Jack demanded of Kyle that he give a reason for his thinking, totally unprompted by me. He [Jack] always gets others to think during discussions (FN-N, 1/31/06). From Jack’s perspective, he also seemed to express genuine interest in participating in discussions. In my final interview with Jack, I asked him how he would rank discussion on a scale of 1 to 10 compared to how he would rank other activities in the classroom (e.g., writing workshop, math). He said, “Discussion is a 9 or 10!” And in response to my follow-up question about the ways discussion help people, Jack replied, “You say what you’re thinking and other people say what they’re thinking and then your words can help them and change their mind” (I-N, 4/20/06).
Colin.

I discovered a side to Colin I had not known until the last day of fieldwork in May. The students knew my last day in their classroom was Friday, May 5, so a few days prior we planned to have an ice cream sundae party to celebrate our work together. At Mrs. Reinhart’s request, all the students wrote me a thank-you note or letter telling me about their perceptions of our work together to share at the party. Some students also drew pictures or had small gifts for me (stickers, a plastic car, a stuffed animal), and Colin had a big bouquet of assorted hand-picked flowers, which he presented to me proudly. When I thanked Colin and displayed my joy for them, he added, “I got them all the way here on my bike!” Mrs. Reinhart later told me that Colin had talked about the many flowers in his yard and how he “took care of them.” To observe Colin in class, you would not say with certainty this expression of kindness and gratitude or interest in flowers was possible. Colin often appeared over-tired, poorly groomed, and unfocused in school. From a teacher’s perspective, he repeatedly made inappropriate remarks during instruction and in discussions. During a discussion, he suggested that the main character in the story should “blow the head off” of the other character (T-N, 3/20/06). Indeed Mrs. Reinhart had to talk to Colin several times during the year about talking and writing about guns and violent themes. Colin also made remarks during lessons that were off-topic and unrelated to the work and directions of the other students. In a reading group lesson, he interrupted the group’s conversation about the dog, Winn Dixie, from the book Because of Winn Dixie by Kate DiCamillo, to tell everyone it was possible “for someone to die in a silo of corn” (FN-N, 2/2/06).
I did not observe Colin being overtly friendly with other students; although I did not observe him being outwardly mean to others either. Sometimes, it seemed as if Colin was alone in the middle of a classroom of 17 other students, yet it appeared as if he did not mind this positionality in the class. Colin became a new student to the school at the beginning of the year (October 2005), so I wondered if his newer student status had something to do with this positionality. At dismissal, he walked out of school by himself, and when he walked in the hall, he generally was at the end of the line, straggling behind the other students. He generally worked by himself when students had the option to work in pairs, and when students read in pairs, he often read alone (despite Mrs. Reinhart urging him to work with others). During a social studies activity, when students had to work in cooperative groups, I heard Colin tell his group of two girls and one boy, “I quit this group!” He walked over to his chair and proceeded to complete the assignment by himself (FN-N, 2/22/05).

I did not observe students picking on or teasing Colin, but they did seem to become annoyed with him when he disrupted the task or efforts of the other students. During one of the few peer-led discussions of the year (T-N, 4/20/06), a small-group of four boys discussed why a character from the short-story, *Inside Out* by Francisco Jimenez, spoke Spanish instead of English. At this, Colin repeated several times, “I speak Spanish!” Ben said, “No, you don’t.” Several seconds passed and Colin repeated, “I speak Spanish.” This time, Kyle, Ben, and Carl responded in unison, “No, you don’t.” Same scenario occurs a third time and then a fourth time. Kyle shouted, “STOP SAYING THAT!” Overall, Colin was not well-received by his classmates during group activities when he interrupted the progress of the group.
In addition to the frequent digressions from and inappropriate remarks during the lessons, Colin’s work in the class vacillated between extreme levels of focus and participation. At times, Colin had no focus on the school task, even falling asleep in the middle of lessons (this happened several times). I once overheard him telling another student that he did not go to bed the night before until 1:00 in the morning, which may have explained his occasional sleeping in class. When he did focus on something, it was not always on the work of the class. In February, I noted: “During reading group today, Colin played with a piece of paper. He rolled it and put it up to his eye as if it were a telescope. He re-rolled it and put it up to his eye and then did the same thing a third time. It seemed as if he was trying to make adjustments to the width of the opening at the end of the rolled-up paper” (FN-N, 2/27/06). At other times, however, Colin was extremely engaged with and appeared enthusiastic to complete the school tasks. In November, I wrote, “Colin was especially attentive during a vocabulary lesson. He raised his hand to participate four times in just a 10-minute long mini-lesson, asking questions about the word ‘humorous’ and a suffix” (FN-N, 11/30/05). And later in the year, Colin was one of the few students paying close attention to the science lesson [about wetlands]. He was VERY (emphasis from original notes) focused. As Mrs. Reinhart wrote notes on the overhead about the different wetland metaphors, Colin wrote them down on his worksheet. At one point, he got up from his seat at the back of the room and moved to the center table so he could see the overhead better (FN-N, 3/15/06).

Regarding traditional literacy in the classroom, Colin struggled with both reading and writing. In fact, Colin felt he struggled with reading and writing as well. In an interview, he stated, “I’m not good at reading and writing. I get frustrated too much” (AR-N, 4/25/06). When I asked Mrs. Reinhart to describe Colin’s biggest struggles with literacy, she said, “Colin still struggles with fluency, he doesn’t always have motivation,
he lacked self-confidence although this improved this year, and he has trouble focusing on his reading” (AR-N, 5/5/06). Colin’s 3<sup>rd</sup> grade achievement test score was 389 (400 is passing), his DRA level in October was “M” (a second-grade level). In January, his DRA level was “N,” but his word reading rate was still only 62 words per minute (100 wpm and higher is beginning of 4<sup>th</sup> grade expectation at Northview), yet a miscue analysis showed that his few word recognition errors “never” interfered with meaning. Colin’s scores improved considerably on the spring assessments. His DRA level was “Q,” and he scored a 418 on the state achievement test. Taken together, these assessments indicate Colin was a considerably slower word caller than his peers, but he used decoding and other word recognition strategies to accurately read words. The proficient grade on the 4<sup>th</sup>-grade achievement test and improved DRA scores indicate he was able to comprehend text consistently. The scores also improved steadily through the year, suggesting Colin became a stronger reader in the fourth-grade (he improved a grade level and a half). Colin also attended a daily, 30-minute support session in reading with one other student for one-half of the school year.

Regarding writing, an observation from my field notes reflects Colin’s consistent frustration with writing tasks:

Colin struggled with the writing part of the lesson from beginning to end today. When I walked over to Colin’s table, his classmates had all completed their graphic organizers and had moved on to writing paragraphs, but Colin had nothing on his sheet. He then asked Mrs. Reinhart, who was helping another student, if he could go to the bathroom; she said, “yes,” and then Colin was out of the room for the next 8 or 9 minutes. When he returned there was just a few minutes left before his reading group began (FN-N, 2/15/06).

It was difficult to tell if Colin’s struggle with writing was because of his intermittent focus on school tasks or genuine difficulties with expressing his ideas on paper. I got the
sense from working with him several times that it was a combination of the two, but he
did genuinely struggle to express his thinking on paper.

Lucas.

I observed the following situation during a writing workshop in December, and it helps characterize Lucas as a student and a person:

Mrs. Reinhart sat in a chair that was pulled alongside the overhead projector. The students sat around her and the overhead projector, looking at Matthew’s story about the Revolutionary War displayed on the board for an author’s review during writing workshop. As Matthew was reading his story, a cut on Mrs. Reinhart’s finger reopened and started bleeding. Lucas, sitting near Mrs. Reinhart and noticing this, hopped out of his chair and ran to get a paper towel from the side of the room and brought it to Mrs. Reinhart. During the same lesson, when students had an opportunity to respond to Matthew’s story, Lucas said, “I have a text-to-text connection!” And indeed he did. It was an excellent one (FN-N, 12/14/05).

The two actions described above characterize a part of who Lucas was as a fourth-grader in Mrs. Reinhart’s classroom. He was very kind to Mrs. Reinhart, his classmates, and me, always assisting any of us who needed something, whether it was a paper towel for Mrs. Reinhart’s cut on her finger, a pencil for a classmate, or a book to share if there were not enough copies to go around. He also was generally eager to participate in class discussions and lessons.

Sometimes, however, Lucas’s over-excitement for something disrupted his opportunities for learning, appearing to a teacher as tangents from the goals of the activity instead of enthusiasm. Early in the year in a discussion about Ruby Holler, Lucas was intent on locating the middle of the book. As students were talking about the story, Lucas was quietly counting the pages of the 300-page long chapter book, looking for the “true center.” After several minutes, he announced to the group, “I found the middle of the book” (T-N, 11/9/06). In this case and most others, Lucas’s classmates did not pay
attention to these kinds of digressions. Mrs. Reinhart, too, thought Lucas’s attention to things other than the goals of the group interfered with his learning. At reading a transcript in which Lucas was a participant, Mrs. Reinhart wrote to me in an e-mail message, “It seems Lucas wanted to impress us with his jokes at times” (FN-N, 3/29/06).

When it came to reading, Mrs. Reinhart thought Lucas’s “inability to focus and maintain a serious attitude about his school work” were the main factors contributing to his lower-achievement in reading (I-N, 4/28/06). In addition, Lucas’s word calling was slow and his fluency at the beginning of the year was poor. Lucas’s 3rd grade reading achievement score was 379, and his DRA scores from fall 2005 confirmed his below ‘basic’ reading achievement score. In September 2005, his DRA level was “L” (4 levels below beginning of fourth-grade expectation) and he read the narrative text of the assessment at a slow 61 words per minute. His fluency score was a “2” out of 4 points, which is very low for a student entering the fourth-grade; all of Lucas’s peers had fluency scores of 3s or 4s. When I listened to Lucas read in a reading group lesson, I too, noted his struggle to read fluently. I wrote, “Lucas’s word calling, although mostly accurate, was slow. He read without expression and in a single tone, often reading in short phrases” (FN-N, 10/5/05). In January, Lucas was reading 71 wpm and had increased 4 levels on the DRA to a level “P.” The comprehension score on the January DRA was very high, and it did not surprise me. I thought one of Lucas’s strengths as a reader was his ability to use his background knowledge to make inferences about the text.

In reading group discussions, Lucas was quick to relate an event or character in the text to himself and situations at home with his family (he had one older brother), television shows, a movie, or his knowledge about the world. During a read-aloud of the
story *Ruby Holler*, at hearing the two main characters in the story could sense each other’s discomfort because they were twins, Lucas informed the class, “Yeah, twins feel the other’s pain because one time I was watching Discovery and it had a show about twins that talked about that” (T-N, 11/16/05). In the spring, Lucas’s wpm rate increased to 83, which is still slow reading for fourth-grade, but he achieved a ‘proficient’ score on his 4th grade reading achievement test, a 401 (400-434 is proficient). Lucas attended a daily, 30-minute support session in reading for almost all of the school year.

Like the other lower-achieving readers I have described so far, Lucas often appeared frustrated with writing tasks or it seemed as if he had trouble focusing on writing tasks.

Students wrote letters to U.S. armed forces’ servicemen and women for Veteran’s Day. Lucas spent 45 minutes writing 2 sentences (one of which was ‘How are you?’) whereas in the same amount of time most students wrote complete letters of 6 or 7 sentences and had finished drawing a picture to go with the letter. It seems part of the reason Lucas was behind in this writing task was because he would work for 5 minutes and then get up to go sharpen his pencil, then sit down, then get up again 2 minutes later to get a tissue, then another few minutes would pass and he would be up again, doing another arbitrary activity (FN-N, 11/9/05).

During another writing workshop, Lucas appeared frustrated with the assignment. While having to write three paragraphs as a response to a short-story, I observed Lucas throw his head into his arms exclaiming, “I don’t know what to write!” (FN-N, 2/22/06). These two observations of Lucas’s work characterize the kind of behaviors he exhibited during most writing activities in the literacy blocks, but these behaviors were somewhat puzzling to me since I had observed Lucas proudly creating his own miniature storybooks during several of my early visits to the classroom. One example of this took place October 17, 2005: “Lucas was decorating the cover of his mini-book he had written [according to
Mrs. Reinhart, many of the boys have been creating mini-books. I asked him what the book was about and he said, ‘the book is called *The Mindless Genius* and it’s about a smart person who does dumb stuff.’ I asked Lucas if I could look through it when he was done…it was very creative” (FN-N, 10/17/05). Lucas’s interest in writing mini-books, and perhaps, his creativity with the “Mindless Genius” shows that he was able to express his ideas in writing, but he struggled to get ideas on paper with many of the assignments during writing workshops.

*Matthew.*

Matthew is the kind of student every teacher would like to have two or three more of in his or her classroom. He produced exemplary work on all of his assignments throughout the school year, which means from a teacher’s perspective his work always achieved the goals of the task and reflected his “best work.” This means all his assignments were carefully-done and on time. Matthew also had a pleasant personality and was cooperative. He got along well with Mrs. Reinhart and all of the students in the class. Early in the year, Mrs. Reinhart commented to me, “He [Matthew] is one of the hardest-working students I’ve ever had in class” (FN-N, 11/9/05). Matthew’s classmates seemed to enjoy having Matthew as a classmate; in fact, several students said in interviews with me that Matthew set a good example in the class and some said they liked having Matthew in discussion groups (I-N, 4/20/06). He was soft-spoken, but his eyes and body language always implied his alertness for learning and satisfaction with school. Reflecting on the school year, Mrs. Reinhart said the following about Matthew’s reading difficulties.

Matthew had trouble early building fluency and struggled with word recognition and word study….he has lots of valuable background knowledge, but he struggled
with confidence to share his thinking. I don’t think he talked much in class until this year, and I think this [talking more] helped him to write with more clarity about his thinking (FN-N, 4/26/06).

Matthew’s reading assessments confirmed Mrs. Reinhart’s descriptions of Matthew’s reading strengths and difficulties. Matthew scored a 405 on the 3rd grade reading achievement test and entered 4th grade with an “M” on the DRA (a second grade reading level). In fall 2005, Matthew was reading slowly at 88 words per minute. It did not take long for Matthew to “pop” (Mrs. Reinhart’s language) or improve quickly. Matthew’s DRA score increased to a level “P” and he was reading 113 wpm in January. In the spring, Matthew scored a 421 on his 4th grade reading achievement test and he improved another 3 levels on the DRA to level “S” (a fourth-grade level).

Although Mrs. Reinhart was worried initially about Matthew’s written expression, commenting to me that his writing assignments from the first quarter of the year were “almost unreadable” and “incoherent” (FN-N, 10/26/05), Matthew expressed his ideas in writing consistently better from the second quarter of the year to the end. In fact, Matthew scored a 446 on the 4th grade writing achievement test (an “accelerated” score; 400 is passing). When I observed Matthew during writing workshop, he was always on-task and carefully writing drafts or final copies of whatever assignment Mrs. Reinhart gave to the class. During an ‘author’s chair,’ a segment of writing workshop where student-authors share their writing by either reading it to the class or displaying a copy of it on the overhead projector, Matthew noticed the first sentence of Trevor’s story, ‘I heard my owners in the next room.’ Matthew said to Trevor, “I like the first sentence because it makes me curious and I wondered if you were a pet or something” (FN-12/14/06).

This example is one of many that represent the comments Matthew typically made about
classmates’ writing during the author’s chair, indicating his interest in writing and his attention to the qualities of written texts that make prose interesting to read.

Matthew had the following to say about his participation in the discussion events:

[I like discussions] because you get to say your opinions…I feel good [when a discussion is announced] and I try to think of things…I try to think of opinions and supportive answers and text-to-text connections to talk about. If somebody says something [in discussions] and I see if they’re right and if I don’t think so, I try to come up with an idea to convince them about what I’m thinking (I-N, 4/14/06).

Matthew’s participation in discussions was excellent from a teacher’s perspective, and several of Matthew’s classmates noted they liked how Matthew said things in discussion because in one student’s words he “says things nicely” (I-N, 4/20/06). I think another way to say what the students told me about Matthew was that he had a supportive style when he participated in discussions. Moreover, his behaviors during discussions indicated he took them seriously; he would listen for long stretches of time, watching other speakers, and then almost unexpectedly he would say something related to the book or topic of discussion and everyone would stop talking and listen to him (FN-N, 2/27/06).

In a discussion about the book *Because of Winn Dixie*, Matthew listened to his classmates for several minutes and then entered the conversation, claiming, “I think that Gloria and Miss Frannie are the loneliest. Mrs. Reinhart probed, “Why do you think that?” Matthew replied, “Because Gloria had a safe garden that she worked in and Opal came by to get Winn Dixie and she liked the company. For a long time, she must not have a lot of company” (T-N, 2/8/06). This short exchange reflects Matthew’s particular focus on the text and his deep thinking about ideas from the story, a kind of focus and thinking he displayed in many of the discussions about text.
Elena was overall a good student, that is, she followed the expectations of Mrs. Reinhart and the classroom and generally worked hard to complete assignments. Further, she listened to and followed directions, had a pleasant demeanor, and was cooperative. For example, during an economics lesson, the students worked in cooperative groups. Of Elena’s participation in her group I wrote, “Elena was very active in her group with Katelyn and Christy today. All three completed the ‘factors of production’ task well, and Elena was particularly on-track, suggesting important ideas that the group used to finish the assignment” (FN-N, 3/14/06). It took me several months of careful observations to learn, however, that despite Elena’s ability to focus on the school tasks, she likewise displayed many off-task behaviors that were not readily apparent to immediate observations of her work. Many times, especially during independent work during the literacy blocks, Elena appeared to work diligently, but after careful consideration, I concluded that Elena often lacked concentration with the independent work. In short, it seemed, at times, Elena was very good at “acting” the student role. During an observation on March 20, I noted the following representative example of Elena “studenting” well during independent reading:

While Mrs. Reinhart worked with a small group of students for writing workshop, Matthew, Kyle, Ben, Alex, Connor, and Elena were scattered at different tables reading their own chapter books independently. All students began reading steadily. After about 5 minutes, Elena appeared unfocused and stopped reading; the others were still reading. Several minutes went by and Elena was still not focused on her book, but she was “studenting” well. She turned the pages of the book, making it seem as if she was reading, but her eyes were blank-looking as if she was daydreaming. Mrs. Reinhart looked up periodically from the small-group instruction to scan the room. Everyone appeared to be reading; everyone was reading except Elena. Elena continued to turn pages but did not read any of them for another 10 minutes. The other students read steadily (except Kyle who took short breaks) until the end of independent reading (FN-N, 3/20/06).
I asked Elena about this independent work time. I queried, “Elena, I was wondering about your book today during independent reading. It didn’t look like you were reading it much.” Elena averted her eyes down, and said, “Yeah. I couldn’t read today.” I asked her why. She said, “I got distracted listening to Mrs. Reinhart teaching the other group.” We talked about this some more, brainstorming ideas she could use to help her keep reading and ways to tune out the others in the class (FN-N, 3/20/06).

Regardless of the kind of distractions, Elena did not always stay engaged with literacy assignments, especially reading, tending to focus on the writing tasks during literacy blocks more consistently than the reading tasks.

Like many intermediate-level readers, Elena was a reader who needed every minute of an opportunity to practice reading and thinking about the ideas in text. Elena read accurately, quickly, and fluently, but struggled to make connections, inferences, and high-level thoughts about what she was reading. She was the kind of reader who read aloud beautifully with wonderful phrasing, intonation, and pace, but then would get to the end of the text and not know where to begin in telling what it was about.

Regarding the reading assessments she took in third and fourth grade, her overall scores were very near the minimum standards. Her score on the 3rd grade reading achievement test was a 408. Her DRA score at the beginning of fourth-grade was a level “O.” She read accurately (100% of words on the DRA) and quickly at 112 wpm coming into fourth-grade. In January, her reading level increased to a “P” and she was reading 130 wpm. In the spring, she was reading at a level “R” and achieved a 403 on the state reading achievement test. Looking across the three DRA inventories, Elena scored a stagnant 17 on the comprehension sub-tests, suggesting that the process of making
meaning from text was a difficult one for Elena. About half of the class started the year with comprehension scores of 17, but at the end of the year everyone except Elena and one other student scored higher than 17, most scoring higher than 20. Mrs. Reinhart confirmed what the several assessments point toward about Elena’s reading. “Elena’s greatest struggles with literacy are reading comprehension, word study, and confidence to express herself orally and to not depend on a classmate” (FN-N, 4/28/006).

All observations of Elena as a writer overwhelmingly suggested that she excelled with this medium of expression. Elena confirmed what these observations suggested when she responded to my question in an interview about what she likes to do in the classroom. She said matter-of-factly, “I like to write” (I-N, 4/13/06). Elena did not hesitate to write multiple sentences on assignments for writing workshop, forming long paragraphs quickly. In reviewing Elena’s reading notebook, a place where Mrs. Reinhart assigned many journal writing activities, Elena wrote pages and pages to complete the assignments whereas many other students wrote mostly short 3 to 4-sentence paragraphs to complete the same journal entries. Indeed her 4th grade writing achievement test reflected her apparent interest in and abilities in writing with a high score at 430.

During discussions from the second half of the year, Elena rarely, if ever, participated with her own ideas whereas in the first 15 weeks of the year, Elena participated with her own interpretations and ideas in discussion events consistently, even at times, appearing to dominate some of the conversations. In an interview at the end of the year, Mrs. Reinhart alluded to Elena’s observable hesitation to participate in teacher-led discussions because of her faithfulness to Christy, a classmate (FN-N, 4/28/06). My field notes and reflections suggested that Elena’s peer group and her focus on a particular
friendship with Christy may have interfered with her participation in discussion and other teacher-led instructional events. Beginning just before the holiday break in December, Elena became inseparable from Christy in school, tending to follow her every move and interest in the classroom. If Christy went to the computers, Elena followed her; if Christy chose not to eat snack, then Elena did not eat snack either; if Christy participated with a particular group, Elena begged Mrs. Reinhart to let her into that group too (Mrs. Reinhart rarely conceded to these strong requests). All observations suggest that Christy was pleasant, popular with classmates, and shy, rarely speaking in the classroom, and I wondered if Christy’s shyness influenced Elena’s withdrawal from verbal participation in teacher-led discussions and activities.

Fifth-grade at Westlake Intermediate School

*Getting Ready for Work with Literacy*

It was 9:20 in the morning and school was about to begin. Some students sat at their desks; the desks were positioned in six groups of four desks pushed together forming a square or “team” as Mrs. Pearson referred to them. Some students rested their heads in their arms, which were folded on the desks, some students had pushed their chairs back from the desks and were doubled over, looking in their desks for the pens and other supplies they would need for the school day, and two students scribbled pictures on notebooks. A few students stood at the side of the room, hanging their back-packs on metal hooks in the neatly-organized coat rack and storage area.

Mrs. Pearson sat at her desk at the opposite side of the room. Placed on the front corner of Mrs. Pearson’s desk are a collection of several Disney Goofy dolls and stuffed toys, all gifts from former students. Behind her long desk are waist-high shelves that are
packed with books, dictionaries, thesauruses, and school supplies. Above the shelves extends a line of tinted windows with ivory-colored, institution-sized blinds partly pulled down over them. While students waited for the morning announcements, Mrs. Pearson reviewed the students’ steno-style assignment notebooks, looking for notes parents may have written in them, writing back to parents when necessary, and making sure parents signed the notebooks the night before. She occasionally called out to a student to check something from his notebook or to return a graded assignment, “James, could you come here for a minute?” James walked up to the teacher’s desk, collected the assignment, and returned to his seat. Kelly, a shy student, voluntarily walked to Mrs. Pearson’s desk with a picture in her hand and said, “I wanted to show you a picture of my horse.” Mrs. Pearson commented briefly about the picture and then Kelly, smiling, returned to her desk. All the students were relatively quiet, although some students whispered conversations to each other. Overall, the moment in the classroom seemed calm.

The school principal began the morning announcements at 9:25. Mr. Skowronski’s baritone voice filled the almost-quiet classroom over the public address system, “Good morning, everyone!” For several minutes, Mr. Skowronski shared with the school the typical house-keeping remarks. Then, on cue, the students and Mrs. Pearson stood and turned toward the small flag hanging on the wall at the front of the room. They all called out the Pledge of Allegiance in perfect unison. They all sat again, and Mr. Skowronski ended the morning announcements saying, “And today’s joke-of-the-day is actually a riddle, ‘What building has the most stories?’” Mr. Skowronski paused for several seconds. Some of the fifth-graders made guesses. Some look as if they did not even hear the riddle. “Libraries,” Mr. Skowronski finally called out! Some
of the students laughed quietly and a few rolled their eyes. It was 9:30, and the literacy block was about to begin.

Mrs. Pearson walked to the center of the room in front of the six clusters of desks. A long white board is behind her. Before students arrived to school, she had written a list of key words and phrases to remind students of the assignments for the literacy block, work she referred to as “morning work.” In a vertical listing, the work on the board indicated the following (my own descriptive notes are in the brackets):

1) CCC [individualized, computer-based math review questions],
2) word study [word sorting in spelling notebooks],
3) reading projects [ongoing genre-based reading/writing assignment],
4) SOW [“student of the week” writing assignment],
5) goals [students write and update their learning goals every month],
6) SSR [silent-sustained reading].

Mrs. Pearson said brightly, “Good morning. How’s everyone doing today?” Some students responded half-heartedly and in unison, “Good.” Matthew seemed enthusiastic about the day, telling a story about his trip to the mall last night. Mrs. Pearson says, “Thanks, Matthew, sounded like fun.” Mrs. Pearson got down to business, pointing to the list on the board behind her,

Okay, you can see what we have to work on this morning. Reading group will meet at 10:20; it’s ‘Group 2’ day, so if you sign yourself out to the library and you’re in Group 2, make sure you’re back at 10:20. Also, Group 2, you had an assignment to answer the questions on page 15, so make sure that’s done before reading group. ‘Student-of-the-week’s’ are due today, so make sure they’re in the bin before social studies. If they’re not there, you’ll get a “0” and have to stay in for recess to get them done and remove the “0.” At 10:50, we’ll talk about the reading projects before social studies [social studies lessons begin around 11:10].

The morning literacy block in Mrs. Pearson’s fifth-grade class typically started the same way every time I visited the classroom for fieldwork (FL/J), letting students
settle into the day, organizing the activities and assignments of the literacy block for independent work, and reminding students about assignments and the consequences for not having particular assignments finished by the end of the literacy block. Mrs. Pearson organized the 90-100 minute literacy block around the independent work time and its assignments, which were always written in a list on the white board. For the first 50 minutes of the block, Mrs. Pearson almost always worked individually with a series of students in writing conferences either at the side table or at her desk. During a conference, the other 23 students sat at their desks and worked, for the most part, quietly on the different assignments, moving through the list of items on the board. When students got too loud for Mrs. Pearson, or if Mrs. Pearson thought the noise level was disrupting others, she would look up from the writing conference and raise her voice slightly, “Team 4! Turn it off,” and then return to her work at the side table. At these reminders, students almost always got right back to work.

Mrs. Pearson told me in an interview that she organized two-thirds of the literacy block around the independent work time, so she could “have time for 5-6 individual writing conferences every day” (I-W, 5/1/06). Mrs. Pearson met with students individually because she differentiated writing instruction and assignments, as well as other curricula, because the school designated her classroom an enrichment cluster. The enrichment cluster designation meant the school district required Mrs. Pearson to differentiate the curriculum for all the students in her class, including the seven students identified as “gifted” by the district’s criteria of an IQ score of 130 or higher and a score in the 97th percentile or higher on standardized assessments in reading and math.
Incidentally, most intermediate-level classrooms without a special ‘enrichment’ designation might have one, maybe two “gifted” students in the class.

The writing conferences gave Mrs. Pearson a chance to provide targeted instruction to several students each day based on their individual strengths, needs, and goals. During individual conferences, Mrs. Pearson also adjusted the expectations of the writing assignments for each student based on his or her individual learning goals. Mrs. Pearson generally reserved the last 40-45 minutes of the literacy block for both reading group instruction with one homogeneous small group (there were five groups, each meeting once a week on a different day) and either a heterogeneous group discussion or whole-class mini-lesson related to word work or writing. Group discussions also took place during reading group instruction.

Following the district’s reading instruction guidelines, Mrs. Pearson used a guided reading model (Fountas & Pinnell, 1996) to organize the reading instruction for small, homogeneous groups of five or six students. To determine the composition of the groups, Mrs. Pearson administered the Jerry Johns Basic Reading Inventory (Johns, 2005), an informal reading inventory, to all of the students and established their independent and instructional reading levels in September 2005. Mrs. Pearson subsequently put students with similar reading levels together in small groups. Throughout the year, Mrs. Pearson also used the district’s reading assessments, which were given to students every nine weeks to determine students’ reading comprehension strengths and weaknesses (e.g., making and using inferences, using vocabulary). Mrs. Pearson used the overall scores and the comprehension skill and strategy sub-scores from the nine-week assessments to help her determine goals and expectations for the students. Despite the ongoing
assessments and Mrs. Pearson’s reviews of the scores, group composition in the reading
groups remained the same throughout the nearly 30 weeks of field work.

Mrs. Pearson chose anthologies of short-stories for the reading groups from the
school’s book room to use during reading group instruction, but she allowed students to
choose the particular stories they wanted to read from them. Mrs. Pearson supplemented
the reading instruction of short-stories from the anthologies with other short-stories and
chapter books that the students chose (voting-style) for her to read during whole-class
read-alouds. Of read-alouds, Mrs. Pearson said, “I use read-alouds a lot for reading
instruction. We talk about comprehension strategies and reading techniques there; a lot
comes up naturally” (I-W, 5/1/06). Another element of the reading program at Westlake
Intermediate was ongoing, genre-based reading projects. The students chose their own
chapter books from the school library or classroom library in order to complete two
independent, genre-based reading projects (e.g., biography book reports, power-point
projects about fantasy books) every 9 weeks, which was an aspect of the differentiated
instruction approach in Mrs. Pearson’s room. A complete list of texts from Mrs.
Pearson’s reading group with lower-achieving readers and whole-class reading
instruction is organized in Table 6. The next narrative describes a typical reading group
lesson with students who had the lowest scores on reading assessments.
<table>
<thead>
<tr>
<th>Text title and author</th>
<th>Reading group/Read-aloud</th>
<th>Subject of analysis in next chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Dork in Disguise</em>, Carol Gorman</td>
<td>Read-Aloud</td>
<td>No</td>
</tr>
<tr>
<td><em>The Last of the Really Great Wang Doodles</em>, Julie Edwards</td>
<td>Read-Aloud</td>
<td>No</td>
</tr>
<tr>
<td><em>The Giver</em>, Lois Lowry</td>
<td>Read-Aloud</td>
<td>Yes</td>
</tr>
<tr>
<td><em>Extreme Sports</em>, anthology edited by Mary Ling</td>
<td>Reading Group</td>
<td>Yes</td>
</tr>
<tr>
<td><em>Chills: 12 Chilling Tales and Exciting Adventures</em>, anthology edited by Burton Goodman</td>
<td>Reading Group</td>
<td>Yes</td>
</tr>
<tr>
<td><em>Varjak Paw</em>, SF Said</td>
<td>Read-Aloud</td>
<td>Yes</td>
</tr>
<tr>
<td><em>A Summer to Die</em>, Lois Lowry</td>
<td>Read-Aloud</td>
<td>No</td>
</tr>
<tr>
<td><em>Danger.com</em>, Jordan Cray</td>
<td>Read-Aloud</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 6. Texts used in the Fifth-grade Class for Reading Instruction in the Order of Their Use

*Reading Group Instruction in Mrs. Pearson’s Room*

Cory, Erica, Emma, Derek, and Mia, “Group 2,” as they were referred to in the classroom, were about to read *The Attic Door*, which is a short-story the group chose to read from the anthology, *Chills*. *The Attic Door* is a story about a young adolescent girl, Rosalyn, who stays with her aunt and uncle for the summer. The two relatives forbid Rosalyn to go into their attic without offering her any explanation. Mrs. Pearson began the instruction asking, “Why does *The Attic Door* look interesting?” Cory and Emma made remarks. Nodding his head, Cory responded to Emma, “There’s two places you don’t want to end up in your house – the basement and the attic!” At this, Mia told the
group about a movie she saw that used an attic as a “scary place.” Mrs. Pearson summarized the student talk saying, “It sounds like your prior knowledge of attics makes you think that this story might be creepy or scary.” Mrs. Pearson then initiated a ‘picture walk,’ a pre-reading technique teachers generally use to help students activate their prior knowledge and think about the story. Students described the three pictures of the story, “There’s an old lady!” “There’s a girl.” “Why is there a parrot?” Mrs. Pearson drew the students’ attention to the characters’ alarming facial expressions, and asked, “How do they look?” Cory said, “Terrified.” Emma said, “Questioning!” Mia said, “She looks surprised.” To this Mrs. Pearson responded, “Yeah, there’s something about her eyes that makes you think she’s surprised.” Erica said, “I think this girl might end up in the attic and get locked in it.”

Mrs. Pearson instructed the students to read the story independently giving the following instructions. “Since we can’t write in the books, I put some sticky notes out, so if you come to a word you don’t know or a question you have, you can write it on a sticky note to talk about later. Also, if you finish reading, you can answer the questions that follow the story on page 67 (there are eight questions).” Seven minutes later, Cory, Emma, and Mia finished reading the story at about the same time, and they answered all the questions on page 67 while Derek and Erica finished reading (three minutes later). Erica and Derek did not have time to answer the questions, so Mrs. Pearson asked them to do them during their independent work time and bring them to reading group next week.

Mrs. Pearson started a 10-minute post-reading discussion with a big question (i.e., where there is more than one possible answer), “Okay. What did you think of the
ending?” Cory started, “I didn’t like the ending at all. You don’t know what happens next.” The others agreed, nodding, and taking turns telling about their dislike for the cliffhanger-like ending. Emma referred to the text and re-read a section that supported her opinion. Erica put herself into the text world saying, “If I was this girl, I would run away, I would not stay there!” After four different students responded about the ending, Mrs. Pearson participated almost like a student might contribute, “I do not agree. I think you can tell what happens because of the last sentence.” She read the last sentence of the story aloud, and then said, “We can infer from this that Rosalyn knows about her aunt’s and uncle’s secret [in the attic], so what do we think happens to her? At this, Derek asked, “Who’s Rosalyn?” Mia reiterated, “Rosalyn?” Cory, Emma, and Mrs. Pearson said almost at the same time, “the girl.” For the next five minutes, the students, for the most part, took turns discussing what might have happened to Rosalyn based on the ending. When students talked over each other, Mrs. Pearson reminded them, “One at a time during discussion.” Mrs. Pearson stopped the discussion abruptly: “We are out of time today. Good work! If you did not do the questions on page 67, do them and bring them next week. If you did them already, put them in your folders and save them for next week. I’ll be grading them.”

Mrs. Pearson tended to organize her reading group lessons into “before reading” “during reading,” and “after reading” segments, usually integrating a short, 10-minute group discussion into the “after reading” segment of the 25 to 30 minute instructional sequence. Mrs. Pearson usually focused the “before reading” instruction on vocabulary, making predictions, other comprehension strategies, or test-taking advice and tips. During reading, students usually read quietly to themselves, but a few times, Mrs.
Pearson listened to one student ‘whisper read’ (a technique teachers use to listen to students read orally in order to make informal assessments) while the others read silently. I never observed the students taking turns to read one at a time, even though the students sometimes made requests to “popcorn” read, which was their term for round-robin reading.

Throughout the first and part of the second quarter of the school year, Mrs. Pearson let students read the text selection during the middle 10 minutes of group time, but as the year progressed, the students from ‘Group 2’ read the short-stories before coming to the reading group lesson. When students came to the reading group having already read the selection, the group discussions about the stories were generally longer, most about 20 minutes. For these lessons, Mrs. Pearson also asked the students to write their own ‘big question’ about the story before coming to group instruction. Almost all ‘Group 2’ students generally displayed enthusiasm to participate in the roughly 15 reading group lessons that I observed during the year. Derek, however, did not outwardly exhibit enthusiasm for reading group lessons. He rarely participated in the pre- or post-discussions and when he read independently, his sporadic focus on reading was apparent to Mrs. Pearson and me. When I asked Mrs. Pearson about Derek’s minimal participation during group discussions and reading texts, she mentioned he had Attention Deficit Disorder (ADD) and used the disorder to explain his limited participation and lack of focus during reading instruction (FN-W, 11/15/05). I asked Derek about his perspectives on his participation in reading group lessons, and he said, “I don’t like to talk in school” (FN-W, 1/23/06).
Although Mrs. Pearson organized and facilitated guided reading group instruction for most of the school year, the focus of reading instruction shifted to the students’ independent quarterly reading projects and the read-alouds for the last few months of the school year. I did not know initially, from Mrs. Pearson’s perspective, the reservations she had about the guided reading model she implemented until our last interview toward the end of the study.

I think the guided reading model sounds great in theory, but the reality is it’s too demanding, especially when you differentiate the curriculum for students. If all I had to do was plan reading groups, then it wouldn’t be so bad, but with the differentiated instruction model, I usually have 8-10 different preparations (most intermediate-level teachers have 5-6 lesson preparations per day) (I-W, 5/1/06).

*Group Discussion Practices and Events*

Mrs. Pearson planned discussion events weekly for either guided reading group lessons, reading lessons for small, heterogeneous groups to discuss a short-story or other text, or during a read-aloud of the chapter books she read to the class. I describe two kinds of discussion events here because they were prevalent practices across the school year -- the discussions during guided reading group lessons and small-group, heterogeneous discussion events.

In the reading group lessons, the discussions were teacher-led, and Mrs. Pearson generally participated in the discussions to either challenge students or connect the topics of the discussion to real-world events and the students’ futures as high-school students or adults. Consider an excerpt from a transcript of a reading group lesson with the lower-achieving students. In it, the students are discussing the short-story *The Ghost of Wan Li Road*, which is a short-story about a boy who uses good reasoning and quick thinking to trick a ghost into believing that he was in fact a ghost too, and this quick thinking spares
the boy’s life. Specifically, the students are trying to figure out how the boy tricks the
ghost and they wonder about the credibility in believing what one hears instead of
believing what one sees. Prior to the sequence of turns in the excerpt below, the students
had been talking to each other for several minutes while Mrs. Pearson listened.

1. Emma: I have another connection to this.
3. Emma: This is kind of like… I’m Italian and there was this girl last year that I was friends
with who said she was Italian because I wasn’t sure because she didn’t look it. I went to her
house and her mom and dad didn’t look like dark or anything. They just looked like regular
people so I said something like ‘Are you really Italian?’ I met her grandma, and the grandma,
she said she was Italian and everything and then her parents were telling me they were
German and stuff. But then she was telling me she was. I went with what I SAW ‘cause I
kind of figured that she wasn’t, but she wouldn’t stop talking about it.
4. Mrs. Pearson: You’re going to come across things in life like that all the time. You’re
going to hear things and you’re going to wonder, ‘hmmm if that’s right or not,’ you
know?
5. Students: (overlap)
6. Deb: The ghost is trying to figure out things in his head. I know what I see, but you’re telling
me something else and I’m not sure what’s right, and he went along with the lies. He got
tricked.
7. Erica: (simultaneous start) (unclear)
8. Emma: (simultaneous start) (He’s saying just look at them.)
9. Mrs. Pearson: And that’s the thing it’s kind of like when people try to convince you to
try drugs. You’re going to go through DARE and you’re going to know that it in your
head drugs are not the right thing for you. Someday somebody might come along and
they might try to convince you that it’s the best thing in the world and it’s going to solve
all your problems -
10. Erica: (interrupts) (shaking head) Drugs? Nooo!
11. Mrs. Pearson: But they might. Drugs or alcohol or something. And they’re going to
try to convince you to do something that’s different than what you learn in DARE so
you’re going to have this clash in your mind about what to do. You know what you
learned in DARE, but here’s this new idea coming in and you will say, ‘what should I do?’ This is what the ghost was doing. I know what I see and I know what I think I know, but someone is telling me about a new ghost and he has a clash in his head about gee ‘what should I believe?’ You guys are going to have stuff like this all the time in your life.

In this sequence of 11 turns, Mrs. Pearson integrated topics about the real world into the discussion (turn 4), and related this topic along with the theme of the story to the students’ lives in turns 4, 9, and 11. In general, Mrs. Pearson implied that the situation in the story is an example of what students may encounter as older adolescents. In turn 4, Mrs. Pearson said, “You’re going to come across things in life like that all the time.” Mrs. Pearson built on this position in turns 9 and 11, referring to D.A.R.E., a 10-week drug and gang education program organized by local police departments that the fifth-graders at Westlake would experience later in the year.

The excerpt above reflects a particular style Mrs. Pearson used in discussions during reading groups and sometimes during the discussions that took place within a read-aloud. At times, she ‘borrowed’ the floor from the students’ conversation to connect the topics of the discussion or text to the students’ lives. Mrs. Pearson’s bids for the floor in order to relate the discussion or text to the students’ lives seemed like “teachable moments” to me; that is, they seemed to emerge spontaneously from the topic of the discussions. This particular kind of participation in discussions was consistent with Mrs. Pearson’s way of teaching. In all activity settings I observed, there were moments when Mrs. Pearson seized an opportunity to talk about the students’ future or lives, which I came to view as a strategy she used to make school and the instruction purposeful for
students. The students, as in the above excerpt, seemed to absorb these “teachable moments,” rarely saying too much about them, but listening intently to what Mrs. Pearson had to say.

During the small-group, heterogeneous discussions, or those that were planned after students finished reading a short-story or read-aloud book, the discussions were always peer-led. Mrs. Pearson generally circulated to five different groups of four or five students who were simultaneously discussing the story. The following narrative describes a typical heterogeneous discussion event and is from my elaborated field notes from March 14, 2006. In the narrative, the students are discussing the short-story, Victor, by James Howe.

Mrs. Pearson started the lesson, “Okay. Clean off your desks, you’ll need a pencil and a piece of paper.” Mrs. Pearson gave the students nearly a minute to do this. There was a buzz of anticipation in the room, as students started to talk as they slid their chairs back on the floor in order to load notebooks and papers into their desks. After everyone was ready, Mrs. Pearson continued, “We are going to read a short-story called Victor, that I think you will like, and then we’re going to have discussions about it.” Many students whispered in an enthusiastic way, “Yesss!” Some showed no reaction at all. Mrs. Pearson went on, “Mrs. Reninger will be videotaping one of the groups and audiotaping another one of the groups, and Mrs. Ross will be coming in a little later to observe the discussions [Mrs. Ross is the vice-principal, and she came in for the last 10 minutes of the time period because she was interested in our project].”

The instructional sequence for the discussion event included the following: a) Mrs. Pearson informed students of the discussion question, “Who is Victor?” and wrote
the question on the white board with a black marker. Mrs. Pearson then instructed
students to write other questions or thoughts they had about the story on the copies of the
text as they read; b) Mrs. Pearson passed out the stapled copies of the stories and
instructed students to read either independently or in pairs [about half of the students
elected to read in pairs]. Students read for about 15 minutes, most finishing in about 10
minutes. Some who finished earlier wrote questions on the last page of the story; c) Mrs.
Pearson waited for everyone to finish and then told the students about the pre-writing
assignment. Students each wrote a paragraph, answering the question, “Who is Victor?”
Students wrote for about 10 minutes; d) Mrs. Pearson then gave the directions for the
small-group discussions:

Before we get into groups, I would like you to write two or three goals you have
for yourself during the discussion on the same paper you wrote about Victor. I
know many of you have been trying to talk more, some of you ‘chatty-Kathy’s’
(several students laugh at this phrase) are trying to talk less, and we have all
talked about backing up what we say when we give our opinions. So write what
you want to do during the discussion and what you want to have happen during
the discussion.

All students wrote for about a minute and then Mrs. Pearson shared a goal for everyone
to aspire. “Another goal I want you to think about today is making the discussions more
adult-like. What do you think that means?” Emma responded, “Try not to dominate.”
Samantha said, “Try to give extended responses, um, giving reasons.” Luis said, “Try to
get more people into the conversation.” Mrs. Pearson then asked, “How can you push
people’s thinking a little in the discussions?” Nicole said, “Ask them why,” and Justin
said, “Challenge them and give your own reasons.” At this, Mrs. Pearson remarked,
“Remember, the strength of support is what gets people to listen to your ideas [this was a common phrase Mrs. Pearson used during pre- and post-discussion instructions or debriefings].”

Mrs. Pearson read from an index card, announcing the composition of groups (4-5 students per group) that she prepared prior to the lesson. Metal chair legs scraped the tile floor as all 24 students seemed to push them back at once. Most students began talking, “Dante, over here, over here!” “Let’s go over near the computers.” The students had organized themselves into small groups many times this year. Mrs. Pearson’s voice rose above the shuffling sounds of students getting into their groups, “Remember to do a goal whip-around (i.e., share goals with others) before you start talking about the big question. I positioned myself to the side of the activity and toward the back of the room to observe the beginnings of the discussions.

Mrs. Pearson walked around the room, briefly stopping at the groups, reminding them to share goals and saying comments like, “After you feel you’ve answered “Who is Victor” you can go to other questions you wrote.” As the students got into their conversations, Mrs. Pearson circulated to different groups, sitting with the groups for several minutes and generally listening to the conversations before she moved to another group. After 22 minutes of discussion, Mrs. Pearson called for everyone’s attention, and initiated a 10-minute debriefing meeting from the front of the room. Several students raised their hands in order to share their goals and tell the class how they believed they met the goals they had written at the beginning of the discussion. Mrs. Pearson also asked for feedback from the students for making the next discussions better. The discussion event ended and the students returned to their regular desks.
Overall during the peer-led, heterogeneous discussions, Mrs. Pearson sent a clear message to students that discussion events were serious, goal-directed classroom activities. Further, Mrs. Pearson organized these discussion events similarly to the reading group instruction. This means there was a pre-discussion activity (e.g., writing goals, writing paragraphs to respond to a questions about the text), the discussion itself, and then a post-discussion activity (e.g., a debrief meeting, post-discussion writing assignment). The students almost always followed Mrs. Pearson’s expectations for the discussion events and seemed genuinely invested in the conversations. When I asked Mrs. Pearson to explain why she used discussions in reading, she said,

A few years ago, after an in-service training for math, I started using discussions more, and then I began to see the power of discussion as a way to help students construct knowledge, and I saw the benefits. I saw affective benefits and cognitive ones for students, but I still don’t see the transfer to paper and pencil tasks and more importantly, the achievement tests (FN-N, 11/22/05).

Fifth-grade Focal Students

Three focal students from Westlake Intermediate School were lower-achieving readers with varying kinds of reading difficulties that became problematic for them in different contexts. None of the focal students from Westlake had Individualized Education Programs (IEPs). This means, from the school’s perspective, it was assumed the three students did not have learning disabilities. Two of the focal students, however, attended speech classes once a day for 20 minutes with a speech teacher for most of the school year. From Wetlake’s perspective, the focal students I describe as lower-achieving readers were identified as struggling readers.
Below I have created sub-sections to describe each of the three focal students from Wetlake Intermediate School as students, readers, writers, and discussion participants. I describe these characteristics of the students because the next chapters will present data related to discussions, reading, and writing. Table 6 summarizes the students’ scores on the state’s reading achievement tests.

<table>
<thead>
<tr>
<th>Focal Student</th>
<th>4\textsuperscript{th} - grade</th>
<th>5\textsuperscript{th} - grade</th>
<th>Jerry Johns (September 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derek</td>
<td>378</td>
<td>Not passed</td>
<td>4\textsuperscript{th} - grade level</td>
</tr>
<tr>
<td>Erica</td>
<td>390</td>
<td>passed</td>
<td>4\textsuperscript{th} - grade level</td>
</tr>
<tr>
<td>Mia</td>
<td>Exempt due to ELL status</td>
<td>passed</td>
<td>4\textsuperscript{th} - grade level</td>
</tr>
</tbody>
</table>

Table 7. Fifth-grade Focal Students’ Scores on the State’s Standardized Reading Achievement Tests and the Jerry Johns Informal Reading Inventory

*Derek.*

During the few interactions I had with Derek during the year, he always seemed courteous, friendly, and patient. Nevertheless, it was difficult to tell if Derek considered seriously his work in school. The following description of Derek’s independent work characterizes his participation with school-related tasks in almost all of my observations of the literacy blocks in Mrs. Pearson’s classroom. The description is from my field notes for February 7, 2006.

It’s 10:50. Most of the students in the class are reading their fantasy books for this quarter’s 9-week genre study. Derek, who is sitting with ‘Team 5,’ is staring
around the classroom. The other three students in Team 5 are reading their books. Derek’s book is on his desk, but it is closed. His back is facing Mrs. Pearson’s work area, so I cannot tell if Mrs. Pearson can see that Derek’s book is closed. At 10:55, Matt, who is sitting in another group, and Derek seem to be playing some kind of game while most of the other students are still reading their books. The two boys look at each other, smile, and begin counting things in the classroom. I can see both of their gazes span the classroom and then one of them points to something as they begin quietly counting. I can see their mouths make the numbers, 1-2-3-4. I do not know what they are counting. At 11:01, Derek has a pen in his hand and is writing something. Everyone else is still reading. At 11:04, while all the other students are reading, Derek’s book is still closed….Later, at 11:15, Mrs. Pearson assigned students to re-read a section of their social studies books, but Derek’s text is closed and he is writing on his poster, which is an assignment he later turned in for social studies. As students quietly read, Derek writes steadily on his poster for several minutes (FN-W, 2/7/06)

There were times Derek worked on his independent assignments and reading during the literacy block, but every time I visited the classroom there were large spans of time (i.e., 20 minutes) where I observed Derek off-task, unfocused, or disengaged from the assignment at hand. If his mind appeared to be engaged, it was generally on something unrelated to the work Mrs. Pearson had assigned. Mrs. Pearson confirmed this observation of Derek’s work habits in several informal interviews. In an e-mail message she sent to me about the focal students’ greatest difficulties with literacy, she wrote, “Derek had motivation problems, but that was in part due to his diagnosis of ADD. Even at the end of the year, and with having medications, he still got very little done. He would only do work when he had a threat over is head or if mom or dad helped him at home…he was perfectly content to draw all day” (FN-6/3/06).

Derek did not talk much in the classroom. I rarely heard him speak, and when he did talk, Mrs. Pearson generally called on him directly. I almost never observed him volunteering to participate verbally. Following a social studies lesson on January 23,
2006, I asked Derek about talking in the classroom and he said, “I don’t like to talk in school” (FN-W, 1/23/06). I asked Derek if he did not talk because he did not like social studies. He told me he liked social studies and the projects in social studies, and as he shrugged his shoulders, he told me again, “I just don’t like to talk.” So I asked if he liked to talk outside of school and he smiled brightly, paused, and then said, “I like to talk at home, and in restaurants, and at church.” Even though there were places Derek felt comfortable talking, perhaps he did not participate verbally in school because he considered himself a shy person. In a focal group interview, he said, “In order to be president, you can’t be shy like me” (I-W, 5/4/06). Likewise, I wondered if Derek’s reticence to talk in school was related in any way to his noticeable speech style (Derek attended a speech class every day for 20 minutes and had been attending speech classes since kindergarten). Derek mentioned his hesitation to talk in school because of his speech style. He told me, “I talk more outside of school because I have friends and I don’t stutter” (I-W, 5/4/06).

As a reader, it seemed Derek’s difficulty with focusing on school work generally minimized his opportunities to read in school. During many observations of his reading behaviors, I noticed his intermittent focus on reading tasks. For instance, on February 14, 2006, I observed Derek’s ‘reading’ during a reading group lesson.

At 10:40 Derek stares blankly at the book. His eyes are not moving, so although he looks at the page of the short-story, it is clear that he is not reading. At 10:41, Derek looks at James who is across the room. At 10:43, it appears Derek is reading. His eyes scan the page and then he turns to the next page. At 10:45, Derek looks around the room. At 10:52, Derek begins reading again.

Scores on Derek’s 4th and 5th grade reading assessments suggest Derek struggled with reading in addition to his struggles to pay attention to his reading. On the 4th grade state-
mandated reading achievement test, Derek scored a 378 (400 is passing), and at the beginning of 5th grade, Derek’s score on the Jerry Johns informal reading inventory indicated he was reading a grade level behind (i.e., 4th grade level). On the district’s reading assessments in October, Derek scored an 8 out of a possible 50 points. In January, his score on the district reading assessment increased to a 19, which from the district’s perspective is a failing grade (20 is passing). Sub-scores on the district’s assessments indicated Derek comprehended the text in a literal way, but had difficulties with vocabulary, inferential comprehension, and the kinds of questions that asked students to write short-answer responses to display their comprehension. Mrs. Pearson confirmed Derek’s difficulties with inferential comprehension, noting that “[Derek’s] struggle with deeper comprehension held him back [from success]” (FN-W, 6/3/06). Mrs. Pearson characterized Derek as a “fluent reader,” but one who lacked motivation to read and practice his reading (FN-W, 5/4/06). Derek did not pass the 5th grade state reading achievement test, scoring less than 400. He was the only focal student in the study who did not pass the state’s reading achievement test.

It is difficult to characterize Derek as a writer because he rarely turned in writing assignments to Mrs. Pearson. And the few observations of his writing that I made went something like this: “Derek is working on his journal assignment, but he is not looking at his papers. He looks up and stares at what seems to be nothing. He does this for most of the 15 or 20 minutes the students spend on the journal assignment” (FN-W, 11/15/05). What Derek did turn in to Mrs. Pearson was generally incomplete or difficult to follow. For example, he wrote a one-sentence response to a question on a reading assignment that
asked, ‘What do you think the narrator will do over the summer? Tell why.’ Derek wrote, “I think the narrator will do over the summer is. He may be go teach kids or spind time with Annie” (WA-W, 11/10/05).

It was not until the end of the school year that I learned how much Derek enjoyed and benefited academically from the discussion events in the classroom. Like the other descriptions of Derek as a reader, writer, and student, observations of his participation in discussions were similar in that most of the time the quality of his engagement and focus were uncertain. Derek rarely participated verbally in the discussion events. In fact, he contributed 57 turns in eight discussion events between January and March. In that same time and during those same events, his peers within the small groups contributed a combined total 1,611 turns. In short, Derek simply did not participate often enough to gain a clear understanding from an observer’s perspective about any patterns that would characterize his participation in discussions. However, during our last interview together in May 2006, Derek told me how much he liked the discussions in the 5th-grade and how much they helped him. In a response to my question, “how do discussions help you,” Derek responded, “Discussions help me talk more…they help me get ideas out” (I-W, 5/4/06). He also described the way the discussion about Victor, the short-story, helped him “learn about the story better.” Moreover, when I asked Derek to “describe discussions,” he answered, “they [discussions] make me work my brain…um..you have to think a lot.” Clearly these responses suggest that Derek was, at least for some of the discussions, actively engaged in the conversations even though he participated rarely as a discussant.
By all accounts, Erica was a kind and thoughtful person. Other students in the class regularly gave Erica friendship ‘awards’ (the school had an ongoing, student-centered character development program). Erica’s peers gave voluntarily these awards because Erica lent paper or pencils in times of need, carried books and materials for others, or said kind things to classmates (FN-W, 2/7/06). Erica is also personable and polite. Toward the end of my morning visit on November 15, Erica came to me (I was packing the recording equipment at the side of the room) and asked the following, “Mrs. Reninger, I was wondering if you would stay and have lunch with us [points toward Marcie and Sarah]” (FN-W, 11/15/05)? I accepted the invitation, so at 11:45 when the lunch period started, Erica stayed back from the others in the line and walked with me from the classroom to the lunch room. When we arrived in the lunch room, Erica showed me around the several different lunch lines and directed me toward the line where I could pay cash for my meal. After I got to the table with my ‘daily special,’ the lunch monitor walked over to the table. Before I could introduce myself, Erica introduced me as a teacher, ‘Mrs. Reninger,’ to the lunch monitor. As we ate our lunches, Erica, Marcie, Sarah, and I conversed about our pets. Erica has a horse, two dogs and a cat, and during the conversation I noted Erica’s empathy for animals. In response to my question about why her family took in an Akita [large dog breed], Erica said, “Prince [the Akita] destroyed a laundry room [with previous owners].” Then she said to me, “But if you were in a room all day and had to go the bathroom what would you do?” (FN-W, 11/15/05).
Erica was a good student who occasionally seemed distracted from or tired during lessons or independent work. The following is a description from field notes of Erica’s typical work style during the mostly self-guided literacy block: “Erica worked on her reading assignment steadily for about 20 minutes today. She read the selection from *Chills* (the short-story anthology) and then answered the questions at the end of the story. She moved right into her word study assignment after she finished the reading assignment (FN-W, 2/14/06).” When Erica’s work appeared to lack focus or attention, she generally seemed physically tired. For example, on January 17, 2006 I wrote, “Erica appeared tired today. She had difficulty during the social studies lesson to look at the overhead that Mrs. Pearson was using to review content with the whole-class. Her head slumped down onto her arm as she held her pen and slowly took notes. At one point, her head was completely down on her folded arms and I could no longer see her eyes or front of her face. I walked to Erica’s desk and asked her if she felt okay, and she said, “I’m really tired…my braces kept me up last night.” She smiled and showed me the new rubber bands the orthodontist had put in her mouth the other day (FN-W, 1/17/06).

As a reader, generally Erica worked as she did during independent work time – on-task with consistent effort. I observed her reading behaviors during reading group instruction, during silent sustained reading (independent reading), and other reading events (e.g., partner reading). In a reading group, Mrs. Pearson suggested to students they use post-it notes while they read to mark unfamiliar words or places in the text they wanted to discuss. Erica was the only student in the group of five to use the post-it notes while she read (FN-W, 12/6/05). During an observation of partner reading on March 14, 2006, I noticed the following about Erica’s work at reading in the classroom.
Erica and Emma took turns reading the short-story, *Victor*. Both seem very focused on their work. Erica follows the text with her eyes as Emma reads and then vice versa. There are also no disputes about whose turn it is to read. The exchange of turns appears seamless, as if the two have been partner reading for years. The two exchange turns for several minutes. I moved a little closer to the two to listen to their reading. Both are reading fluently, with few hesitations in indentifying words. Erica reads with intonation in her voice, changing her voice for dialogue. Emma helps Erica with reading the abbreviation ‘IV’ [intravenous]. That’s something else the two do effortlessly – help each other out with reading unfamiliar words. Some of the [other] pairs had finished reading the story before Erica and Emma, but they seem to have finished along with most of the other pairs and individuals who were reading the story.

Erica also seemed to enjoy reading. In November she said during a guided reading group lesson, “[I like to read] because it’s exciting to get to the next page” (FN-W, 11/1/05). In February, I asked her about her nine-week fantasy genre book project. She told me that she had written a book report about the book, *Phone Home Persephone*, by Kate McMullan; and at this information, I asked her if she had the book with her. She said, “Yeah, just a second” in a friendly way, and then readily walked to the back of the room where the pile of reports and projects were laying on a table. Erica leafed through the pile [in the meantime, I had walked to the back of the room]. She then, without my prompting, showed me her report and the book, and reviewed enthusiastically the story and the details of her report for me (FN-W, 2/7/06).

Although Erica seemed to work hard at and enjoyed reading, she did not achieve beyond a basic level on the state, district, or classroom reading assessments consistently. Erica scored a 378 on the 4th-grade state reading achievement exam, 22 points below the ‘basic level.’ Coming into the fifth-grade, the Jerry Johns informal reading inventory indicated Erica was reading at an early fourth-grade level. Likewise, on the district’s
nine-week reading assessment in October 2005, Erica earned 15 points out of a possible 50; the district considers a score of 20 points a minimum score for a ‘proficient level’ in reading. Erica was one of six students in the class who scored below 20 points on the assessment.

Despite what appeared to be a slow start in reading, Erica improved in reading during the fifth-grade. By January, her district reading assessment score was a 28 (proficient level) and she passed the state’s reading achievement exam in the spring. Sub-scores on the district assessments in October and January, however, showed that Erica still had difficulties with ‘reading processes’ - constructing short-answer responses and completing multiple choice questions to demonstrate comprehension. She read fluently, decoded words well, and seemed to like to read, and her answers for the vocabulary items on the assessments were almost always correct. Erica’s assessment scores coupled with her reading strengths imply that she struggled with making connections in order to comprehend text beyond a literal level. It seems she was able to comprehend beyond a basic level of understanding, but perhaps could not do so consistently with a range of texts. Mrs. Pearson confirmed this judgement of Erica’s reading strengths and weaknesses in an interview with me stating, “[Erica] has pretty good fluency and word recognition, but the comprehension holds [her] back. She also is a very poor speller.” (I-W, 5/4/06).

Much like the other areas of the curriculum discussed so far, Erica’s work with writing reflected her overall consistent efforts during instruction. When I observed her writing in the classroom, I never saw her looking exasperated because she did not want to or know what to write like I had observed in some of the other focal students’ work with
writing. For instance, I came into the classroom shortly after the students had started the literacy block on November 15, 2005. The students were working independently while Mrs. Pearson held writing conferences with individuals at the side table. Erica walked up to me as I was getting settled at a desk in the back of the room and showed me the narrative she wrote (students wrote short narratives each week about another student in the class who was designated ‘student of the week’). I asked, “Would you like to read it to me?” Erica read the story aloud without hesitation. I wrote in my field notes, “Erica seemed very proud of the ‘student of the week’ story and I sensed from listening to her read it that she had put some thought into it (didn’t just write something to get it done)” (FN-W, 11/15/05).

During discussions, it was always clear to see that Erica enjoyed participating with others in group discussions. It did not seem to matter what the title of the text was or who was part of the group. Erica seemed to like to talk about what she read because her responses during the discussions were spirited and she had an enthusiastic quality to the way she talked. The following is an excerpt of a transcript from a discussion about the short-story, Mean Rocky, which took place in January 2006 with Mrs. Pearson in a guided reading group. The story is about a famous baseball player who refuses to sign autographs. Notice Erica’s turns in the transcripts, demonstrating her ability to make connections about the text, her generosity when another student and she talk at the same time, and her propensity to listen to other students and build on to what they say.

Emma: He didn’t throw it.
Erica: But he put it in his car… uhm… that… that would make my dad mad or me because why would someone do that? Why can’t they just say, can you please sign me an autograph?
Emma: I think he’s just like, so frustrated with all these kids and people like coming up to him and being like uhm… “Can I have your autograph?”… and
stuff he’s kind of like… so like… out of it, he’s just so mad about like all this. He’s so frustrated that he just wants to be alone for once and be like a normal person, he feel like people are treating him like all special, and he just wants to be like … everybody else … he’s just so like … frustrated with all the stuff that people are –

Cory: (simultaneous) And…
Erica: (simultaneous) Go ahead Cory.

Cory: Uhm… he’s not really all that mad. He’s not the maddest with the people like… getting Adam and stuff, giving him autographs, but like when he loses a game, he hates it and like… like.. he.. uhm… I think he had anger issues like.. when he… when he loses a game he gets real, real mad, like… he gets mad when he loses the game.

Students: (overlap) Yeah.

Mrs. Pearson: And you guys probably know people like that, that don’t take losing very well.

Emma: They get all like mad and “Oh, you cheated” and stuff like that but-
Mia: (interrupts) Like some of the kids in here, like… “It’s just a game!”; like when we ever play, it’s like people are so frustrated at that gym.

Students: (overlap) (agreeing)
Erica: They have to always win in gym.

Mia.

Mia seemed extremely dedicated to her independent and small-group work in school (i.e., work during language arts block), but she seemed less focused on school work during whole-group lessons. During the language arts block where students generally worked independently, Mia almost always appeared to work on the tasks steadily and diligently. For example, I noted the following about Mia’s work, during the language arts block on February 7, 2006,:

(9:45) Mia was reading quietly, *The Ancient One*, which I later learned was her fantasy book for this 9-week’s genre report (Mia reported that she “loved” the book). Mia seemed focused during independent reading, her eyes scanning the pages steadily without distraction from other students entering or leaving the room or walking by her desk. She stopped reading twice to write on a “think mark” [notes about the story]. At around 10:10, Mia’s name was called for the computer curriculum [there are three computers that students share to complete a required online math curriculum]. She worked steadily on the math problems for about 15 minutes. When Mia returned to her seat, she got out her word study notebook and completed the assignment that Mrs. Pearson had noted on the board (word sorting). Mia did all of these activities without getting distracted by
anyone, which impressed me because it’s unusual for students at this grade level to not get involved in any kind of brief conversations.

Mia also showed her concentration on school tasks during small-group work. For example, on October 25, 2005, Mia was working with Nicole, John, and Louis on a social studies project about American Indians (Chinook tribe). I noted Mia’s “apparent interest in the project or task because she participated, giving her ideas to answer the questions, and the others in the group accepted her suggestions and ideas to complete the questions” (FN-W, 10/25/05). Despite Mia’s solid work ethic on most school tasks, she seemed to struggle during whole-group lessons. For instance, during a whole-group social studies lesson, as others read from the text, Mia “was not looking at the text – she stared out into the class while most other students followed the round robin reading of the chapter (FN-W, 2/7/06). Likewise, on January 12, I wrote in my field notes, “Mia was not focused on the lesson [social studies]. As others responded to Mrs. Pearson’s questions about the topic (slavery), Mia’s eye gaze did not track [follow] the interaction patterns in the classroom. Her gaze stared out, appearing to look at nothing.”

I wondered if Mia had struggled to pay attention in whole-class instructional contexts because of her English language learning status the previous few years in school. Mia was born in Cambodia and immigrated to the United States as a toddler. Her parents speak their native language in the home, so Mia was designated an English language learner (ELL) in the school district between kindergarten and fourth-grade, which means she received instruction in English with an English as a Second Language teacher in pull-out contexts. The fifth-grade was Mia’s first year without specialized instruction in English, but I wondered if it was perhaps still difficult for Mia to concentrate in the whole-class setting (it is common for ELLs to struggle with receptive English in large-
group contexts). After observing a whole-class social studies lesson where Mia did not seem focused, I asked Mia what she thought of the lesson. She shrugged dismissively, saying, “Ahh, I don’t know. I don’t like social studies very much” (FN-W, 1/12/06). I struggled with getting to know Mia as a student. When I asked her informal questions, I often received quick shrugs of the shoulders and short responses. The only information Mia volunteered to me the entire year was that she enjoyed being videotaped (FN-W, 12/13/05).

Mia seemed to enjoy reading and she worked hard at it in the classroom. From a teacher’s perspective, she used productively the independent reading time during language arts blocks (i.e., consistent reading without distractions). I also observed on-task reading behaviors during reading instruction in small, guided reading groups (e.g., eye gaze following the text and interactions of the group) (FN-W, 11/22/05). Mia also noted during a reading group lesson that she liked to read, but she did not like non-fiction books, stating, “…fantasy stories are my favorite” (FN-W, 11/1/05). Mia’s ELL status the previous years had exempted her from taking the state achievement tests in the third- and fourth- grades. In order to receive ‘exempt’ status as an ELL, the student achieves at or below the 40th percentile in reading on district-level reading tests, so Mia’s reading scores the previous years had to have been at or below the 40th percentile.

On entering the fifth-grade, Mia was reading at a fourth-grade level, according to an informal reading inventory. On the nine-week district reading tests, Mia scored “proficient levels,” indicating she read fluently and was able to make meaning. On the nine-week test in January, Mia earned 34 points out of 50, which was the median score in the class. The only sections of the tests Mia scored poorly were sections about
vocabulary. From Mia’s perspective, she seemed to have a sense that vocabulary was difficult or important for her. In response to a question about ‘the most important thing about reading, Mia responded, “Learning new words and pronouncing them” (FN-W, 11/1/05). Mrs. Pearson confirmed what Mia believed about reading and what the assessments indicated. She noted that Mia’s difficulties with reading related to her English language learning. She said during an interview, “Mia had some difficulties this year with word endings…um, both in reading and writing them. I think this was in part due to her ESL status in previous years. She is still working on getting a good command in English” (I-W, 5/4/06). Table 7 summarizes Mia’s test scores as well as the scores of the other 5th grade focal students.

Much like other areas of the curriculum discussed so far, Mia’s work with writing reflected her overall consistent efforts during instruction. Mia seemed to write with little hesitation, completing writing assignments during the language arts block in a timely way. By all accounts, she was a fluent writer. During discussions, Mia appeared confident, and she was generally enthusiastic about the topics and fearless in challenging others’ thinking. Mrs. Pearson also noticed Mia’s persistent engagement in discussions, voluntarily telling me one day, “I’m glad Mia participates so much during discussions. It’s good for her. I hope she feels more confident with speaking (FN-W, 1/17/06).” Mia seemed to find the discussions as challenging contexts. After reviewing the transcript from a focal group interview in which Mia participated in April 2006, Mia said, “questions were easy” and other times “questions were hard” in several different
responses. I am not sure what Mia was getting at, but her language suggests that she believed discussions were about answering questions, some of which were challenging.

Conclusion

The purpose of this chapter was to provide the reader with strong background knowledge about the classroom contexts and the focal students in order to situate the findings in the next chapter about lower-achieving readers’ participation and high-level thinking. I purposefully chose the descriptive accounts from the data corpus as representative scenarios reflecting the classroom, reading, writing, and discussion practices, and the focal students’ behaviors and work as they related to reading instruction and discussion. Moreover, I integrated the participants’ own language about their classrooms and the work that went on in the classrooms into the accounts of the sociocultural milieux.

The focal students across the two classrooms were similar in that they had reading strengths and weaknesses, yet they were all lower-achieving readers, scoring below what schools and educators consider “proficient levels.” In my view, six of the eight focal students (Mia, Erica, Jack, Matthew, Elena, and Lucas) generally enjoyed school, their work with the teachers, and their peers in each of the two classrooms. Overall, Colin and Derek did not seem to enjoy school as much as the others, but they had their own important interests away from the school context. I also learned through the course of this investigation that several of the focal students (four of the eight) might be characterized as struggling writers (Jack, Lucas, Colin, Derek) as a result of their apparent and routine frustrations with writing assignments and their poor achievement on writing assignments. Writing was an aspect of their work I had not considered before
beginning the study, but subsequently recognized it as an important facet of these focal
students as ‘readers’ and ‘users’ of school literacy in the intermediate grades. I take up
more findings related to the students’ writing in the next chapter as I present an analysis
of the students’ appropriation of the features of discourse in writing tasks.

Another similarity across the two classrooms was the teachers and the classroom
environments they created with their students. Both teachers were veteran instructors of
the intermediate grades. Although experience does not guarantee that teachers are
highly-effective, in my opinion, Mrs. Pearson and Mrs. Reinhart were indeed highly-
effective, extremely caring, committed educators, and very good at creating healthy
classroom environments and facilitating discussions in those environments. I
characterize both of their classroom settings as spaces primed for discussion events.
CHAPTER 5

FINDINGS AND DISCUSSION

“Individual responses emerge from the collective life” (Wertsch, 1985, p. 58)

This chapter is organized around the three research questions that were the focus of the study. These questions were:

Question 1: What happens when lower-achieving readers, their peers, and their teachers engage in group discussions about literary texts?

Question 2: To what extent do lower-achieving readers display high-level thinking about literary texts during group discussions?

Question 3: Do lower-achieving readers appropriate features of the discourse of discussions and demonstrate the use of them in classroom writing tasks?

The first research question is broad so in the first section I describe findings based on three categories that emerged from patterns in the data, providing an interpretation of what happened and a detailed account of the focal students’ participation in the discussions and the outcomes of the discussions related to reading comprehension. The first section presents narrative vignettes, key quotations, and data displays. In the second section, I present tables and graphs to report the extent to which the focal students engaged in high-level thinking during several discussions. In the third section, I present
excerpts of discussion transcripts and excerpts of student writing to illuminate the ways lower-achieving readers made use of the discourse of discussions in classroom writing tasks. Throughout the chapter, I discuss theoretical perspectives and empirical research to explain and describe the findings, informing the macro-purpose of this inquiry: to acquire a deeper understanding of lower-achieving readers’ discourse in group discussions from a long-term study in two intermediate-level classrooms.

Question 1: What Happens when Lower-achieving Readers, Their Peers, and their Teachers Engage in Group Discussions about Literary Texts?

Mrs. Pearson and Mrs. Reinhart facilitated discussions about literary texts, either peer-led or teacher-led, in order to provide students with opportunities to respond to text, to practice reasoning about text (i.e., to give reasons and evidence for opinions and claims), to hear the views of other students, to collaborate, and otherwise, to think and talk deeply about text (FL/J; FN-N, 3/20/06; FN-W, 5/1/06, FN-W, 11/13/05; FN-N, 1/12/06). The goals in each of the two classrooms led to multiple, yet similar, outcomes for lower-achieving readers that I discuss in this section. First, I show how the focal students used the discourse of the discussions as “intellectual scaffolds” for their thinking about and understanding of texts. Second, I demonstrate the ways students seemed to refer to specific reading comprehension strategies (e.g., visualizing the text) during discussions, talking about comprehension strategies during discussions in organic ways. Finally, I propose an important contextual foundation of the discussions in both
classrooms that seemed to be a necessary condition for the kind of discourse that lower-achieving readers used to engage in a thoughtful approach to literacy (i.e., reasoning and problem-solving about and through text).

*Discourse of Discussion as a Tool to Extend and Improve Comprehension of Texts*

Almost all of the focal students struggled to comprehend grade-level texts, as indicated with ongoing reading assessments and the teachers’ judgments throughout the year. Although there were certain texts and contexts that supported the focal students’ reading comprehension, for the most part, they had difficulties consistently making meaning with a wide range of texts. During interviews with Mrs. Reinhart and Mrs. Pearson, they described the focal students’ difficulties with comprehension as problems with either fluency, background knowledge, vocabulary, or making inferences and connections while reading (I-N, 1/11/06; 2/14/06; 4/23/06; I-W, 12/13/05; 5/4/06). Likewise, most of the focal students had negative perceptions of their reading. During interviews with the focal students, most of them shared their dislike for reading, reporting it was “frustrating,” “too hard,” or “boring” (I-N, 4/13/06; I-N, 4/20/06; I-W, 4/18/06; I-W, 5/4/06). Despite these particular explanations for comprehension difficulties from teachers’ and students’ perspectives, the discussions seemed to provide the focal students with opportunities to improve their comprehension of the texts that were being discussed. It appears the focal students used the discourse of the discussions as a tool to strengthen, and, in some cases, formulate new understanding about the stories. I use the concept of *learning histories* to explore this claim and provide evidence to support its plausibility.

Hatano and Inagaki (1991) introduced the concept of ‘learning histories’ in their research about children’s problem-solving and the effects of collective comprehension
activities on the cognition of the individual learner. They described comprehension
activities as the processes that lead to insight about a constructed representation that takes
place behind any given set of information. Hatano and Inagaki (1991) defined a learning
history as the way “each student in a group elaborates or revises his or her idea by
incorporating and reacting to information presented in the discussion” (p. 341). I have
used the learning history concept in my own analysis of the discourse of discussions,
using the concept to show changes in the focal students’ thinking over time both within
the context of a discussion event and following a discussion in another activity setting in
the classroom (e.g., writing activity). The following learning histories of two focal
students, Derek, a fifth-grade student, and Matthew, a fourth-grade student, are typical
examples of the ways the discourse during discussions facilitated the focal students’
understanding and comprehension of the texts.

I begin Derek’s learning history with a review of his reading assessment scores.
Derek consistently scored lower than his classmates on all reading assessments
administered during the 2005-2006 school year (e.g., informal reading inventory, the
district’s 9-week reading tests) (FN-W, 10/05-5/06). Derek also appeared to be shy in
class (I-W, 5/4/06; FN-W, 11/22/05; 11/29/05; 1/12/06), speaking or interacting with
other students rarely, so it was difficult to learn much about the nature of his reading
difficulties through observations of his talk and participation during instructional
activities. Mrs. Pearson attributed Derek’s poor performance in reading to his difficulties
with comprehension and an inability to focus on school tasks (I-W, 5/5/06). Evidence
from field notes confirmed Derek’s struggles to maintain focus on school tasks.
Moreover, Derek’s responses during reading group instruction and on written
comprehension tasks often demonstrated his ability to show literal interpretations of the stories, but they failed to show an ability or propensity to go beyond the basic facts of the stories, suggesting that he struggled to comprehend in a more thoughtful way. Derek’s learning history continued throughout the language arts lesson with the short-story, *Victor* by James Howe. It depicts the way the discourse of the discussion stretched Derek’s thinking about the text and supported his improved and more thoughtful comprehension of the story. The following narrative illustrates Derek’s transformations in thinking about the text (FN-W, 3/14/06).

Before the Victor discussion, most students read the short-story independently at their desks (several students read in pairs), which took approximately 15 minutes. Derek read independently, and he appeared to have read the story because his eyes scanned the pages of the text during the independent reading, and I observed him turning several pages of the photocopied story. After the students finished reading the story, Mrs. Pearson asked the students to write a one-paragraph response to the question, ‘Who is Victor?’ Independently, students spent approximately eight minutes writing quietly at their desks. Derek wrote the following during this pre-discussion writing activity:

> I think Victor is the eighty-year-old man because…it sounds like him talking and telling the story about Victor. Maybe he is talking about himself in the story.

Mrs. Pearson then instructed the students to write three or four ‘big questions’ or authentic questions to use during the discussions after the group “felt good” about their answers to the same question, ‘Who is Victor?’ Derek wrote the following questions:

1. Is it a real story?
2. How is Victor a man?
3. How [sic] [Who] is telling the story?
4. Is it a man or kid?
The peer-led discussions began soon after the students had finished writing their one-paragraph responses and authentic questions. Mrs. Pearson formally posed the question and wrote on the board, ‘Who is Victor?’ She reviewed the ground rules and asked students to think about a personal goal for the discussions. Students wrote their goal(s) under their written responses about Victor. Derek wrote, “talk more!” Then five groups of four or five students, seated in chairs and clustered in circles around the room, began talking about the story.

In the group in which Derek participated, I noted the following. For the first few minutes of the discussion, the students offered a range of unique responses to the question, none of which were offered in the story. “I think Victor is a miracle worker,” Mia suggested. The students discussed this proposal. Katie suggested, “I think Victor is God.” Students discussed this proposal as well, using a problem-solving approach to their conversation. Five minutes went by without a response from Derek. Ryan then asked in a friendly way, “Okay, Derek what do you think?” Derek said, “I think Victor is the 80-year old man.” Derek’s proposal represented a misconception about the story and Victor’s character. In truth, the author described Victor as an older man and Cody, the ill child, narrated how his illness made him feel like an 80-year old man. The transcript in Table 8 shows how the group talked about and helped clarify Derek’s proposal. I have highlighted particular turns and included my own comments about the transcript to facilitate an understanding of my interpretations.
<table>
<thead>
<tr>
<th>Turn</th>
<th>Transcript</th>
<th>Researcher’s Commentary</th>
</tr>
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<tbody>
<tr>
<td>42</td>
<td>Derek: I think Victor is the 80-year old man.</td>
<td>42. Derek’s proposal</td>
</tr>
<tr>
<td>43</td>
<td>Mia: Well, why do you think that? What do you mean?</td>
<td></td>
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<tr>
<td>44</td>
<td>Ryan: Yeah.</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Grace: (simultaneous start) Oh, and um -</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Mia: (simultaneous start) [to Derek] Oh, are you talking about when he said he made me feel like an 80 year old man?</td>
<td>46-49. The group considers Derek’s misconception.</td>
</tr>
<tr>
<td>47</td>
<td>Derek: Um. yeah.</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Mia: Well, Cody said that.</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Ryan: Yeah! Cody said that. Cody said that, he didn’t. He said, ‘I feel like I’m an 80 year old man.’</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Mia: But he is only like 12.</td>
<td>50 – 60. Problem-solving about Derek’s proposal.</td>
</tr>
<tr>
<td>51</td>
<td>Grace: In the story he said that he’s (unclear)</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Ryan: (overlapping) But he’s not describing Victor, he’s describing what he thinks of himself right then.</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Mia: He’s describing himself.</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Grace: Well, I don’t really know what that means.</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Katie: And plus not every 80-year old man can get somebody who couldn’t talk to talk and again and who couldn’t move to move again.</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Ryan: Yeah. And I don’t think he was an 80-year old man because (unclear).</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>Katie: I don’t think so.</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Mia: He’s old though.</td>
<td></td>
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<tr>
<td>59</td>
<td>Ryan: It only said that Cody disguised himself because he said, ‘I FELT like an 80-year old man.’ He did not say that he was.</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Grace: Well it did say-</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Derek: (interrupts) Well, maybe Victor, he is in his 50s or maybe he’s older.</td>
<td>61. Derek’s revised idea about the text.</td>
</tr>
<tr>
<td>62</td>
<td>Ryan: Why do you think he is in his 50s?</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Derek: Um (pause)</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>Mia: Because of his wrinkles?</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Derek’s Learning History Depicted in an Excerpt from ‘Victor 1’ Discussion Transcript
We know Derek was listening to the conversation about the reasons why Victor was not the 80-year old man because in turn 61, he responded, “Well, maybe Victor is in his 50s or maybe he’s older.” This was actually a more plausible claim and Mia took it up, offering support from the text in turn 64. Undeniably, the author described Victor as a man with wrinkles in his face.

In reviewing Derek’s learning history so far, here is what we know: Derek read the short-story independently. In a pre-discussion writing activity, Derek wrote that he thought Victor was an 80-year old man, but he seemed to have second-guessed this position in his written response, speculating, “Maybe he [Cody] is talking about himself in the story.” We also know the first several minutes of the discussion did not change Derek’s thinking about Victor, despite the mounting evidence that Victor is some kind of miracle worker or heavenly figure, because Derek informed his group in turn 42 he still believed Victor was the 80-year old man. The group collectively worked through this proposition, using text evidence and collective reasoning to resolve the idea that Victor was not the 80-year old man, but Cody referred to himself as feeling as if he were an 80-year old man. It seems an aspect of the group’s discourse and problem-solving affected Derek’s interpretations of the text because he revised his original proposal when, in turn 61, he said, ‘Well maybe Victor is in his 50s.’ At this point, Derek did not say anything more about the topic during the discussion. If Derek’s learning history stopped there, we might propose that his understanding of the text changed and improved to some extent as a result of the group’s discourse.
Two months later, however, Derek’s learning history related to the Victor discussion event continued to unfold in a focal group interview I conducted May 4, 2006. Derek’s responses during the interview reaffirmed the notion that the discourse during the ‘Victor’ discussion became a tool for his thinking, transforming his understanding of the text. The excerpt below is from a transcript of that focal group interview in which Derek participated with Alex and Katie:

1. Kristin: How do discussions help you?  
2. Derek: They help me talk more. But um discussions like next year if you have a fifth-grade class it would help them talk more. Like maybe whenever I was in, in the second video I started getting into it because people encouraged me to talk and I got talking a lot and it really helped me a lot.  
3. Alex: I’m totally lost.  
4. Kristin: The question is: How do discussions help you?  
5. Katie: Well, uh, this may not make a lot of sense, but they make me have more thoughtful thoughts if that makes sense-  
6. Derek: Yeah.  
7. Katie: I’ll be reading a book or watching a TV show or movie and a question will come up that doesn’t really make sense and I’ll just sit there and question and question myself and it drives me crazy.  
8. Derek: Yeah.  
9. Alex: YEAH! That’s what I do. Like yesterday on the reading Terra Nova tests, like in some of the stories where I didn’t understand something, I would just think in my head like I was in one of the groups and I randomly picked out people in our class and had a discussion….  
10. Kristin: It sounds like you were having a discussion in your head about the reading.  
11. Alex: Yeah.  

[Students talk about the ways discussions help them outside of school for several minutes]
45. Kristin: Can you think of a time a discussion helped you understand something in school?

46. Derek: Yeah. Uh. The Victor thing.

47. Alex: It helped me understand that story a lot better.

48. Derek: It helped me understand who Victor was. Someone said the 80-year old man in our group and someone said, uh, Cody. I don’t know why, but….um, I said that, I think I said that...(pause) Well, at first I said Victor was the 80-year old man but then they talked and they made me change my mind like just about the other question, like one opinion then I had one, then they talked and they said it was Cody, and I agreed. Cody had this box and it was from Victor so it had to be him since he had a box already....

49. Kristin: So, you changed your mind?

50. Derek: Yeah. Big time...big, big, big, big time.

In lines 46 and 48, Derek’s own words and reflection about the Victor discussion confirmed his change in thinking and new understanding as a result of his participation in the discussion, and his comments completed his learning history related to his initial misconception about or limited comprehension of the story. Toward the middle of line 48, Derek said:

Well, at first I said Victor was the 80-year old man but then they talked and they made me change my mind like just about the other question, like one opinion then I had one, then they talked and they said it was Cody, and I agreed.

Derek’s words suggest that his self-perceived misconception about Victor’s character was clarified during the discussion, and it was the discourse, or as Derek put it, “then they [the group] talked” which suggests the discourse became a tool for Derek’s thinking, extending his understanding of the story. Without the discourse of the discussion about Victor, Derek would probably not have had the opportunity to stretch or improve his
of discussions has the potential to improve lower-achieving readers’ comprehension of literary, grade-level texts.

Another representative example of focal students’ use of the discourse to improve their understanding of the text during discussions is reflected in one of Matthew’s learning histories in the fourth-grade classroom. Matthew’s learning history during the Lion discussion demonstrates the way the discourse of discussions transformed his thinking about the text. The Lion discussion took place in a homogeneous guided reading group lesson about the book *A Lion to Guard Us*, by Clyde Bulla. All five of the fourth-grade focal students participated in the discussion.

*A Lion to Guard Us* is a story about three siblings from England who become orphans when their mother dies just as the story begins. The only family members able to care for the orphans are their distant relatives in North America and, to make matters worse, the mean, wealthy home owner who employed the orphans’ mother does not want to care for the children. The topic of the following excerpt relates to the orphans’ expulsion from the house and their escape to a pier to try to stow away on a ship headed to North America. The seven students in the group were particularly interested in the identity of a stranger who approached Meg, one of the orphans, on the pier. In truth, the woman was likely a homeless person living on the pier, but some of the students speculated the woman might be the children’s mother. In the excerpt, the students were responding to Mrs. Reinhart’s initial question, “What happens when they’re kicked out of
Matthew’s learning history is shown in the excerpt below, illustrating the way the focal students used the discourse of discussions to stretch their thinking about text and to comprehend the text in a more thoughtful way. I have highlighted several important turns that I discuss below.

236  Jack: And then she tries to trick Meg. She says (reads from text), The old woman held the lantern high. She was looking at Meg, ‘It’s my little girl she said.’ ‘No,’ said Meg. The old woman came closer, ‘Don’t you know me, dear?’ ‘Go Away,’ said Amanda. The old woman sat down beside them. She touched Meg’s hair. ‘Come, dear. I’ll take you home with me,’ ‘Leave her alone.’ Amanda pulled Meg away and took Jemmy’s hand.

237  Matthew: Um, they might be -

238  UnknownS: (interrupts) (cannot hear)

239  Matthew: They could’ve kicked her out of the house, too.

240  Teacher: The, the lady that they’re speaking with? Who might it, was it someone else or -

241  Lucas: (interrupts) If I was Mistress Trippet, I’d kick Randall out. You’re FIRED!

242  Teacher: [quietly to Lucas] Listen.

243  UnknownS: (overlap) (cannot hear) If they have been nice to the mom -

244  Troy: (interrupts) The mom died.

245  Matthew: Mistress Trippet could’ve kicked her out of the house, too.

246  Teacher: Interesting.

247  Jack: Maybe they just said her mom died but they actually kicked them out of the house and Mistress Trippet tried to bribe, um, Mist-, Dr. Crider into saying that. But they probably kicked her out.

248  Teacher: Okay. Any other ideas about what’s going on?

249  Colin: Oh, oh!

250  Teacher: Go ahead, jump right in.

251  Colin: The lady’s probably, the lady’s just weird, trying to mess with them.

252  UnknownS: It could just be the mom.

253  Lucas: Mrs. Reinhart?

254  Teacher: Maybe. Maybe she’s, maybe people, sometimes people that are homeless are mentally ill and they don’t know what really is real and they say things that may or may not be true.

255  Colin: Uh huh.

256  Matthew: Yeah, I sort of disagree with myself.

257  Teacher: You do?

258  Matthew: (overlap) Yeah, ‘cause it--

259  Teacher: (overlap) Okay, you’re changing your mind, huh?

260  Matthew: Yeah, because if it [she] was their mom -

261  Jack: (interrupts) She would know their names.

262  Matthew: Yeah.
UnknownS: Yeah.
Colin: Then they should know her, too.

Making accurate inferences about details, characters, and events of a story are necessary components of the reading comprehension process (Duke et al., 2004; van de Broek et al., 2005). Matthew’s learning history begins with a break-down in this inference-making process. The proposal that the woman on the pier might have been the orphans’ mother was unsubstantiated speculation. Matthew initially speculated about the identity of the woman instead of generalizing across events or analyzing the story, which would have helped him make the necessary inference about the woman’s identity (i.e., a person who is homeless). Matthew did provide a reason for the claim in turn 245 (i.e., maybe Mistress Trippett kicked the mom out as she did to the children), and based on Mistress Trippet’s character traits (mean and heartless), this idea was somewhat defendable. But then Matthew listened to the others’ discourse as they engaged in problem-solving about this proposal in relation to the text, and in turn 256, he suggested his own disagreement with his original speculation. Matthew’s statement, “Yeah, I sort of disagree with myself,” is evidence that the discourse became a tool for his more thoughtful thinking and approach to understanding the story. I argue that the inference Colin and Mrs. Reinhart created together in turns 251 and 254 (i.e., the woman on the pier was homeless) provided the necessary ‘scaffold’ for Matthew to reorganize his thinking about the identity of the woman on the pier. Specifically, Matthew said, “Yeah,” and this signified his agreement with what was said prior. So we are able to infer that the discourse, and most likely the inference Colin and Mrs. Reinhart constructed, transformed his thinking and comprehension.
Interview data supports what I have inferred about Matthew’s transformation in thinking and the role of the group’s discourse in the Lion discussion. In response to a question in a focal group interview about what students ‘do’ in discussions, Matthew told me the following:

I, if somebody says something and I see if they’re right and if I don’t think so I try to come up with an idea to convince them about what I’m thinking (I-N, 4/13/06).

Matthew’s responses in the ‘Lion’ discussion show us that he attempted to back-up what he claimed, or as Matthew stated, “convince them [group members] about what I’m thinking.” In turns 239 and 245, he speculated the reason for why the identity of the woman could be the children’s mother, drawing on his accurate portrayal of Mistress Trippet’s character. After the group used discourse to problem-solve through this speculation, Matthew reconsidered his original proposal in turn 260. Matthew’s characterization of what he “does” during discussions confirmed what we see in terms of how he used discourse as a tool for his thinking. It seems his approach to discussion was to “convince” others with reasoning or “ideas”, and he allowed others’ reasoning about the text to convince him of the accurate meaning of this text event.

Other focal students reported, during focal group interviews, similar approaches to using discourse as a tool to transform thinking about text (I-N, 4/06; I-N, 4/06; I-W, 4/06). For example, Jack (fourth-grade) said, “[During discussions] you say what you’re thinking and other people say what they’re thinking and your words can help them change their mind.” Colin, a fourth-grade focal student, seemed to indicate a similar approach to discourse when he said, “[Discussions are] proving your ideas.” Lucas
reported, “[In discussions] we all listen because if we don’t, we don’t get any ideas.” And Mia, a fifth-grade focal student offered the following in a focal group interview with Melinda and Grace (I-W, 4/14/06):

**Kristin:** If you had to fill in the blank, what would you say? Discussion is (voice fades)….

Mia: Well, I think that it’s lots of people talking about things...uhm...feelings, thoughts, other people and describing books for some people because we do that to –

Melinda: (interrupts) We talk about an idea of what something is to get more information about the story.

**Kristin:** So, you talk to get more information?

Mia: Yeah.

Together, Matthew’s and Derek’s learning histories and comments from Mia, Lucas, Colin, Jack, Derek, and Matthew during interviews characterize the ways the focal students used the discourse of discussion as a tool to repair comprehension, to stretch thinking about the texts, and to foster a more thoughtful approach to reading. Furthermore, group members used discourse in order to problem-solve through the text, making problem-solving about text a quality of the discourse that may contribute to improved and thoughtful comprehension of text. In both Derek’s and Matthew’s learning histories, the students and teacher took a problem-solving approach during the discussions to collectively understand the story.

Mercer (2000), drawing on Bruner’s notion of “scaffolding,” argues that in a group context, the others’ intellects, which are displayed through language, provide a temporary support for a child’s own development until a new level of understanding has been achieved. Mercer’s view of learning in group contexts is similar to Vygotsky’s notion of a *zone of proximal development* (ZPD) (Vygotsky, 1978). Moll and Whitmore
(1993) elaborated this concept, claiming that a larger classroom context provides a collective zone of proximal development. Mercer (2000) characterized Vygotsky’s ZPD notion, stating, “For a teacher to teach and a learner to learn, they must use talk and joint activity to create a shared communicative space, an intermental development zone (IDZ) on the contextual foundations of their common knowledge and aims” (p. 141). Mercer used the IDZ to conceptualize the way a learner uses aspects of the context as a support for intramental development or improved understanding. Within classroom dialogue, language becomes a significant contextual foundation that has the potential to generate authentic collective thinking. When the teacher and students share a common framework for talk and relevant work in the classroom, the language in those activities may provide guidance for the learner. In the previous excerpt of the Lion discussion, Matthew changed his view and understood an important inference in the text only after the students used the discourse to engage in problem-solving about the proposition. The problem-solving framework became the contextual foundation and IDZ or a social resource that supported Matthew’s intramental activity. In other words, the students’ and Mrs. Reinhart’s collective goal of understanding the “pier scene” fosterd a problem-solving approach to the discourse and text that may have provided the necessary scaffold to support Matthew’s thinking about the story. In making their thinking public, discourse became a tool for thinking, and in this case an indispensable tool for a lower-achieving reader to think about text in a thoughtful way.

The same scenario was true for Derek during the Victor discussion. The group members revealed their thinking through their problem-solving approach in order to
make sense of the story. This approach helped Derek repair his misconception about the main character, fostering intramental activity on his part and a transformation in his understanding of the text. In sociocultural terms, Matthew’s and Derek’s learning histories depict classic examples of the ways intermental activity supports the intramental thinking of the individual.

In conclusion, the findings here confirm Mercer’s (2000), Wells’ (1999), and other neo-Vygotskian researchers’ work that has explored this aspect of language as a tool for thinking within the broader domain of sociocultural theory. Indeed, this idea is directly related to the Vygotskian approach to understanding learning; that is, we are social creatures who gain much of what we know from others and whose thoughts and actions are shaped by our interactions. The importance of this finding is that lower-achieving readers who may need extra scaffolding for text comprehension can thrive as readers and meaning-makers within a discourse context (i.e., discussion) that uses a problem-solving approach to the text. Ostensibly, the problem-solving features of the group’s discourse during discussion created space for group members to reveal their thinking, scaffolding the intramental activities of the lower-achieving readers, and chiefly, their thinking and discovery of new or repaired meanings about texts. I take up the problem-solving feature in a later section.

Reading Comprehension Strategies Emerge from and are Modeled during Discussions

The National Reading Panel Report (2000) made several recommendations for the kinds of reading comprehension strategies that readers in schools need to acquire in order to comprehend texts in school well. They include: a) activating background knowledge, b) asking questions, c) searching for information in the text, d) summarizing, e)
organizing information from the text, and f) understanding the structure of stories. Of these strategies, the Panel concluded, “active, interactive strategic processes are critically necessary to the development of reading comprehension” (2000, p. 4-1). In addition to the Panel’s conclusions, reading educators agree that visualizing as one reads and employing metacognitive skills (i.e., thinking about one’s thinking, having control over one’s thinking) are other strategic reading behaviors that foster comprehension (Pressley, 2002; Snow & Sweet, 2005).

In the classroom discussions, all of the focal students used the discourse to enact a strategic way of thinking about the text that can only be described as ‘doing’ or ‘practicing’ what good readers do to make meaning. In short, the discussions generated opportunities for students of all achievement levels to appropriate comprehension strategies and to practice those strategies as they related to the texts under discussion. In addition, the strategies the students used emerged from the discourse in a markedly natural way. This means the teachers, in the case of teacher-led discussions, did not impose a strategy lesson nor evoke the strategies themselves in order to instruct the group. Instead, the students drew on their knowledge of different reading strategies and talked about them during the discussions in authentic and often explicit ways.

The reading comprehension strategies that emerged from the student talk during discussions included: a) making inferences about the text, b) understanding vocabulary, c) generating questions, d) referring back to the text to find evidence to support one’s claim, e) visualizing the text, f) engaging in metacognition, and g) understanding story structure (e.g., T-N, 10/17/05; 11/30/05; 1/11/06; T-W; 11/8/05; 1/12/06). The focal students observed other students’ use of and explicit reference to one or more of these
reading comprehension strategies, and they used these strategies themselves in authentic ways during the discussions. Using excerpts of transcripts from two different discussions, I provide two detailed examples of this phenomenon. I then summarize other examples of this phenomenon in Table 9.

The following excerpt is from the Weasel 1 discussion, which took place in the fourth-grade classroom in March 2006. Eight students in a heterogeneous, teacher-led group discussion talked about justice for Weasel, a main character in the story of the same title (Weasel by Cynthia DeFelice) who murdered Indians during the early days of pioneer life in America. Jack, a focal student, participated in the small-group discussion. During the discussion about retribution for Weasel, Mrs. Reinhart pointed out the author’s use of the word ‘savage’ in the story, then the students took up the focus on the vocabulary item as they engaged in problem-solving about the word and its relationship to the topic of the discussion and theme of the book (i.e., returning evil with evil does not make right). I highlighted sections of the transcript that I discuss below.

39. Ashley: Yeah, he may not be, if he, if he doesn’t, if he does find a way out of the trap, good for him. But if he doesn’t, I mean that, it serves him right. I mean, I know that’d probably not the right thing to do, but it serves him right.
40. Jack: He deserves it.
41. Students: (overlap) (cannot hear)
42. Teacher: Let’s look on page 42 because the book has a word in there, when we talk about the word ‘savage’ and on this page, in the second paragraph down, um, let’s read that part. Um, Christy, can you read, I thought about Weasel cutting out as we start that section right there? Can you read that for us?
43. Christy: (reads from text) I thought about Weasel cutting out Ezra’s tongue and killing Indians and poor settlers and seemed to me has, he has, he was more a savage than anybody I’d ever heard of. Couldn’t white folks be savages, too?
44. Thomas: I don’t think the Indians were savages in the first place.
46. Thomas: What is a savage?
47. Jack: Someone who kills somebody.
48. Student: (simultaneous) That -
49. Ashley: (simultaneous) That’s, there’s different meanings to it because different people have opinions -

50. Thomas: But what about THIS meaning? What does this meaning mean that they’re savages?
51. Ashley: Um, it says -
52. Teacher: (interrupts quietly) That’s a good idea, Thomas.
53. Ashley: I think that what it means in here, the savages, in here, it means that someone is just so ruthless to kill someone and they don’t even think bad about it. And that, the Indians, they weren’t savages at all, even if it says so in this book. ‘Cause they use, they only killed what they needed.
54. Jack: (simultaneous) Yeah, the animals -
55. Thomas: (simultaneous) They didn’t use them over time.
56. Ashley: They didn’t stock up.
57. Jasmine: The Indians didn’t kill, they didn’t kill all -
58. Ashley: (interrupts) And if they did kill over what they needed, they used every single bit of it.

Expanding one’s vocabulary is a necessary condition for improved reading comprehension, and understanding vocabulary within a specific context is a key reading comprehension strategy that good readers use to make meaning of the text (National Reading Panel Report, 2000). The excerpt from ‘Weasel 1’ illustrates the way students drew on specific reading comprehension strategies in an as-needed or authentic way during group discussions. Although Mrs. Reinhart brought up the word ‘savage,’ the students did all of the ‘work’ involved in making sense of this word in the context of the story. It seemed Thomas’s apparent interest in the word, ‘savage’ (turn 46), spawned an important conversation about determining the meaning of words in context, creating a model of strategic reading for the others in the group. Jack, the focal student here, responded to Thomas’ initial query in turn 47 with the response, “[a savage is] someone who kills someone.” This was an adequate definition, but notice what happened after Ashley and Thomas explicitly referred to the strategy of identifying the meaning of
words in a particular context. In turn 50 Thomas said, “What about THIS meaning?”

Then, in turn 53, Ashley reformulated the information from the text or perhaps the part that Christy read in turn 43 in order to suggest a definition of the word ‘savage’ in that particular context. Then together, Jack, Jasmine, Ashley, and Thomas made additional connections to the word, referring to a previous section of the text about how the White people killed animals without using them, and this helped solidify the group’s understanding of the word ‘savage.’ In short, the students worked together, interrogated the text, recalled text details, and unearthed the specific meaning of a word in order to perform and practice a valuable reading comprehension strategy.

Moreover, the students generated strategic thinking in using vocabulary to make sense of the text in a way that I can only describe as organic, which I define here as natural or authentic. Mrs. Reinhart referred to the word, but the students took up the meaning-making and explicit reference to the important strategy of inferring meaning through the context of the story. Jack, the focal student in the ‘Weasel 1’ discussion participated in this strategic reading event twice. The first time he provided a definition of the word ‘savage’ in turn 47 and then a second time he built onto Ashley’s improved definition of the word in turn 53. Ashley’s better definition (i.e., related to the context of the story) could have reminded Jack of the way the author had described the ways the White people killed animals without using them and the ways the Indians used every bit of the animals they killed because he says in turn 54, “Yeah, the animals.” Jack participated with the other students in this strategic reading event, practicing his own strategic way of thinking about the word by making a connection between the word and its use within the context of the story.
The same kind of organic use of comprehension strategies emerged during discussions in the fifth-grade classroom (e.g., FN-W, 2/7/06; T-W, 2/7/06). It is generally agreed that strategic readers visualize the text or make pictures in their minds of the mental models they create as they read (Pressley, 2002). The students in the next typical example of the phenomenon discussed ‘visualizing the text.’ The fifth-grade reading group consisted of three focal students Erica, Derek, and Mia and two other students, Emma and Cory. The students had read the short-story, *The Old House* by W.W. Jacobs, independently before the reading group met. During the more homogeneous guided reading group lesson, the students discussed the story with Mrs. Pearson for approximately 30 minutes. *The Old House* is a story about four young adolescent boys who dare each other to explore an abandoned house that one boy had claimed was haunted.

As the students were getting settled for instruction at the table where Mrs. Pearson led reading groups, Emma and Mia immediately started talking about their confusions concerning the four characters (all teen boys). It seemed Mia had trouble with identifying the characters in the text because she said, “[pointing at the only illustration in the story] So that’s William right there eating a sandwich?” The students and Mrs. Pearson sorted out the characters for about one minute and then Mrs. Pearson began the discussion formally, asking, “Does anyone have a discussion question for today?”

Emma responded without any hesitation, “Why do you think those…uhm…boys were so interested in that house?” For the next 12 minutes, everyone except Derek discussed their views toward this question and related topics with little interruption from Mrs. Pearson. The dominant theme in this part of the discussion related to event in the
text about “something” scaring the boys in the house. The students engaged in problem-solving together, sorting out whether the “something” was real, imaginary, or supernatural. After several minutes of dialogue without any consensus on the topic, Cory said the following:

There is always a possibility that it’s not something of the supernatural, uhm like, the thing with the door closing and opening, it could have just been the wind, uhm…for the part if the figure going to them and the noises, it could be an animal uhm and uhm (unclear) sometimes gets big, so he thought that was sometimes that figure or the shadow and the figure, it might have been an animal.

The excerpt below of the Old House transcript illustrates the way talking about specific comprehension strategies emerged in the discourse of discussions about text.

The following excerpt is about the use of visualizing the text. I have highlighted several turns that I discuss below.

173. Erica: Ok, but one time, uhm… I see a figure that looks like something, but it really wasn’t that thing, like boxes… maybe it was the staircase or something looking like a figure, but then there was like uhm mice I guess, like walking… making that sound.
174. Emma: Well, maybe for some reason while I’m totally against the ghost thing because I don’t believe in ghosts or spirits, so that’s maybe why, maybe I’m talking before I’m like listening to myself, like uhm -
175. Erica: (interrupts) That happens all the time!
176. Emma: But I still think like this book, it sounds like, you know how I told you this, but I want to tell you this, you know how we before turn something in to a story you want people to read it well, it seems like this author wrote it and no one re-read it, you know? And it sounds like he wants it to be a discussion story, what if we don’t… what if I didn’t do this discussion? What if I’d just picked it up and read it? I would you know…That’s stupid to have a discussion with myself!
177. Erica: But I mean like he might.
178. Mrs. Pearson: But look how much thought we were giving to The Giver the night that you went home. There’s a lot of thinking that goes along about a book sometimes. When you’re really intrigued with the book or a story, you might think about it away from, you know… away from when you’re reading it, those conversations that you have in your head to yourself…. I mean I thought a lot about The Giver.
Emma: But, I’m like different like that when I’m done reading a book I don’t think about it anymore, I think about it while I’m reading it or listening to it.

Erica: (simultaneous) I don’t!

Mrs. Pearson: (simultaneous) You didn’t think about The Giver at all? Later?

Emma: No, I like the book and all, but when I’m at home, I really don’t sit there and like think about where Elsewhere is, I need to hear more of the book like while you’re reading it, I picture it in my head… I can’t like think about it maybe in Science, later in that day. I have to like, hear you or someone like talk and read. I need more descriptions… They help me get mental pictures on my head… and like -

Mrs. Pearson: (interrupts) You don’t get mental pictures while you’re reading?

Emma: No.

Erica: I do! I don’t know why, but I do.

Emma: Because like uhm… I read, sometimes I don’t understand what I’m reading so I go back and read it. [reads from the Old House text] The figure did not answer. So I would be reading like this and like that and like … I try to slow down but then I don’t understand it, so like, I, I, I need some pictures to help me understand the book uhm -

Mrs. Pearson: But you don’t have mental pictures when you read?

Emma: No, I have to listen to someone.

Mrs. Pearson: Listen to someone read or listen to someone talk about the book?

Emma: I can, most of the time, when people talk to me about the book.

Emma refers to her use of visualization in turn 182 and Erica refers to the same strategy in turn 185. Although Mrs. Pearson reiterates the strategy (183), she does not compromise Emma’s and Erica’s authentic work in explaining the strategy or pointing out the way they use the strategy. Emma implied she uses visualization as a strategy to make meaning when she reads, and she explained her use of the strategy explicity, which in turn, seemed to help Erica think about her own use of the strategy (turn 185).

In the Old House excerpt, the students began talking about an event in the story in a way that was typical for this group (FN-W, 3/14/06). They grappled with an idea about the story, in this case the plausibility of the supernatural, for many turns, but then Emma’s comment about the text in turn 178 elicited a kind of retrospective think-aloud
about her reading process. Emma begins a think-aloud in turn 175 when she mentioned the viability of using discussion in order to comprehend text. Mrs. Pearson showed a curiosity about Emma’s response, querying in turn 180, ‘You didn’t think about *The Giver* at all?’ Emma and Mrs. Pearson then exchanged questions and responses for the next several turns each time confirming that Emma used ‘visualizing’ as a strategy only in the context of discussions or when she listens to others read. Erica, a focal student, appeared to be listening to the discourse here, and it is Emma’s description of her own reading process that likely helped Erica affirm, in turn 184, that she visualizes the text when she reads.

The excerpt from the Old House transcript is interesting because it demonstrates the way explicit references to a reading comprehension strategy emerged from the discourse in a way that I have described as ‘organic.’ Mrs. Pearson alluded to the strategy, but it was Emma’s persistence in explaining her critique of the story and her reading process that provoked the talk about the strategy and perhaps led to Erica’s thinking about her own use of this strategy.

During a focal group interview, Erica and Emma seemed to perceive their participation in discussions as opportunities to practice reading comprehension strategies, confirming what happened in the ‘Old House’ discussion. In response to my question, ‘What do you do during discussions,’ Erica said, “I picture stuff in my head…uhm, and I try to ask questions if I’m lost” (I-W, 4/24/06). In that same interview, Emma reported:

Like in *The Giver* (reference to two discussions held earlier in the year) uhm I thought about the story and I listened to what other people said and after I put in my own words, and if there were parts of the story I didn’t understand, I’d bring them up to talk about.
To this I replied, ‘Why did you do that?’ And Emma responded, “I was trying to get an answer in my head that made sense.”

During other focal group interviews, in response to my question, ‘what do you do during discussions’ or in response to my question ‘how do discussions help you,’ focal students variously reported that discussions made them ‘re-read the story…make sure I have questions ready (Jack),’ ‘go back into the book to get evidence (Elena),’ ‘look back to the story to find answers (Erica),’ ‘make text-to-world, text-to-text, and text-to-self connections (Lucas),’ and ‘…talk about how something happened and we make predictions (Matthew).’ Implicit in these comments is a sense that focal students used the discussions about literary texts as contexts to practice reading comprehension strategies such as summarizing, asking questions, looking back into the text for details, making metacognitive moves, building inferences, and making predictions.

Table 9 summarizes examples of this organic comprehension strategy phenomenon in other discussions. In each of the discussions shown in Table 9, the students who participated in the discussions drew on their understanding and background knowledge about comprehension strategies, telling others about their use of the strategy or need for the strategy in relation to the topic of the discussion. Again, the finding is the focal students either brought up the strategies themselves or participated in the discussions when others in the group brought up and used the strategies.
<table>
<thead>
<tr>
<th>Title</th>
<th>Fourth-Grade Classroom Strategies</th>
<th>Fifth-Grade Classroom Strategies</th>
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<tr>
<td>Ruby Holler 1</td>
<td>Referring to text in order to make a claim; referring to vocabulary; generating questions</td>
<td>Old House</td>
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<tr>
<td></td>
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<td>Visualizing text, referring to story structure; generating questions</td>
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<td>Ruby Holler 2</td>
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<td>Referring to story structure; making metacognitive moves; generating questions</td>
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<td>Referring to vocabulary; generating questions</td>
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<td>(e.g., rising action, theme)</td>
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<tr>
<td>Winn Dixie 1</td>
<td>Referring to vocabulary; generating questions</td>
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<td>Winn Dixie 2</td>
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<td>Visualizing; generating questions</td>
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<tr>
<td>Weasel 2</td>
<td>Referring to text in order to make a claim; referring to vocabulary; making metacognitive moves; generating questions</td>
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<td>Rules (a)</td>
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<td>Making metacognitive moves; generating questions</td>
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<td>Rules (v)</td>
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<td></td>
<td>Making metacognitive moves; generating questions</td>
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<td>Kelly</td>
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<td></td>
<td></td>
<td>Making metacognitive moves; generating questions</td>
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<td>Poppy 1</td>
<td>Metacognition; generating questions</td>
<td>Victor (v)</td>
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<tr>
<td></td>
<td></td>
<td>Making metacognitive moves; generating questions</td>
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</tbody>
</table>

Table 9. Particular Reading Comprehension Strategies that Emerged in Discussions in Each of the Two Classrooms

Both Mrs. Pearson and Mrs. Reinhart systematically and explicitly instructed students to use comprehension strategies through modeling, explicit instruction, and guided feedback during certain parts of their reading instruction (e.g., during read-alouds,
as mini-lessons before a language arts block, at the beginning of guided reading groups) (FN-N, 5/5/06; FN-W, 5/4/06). Discussions, on the other hand, were instructional contexts where explicit teaching of comprehension strategies almost never happened (FN-W, 10/05-5/06; FN-N, 10/05-5/06).

What we are perhaps discovering here, then, is that discussions may become an important context for a certain variety of reading instruction that reflects a situated view of learning (Lave & Wenger, 1991). Simply stated, situated views on learning or situated cognition imply that cognitive acts must be viewed as responses to a particular set of circumstances (Resnick, 1991). In other words, knowledge and skill develop in the process of enacting the skill or employing the knowledge, not the result of the process (Lave, 1991). In the cases here, thinking about strategies and relating them to the story came from the students’ needs or desires to talk about those strategies, demonstrating a situated view of learning that may explain the finding.

In their review of empirical studies of reading comprehension instruction, Pearson and Fielding (1991) reviewed a small, but noteworthy group of studies that suggested students’ real learning of complex tasks (e.g., reading comprehension) takes place gradually over time in the performance of authentic activities and situated modeling. Further, Pearson and Fielding (1991) summarized the findings from these studies, stating that ‘authentic’ and ‘situated’ are key terms in that “students learn how to perform complex mental tasks when there is a real need to do so and when they are allowed to participate in the whole act of task completion even before they can carry out the entire process independently” (p. 842). Based on this perspective, what we find in the above examples is a classroom activity that facilitates the authentic or, as I have suggested,
‘organic’ work with comprehension strategies that may support students’ overall growth as readers. The discourse of the discussions created opportunities for focal and non-focal students to identify and use strategic reading behaviors and to listen to the ways other students used those strategies as a kind of situated and authentic practice. The students, in essence, modeled for each other the authentic use of the strategies in a relevant context.

As indicated above, discourse related to reading comprehension strategies exposed lower-achieving readers to models of what good readers do when they make sense of text (e.g., engage strategies to aid comprehension). I cannot say with certainty that all of the focal students gained deeper understanding of reading comprehension strategies as a result of their presence or participation in discussions, but the data showed the ways the focal students became immersed in real talk about important strategies. The point here is that the explicit use of these strategies need not occur when the teacher chooses to instruct them. For instance, without the Weasel discussion, Jack would not have been part of a rich conversation about a new(er) word, and he would not have had an authentic opportunity to make a connection between the word and the story or listen to his classmate’s rendition of the comprehension strategy related to vocabulary knowledge (i.e., making sense of words in context).

*Participation in Problem-Solving about and Around Text during Discussions*

Earlier, I claimed the lower-achieving readers in this study used the talk in discussions as a tool for transforming their thinking about text and improving their comprehension. I suggested they did so more frequently in discussions that seemed to have a problem-solving framework or approach to the discourse, claiming a problem-
The excerpt below is from the Poppy’s discussion transcript, and it provides an example of a problem-solving approach the participants used in the discussion. Jack is the focal student in this particular example and he is part of a group with four other boys working with the text *Poppy*, by Avi. *Poppy* is one book in a series of fantasy stories about a family of mice who must try to pool their resources to outwit and survive the forest’s self-appointed leader, Mr. Ocax, the great-horned owl. In Jack’s words, the ‘Poppy’ discussion was his “favorite” of the year because “it [the discussion] was like we were all in a club…it didn’t matter if we disagreed because we were all friends” (I-N, 4/20/06). Mrs. Reinhart’s instructional goals for this particular text were for the students to understand cause-effect story structure or “how things, events, or people connect to each other” and “to provide reasons and evidence” for one’s thinking during the discussions (FN-N, 2/1/06). The students and Mrs. Reinhart were discussing whether Rye could be Ragweed’s brother (both field mice and main characters in the story) during
a guided reading group lesson. The discussion lasted 23 minutes. The students seemed to use their knowledge of character traits to make claims, pose questions, and problem-solve the questions they had about the text. I have highlighted particular turns that reflected problem-posing, which are embedded in series of problem-solving episodes.

130. Ben: You’re disagreeing with who?
131. Jack: I’m disagreeing with whoever said that Rye is Ragweed’s brother. Who said that? Kyle was that you? (pause) uhm, I’m disagreeing with Trevor.
132. Thomas: Ben it’s just like -
133. Teacher: (interrupts) Why are you disagreeing? What’s your reason for your thinking there?
134. Ben: Uh hum (nodding in agreement with Mrs. Reinhart’s probing)
135. Jack: I also agree with Thomas and I disagree with Trevor. Because if Rye probably would have said something if -
136. Ben: (interrupts) Ragweed was his brother.
137. Jack: Yeah. But maybe Ragweed was one of Rye’s long lost cousins and they never even knew each other and so he probably didn’t say because he didn’t know.
138. Thomas: (simultaneous) But Jack-
139. Ben: (simultaneous) I agree with Trevor because maybe he was actually Ragweed’s brother. But he was too sad to even speak of Ragweed when -
140. Jack: (interrupts) He would have said something.
141. Thomas: But Kyle, if Ragweed was Rye’s brother
142. Jack: He would have said something.
143. Thomas: Yeah, and Rye would probably say, ‘You know what, Poppy? Did you know Ragweed is my brother and he did die from Ocax and gotten eaten and all that, and he’d probably be that important. He’d be that sad but he would tell Poppy about it.
144. Ben: Yeah, but if my brother would have died, I would never have spoke of him ever again.
145. Trevor: But maybe-
146. Thomas: (interrupts) Yeah, but there’s no crying in here [the book].
147. Jack: If my sister died, I would have said something if nobody knew I was her brother.
148. Trevor: Maybe he was his little brother and because usually little brother and little sisters get all the attention, so he didn’t care about him.
149. Thomas: Didn’t what?
150. Jack: Or maybe Ragweed and Rye never seen each other for a long time and they forgot about each other.
151. Ben: What if they were best friends?
152. Jack: But don’t you think he might have still said something?
Thomas: Yeah, well, but if they’re best friends what if Poppy, what if Poppy already knew that-

Jack: Because Ragweed might have talked about him.

Thomas: Yeah, what if Rye already told Ragweed that Rye already told Rag- Poppy that they were best friends, so that’s probably why he’s not saying anything or -

Ben: Wait. What if Ragweed and Rye weren’t really brothers, but they were friends who were really, really close together like brothers?

Thomas: Yeah. Sort of like brothers.

The ‘Poppy’ excerpt reflects a problem-solving approach to the discourse that the students and Mrs. Reinhart created together. In turn 130, Ben queried about a disagreement Jack had with Trevor’s earlier position, which generated a problem to discuss. Mrs. Reinhart asked a follow-up question in turn 133 that seemed to ignite the conversation about the two field mice (“Why are you disagreeing?”). The boys then seemed to take off on their own as they resolved Jack’s proposition in turn 131 (i.e., that Rye and Ragweed are not brothers). Within this problem-solving framework, Jack’s responses indicate that he speculated about the characters (turns 135, 137, and 140) and then backed up his early speculations with a plausible reason, drawing on his personal experience as a brother (turn 147). Turn 147 is considered a ‘text-to-self’ connection and it seems to be a critical turn here because it demonstrates that Jack used discourse as a tool to reason and think thoughtfully about the text. We do not know for sure if Jack would have made this connection between the text and his personal experience without the discourse, but we can say the discourse certainly helped by producing the opportunity to do so. From a reading teacher’s perspective, what the students did in the ‘Poppy’ discussion is the overall aim of reading instruction in the intermediate grades – to think
about text in a way that goes beyond the basic details of the story, problem-solving about characters, text events, and story themes in order to interpret the text in a more complex way.

Many students (focal and non-focal) seemed to have a tacit awareness of their work as ‘problem-posers’ and ‘solvers’ during discussions. Consider the students’ comments in Table 10 that were reported to me in response to the questions, ‘what do you do during discussions’ or ‘which discussion was your favorite this year and why’ during focal group interviews (I-N, 4/13/06; I-N, 4/20/06; I-W, 4/18/06; I-W, 4/24/06). I included the responses from the focal students (bold-faced) that implied their perceptions of discussions as ‘problem-solving’ events, and I chose to include a few comments from non-focal students to show that others approached discussions in a similar way. Key words in students’ comments that seemed to evoke the qualities of problem-posing and solving are underlined.
Lucas: I talk during the discussions and when someone brings up an idea then we talk about it for quite awhile…you say what you think and other people can agree and disagree.

Matthew: I liked the *Weasel* discussions the best because everyone got to say what they wanted to say and everyone had an answer.

Elena: I liked the *Because of Winn Dixie* discussions because everyone listened to each other. Nobody was off on something different like they are in *The Landry News* discussions.

Ben: I liked the *Poppy* discussions the best because we had long discussions and they were our own….We challenged each other and thought of character traits and did a domino effect.

Evan: We challenge each other [in discussions]. Somebody will tell an answer and then somebody will, like, say… ‘Why is that?’

Thomas:…ask questions…giving evidence and proving your ideas [during discussions] is fun…you focus on an idea and talk about it.

Patrick: We try to think about what needs to be said and we find a part in the book that supports your idea….a third of it is explaining to people what your ideas are.

Mia: Everyone listens in them [discussions].

Emma: [During discussions] I thought about the story and listened to what other people said and after put in my own words.

Katie: The discussions helped me question myself more…I think President Bush needs to have discussions.

Melinda: We talk about an idea of what something is to get more information.

James: We used to read the story and there was a definite answer, but not now [referring to the discussions in fifth-grade].

Carl: I think the discussions were good because you question each other.

Table 10. Students’ Responses that implied their Views of Discussion as Problem-solving Events
The students’ comments about what they ‘do’ or ‘like’ about discussions suggest that they noticed the qualities that I argue comprise a problem-solving approach in the discourse of the discussions, asking questions, stating propositions, giving evidence to support ideas, talking about the ideas with others, and listening to others in order to build an understanding of the story. No student of the 41 who were interviewed said things such as ‘we don’t listen,’ ‘we argue with each other,’ ‘we fight, ‘I don’t like them,’ or other kinds of comments that would suggest the students perceived their involvement in the discussions negatively.

In addition, I used a code I called ‘meta-discourse’ to mark places in the transcripts, interviews, and debrief sessions when students referred to the discourse in a way that showed they may have been aware of the purposes of discussions. For example, during the Box in the Barn discussion, Thomas informed his group, “I have evidence from the story” (T-N, 2/15/06). In Poppy 2, an unidentified speaker asked Trevor, “What’s your reason for that” (AR10-N)? In Poppy 5, Ben asked Jack, “What’s your proof for that” (AR12-N)? In Ruby 2, Elena told her group, “I have evidence” (T-N, 11/05). In a debrief session, Mrs. Reinhart asked the class what kinds of questions needed to be asked during discussions, and Patrick replied, “We don’t ask stale bread questions, we ask big fat stack of pancake questions!” Thomas queried about the meaning of this, and Patrick said, “It’s a question that means a lot to the story and there’s a lot of evidence” (AR17-N). In Victor 1, Erica reminded her group to listen to John when she said, “Wait. John found it to back up what he said” (T-W, 3/14/06). I coded 106 comments like these across the two sites, and I argue the comments reflect the students’ consideration of discussions as contexts where they share relevant information,
give reasons and evidence to substantiate what they said, and ask others to provide reasons or evidence for their claims about text. These comments portray students who know an essential purpose of discussions – to pose questions and work together to solve those questions about the text.

Taking into account the students’ comments and patterns across the transcripts and indices from the discussions in both classrooms, I have come to identify a problem-solving approach in discourse as a kind of “tacking” or fluid-like movement between the student (or teacher) questions and problems about the text and their work together to solve and resolve the questions under consideration (see Figure 4). Similar to navigators of sailboats who use the wind to tack between two points in the sea in order to move forward, the students in the ‘Poppy’ excerpt, for example, tacked between different questions as they worked toward solutions or resolutions in order to move toward the intended goals of making meaning and learning new ideas about reading and the text.

Figure 4. A graphic representation of ‘tacking’ between problem-posing and problem-solving episodes in the discourse.
Another example of this ‘tacking’ occurred in the Victor 1 discussion in the fifth-grade classroom (see excerpt below). Derek and Mia, focal students, participated in this heterogeneous, peer-led discussion with Grace, Ryan, and Katie in March 2006. They were discussing the short-story Victor, by James Howe. I have highlighted particular turns in the excerpt to emphasize the problem-posing that occurs within problem-solving episodes.

95. Grace: What do you think, Katie?
96. Katie: Like I said I think Victor is God like not even a miracle worker because he's somebody like out of (unclear).
97. Ryan: (overlapping) Not even in reality can people do that, so it has to be some unordinary person unless it's fantasy and I think this can happen in real life. (pause)
98. Grace: I think (unclear) this could be a dream.
99. Ryan: What?
100. Mia: I don't think that he ever had a dream-
101. Grace: (overlapping) I believe this whole thing was a dream. Could Cody have dreamed about Victor and then woke up and talked to his parents did it really ever happen? I don't know.
102. Ryan: We could talk about that. Do you think it was a dream?
103. Mia: No.
104. Katie: Why don't you think it wasn't a dream?
105. Mia: Because then why would he dream about a guy Victor and Max in his dream when Max is a real character?
106. Grace: I've had dreams about different people before.
107. Ryan: Yeah I guess it could be when someone dies in a story or something.
108. Mia: But how could he dream it. Because he said, ‘I never find out who Victor was’ then Victor came and said goodbye to Cody. He almost died in his dream.
109. Grace: Have you ever had dreams that you thought were real?
110. Mia No.
111. Ryan: No.
112. Grace: Did you ever wake up and doubt that they really happened though?
113. Ryan: Sometimes your dreams are about what's about really happening like. You might dream something that you might actually be doing.
114. Mia: Yeah but it doesn't say anything about his dreams.
115. Katie: Well, he couldn't have been dreaming the whole time.
116. Mia: Yeah, he couldn't have had a dream the whole time.
117. Grace: He could've been dreaming when Victor came.
118. Mia But Victor is always there.
119. Grace: But he only shows at night they don't and authors sometimes don't
tell you everything that is happening.
120. Katie: Oh, uhm there's one other thing about that big box and even his
parents were like 'why did he get a big box' unless (unclear). Well, it could
not have been there if it was a dream.
121. Ryan: It couldn't have been in a dream because if he got a box -
122. Mia: Why did Victor come in the first place?

This excerpt from the Victor 1 discussion is another example of how the problem-
solving framework operated in the discussions in both classrooms. I characterize this
problem-solving as a fluid movement in the discourse between the students’ (or
teacher’s) questions and problems and their collective efforts to work through those
questions before asking new questions.

Although many discussions had this problem-solving quality, not all of the
students’ talk during discussions indicated genuine problem-solving. Some discussions
lacked the fluid movement in the discourse between questions and problem-solving that I
illustrated in the Poppy and Victor 1 discussions. For example, in the excerpt below the
discussion lacked any movement between problem-posing and problem-solving on the
part of the students, so the discussion seemed to stall in places (T-N, 2/1/06). The
excerpt is from a transcript of a discussion from a fourth-grade, teacher-led reading
group, discussing several chapters of the story, Because of Winn Dixie, by Kate
DiCamillo. I highlighted sections to show where problem-posing began but problem-
solving stalled.

Lucas: I’m wondering how old is everyone?
Jasmine: About, has to be about ten years old.
Mrs. Reinhart: Okay.
Colin: The Dewberry boys have to be younger. Around like.. six… or seven.
Students: (overlap)
Matthew: I forget in which chapter, but it says that the Dewberry boys, one is
nine, and the other one is ten and it said just like me.
Mrs. Reinhart: Good evidence! Huh?
Jasmine: Opal…Opal also gave them.. Sweetie Pie a Litmus lozenge, and then
Sweetie
Pie just like spitted out cuz she wants a dog really bad, so I think so maybe we
should have like added Sweetie .. Sweetie Pie on that [referring to chart paper
where students had previously added characters to a graphic organizer]
Mrs. Reinhart: So we should add Sweetie Pie up here? [chart paper]
Jasmine: She wants her (pause) she wants her dog really bad.
Students: (overlap)
Mrs. Reinhart: So she has sadness because she wants a dog, is that –
Lucas: (interrupts) Wants dog.
Jasmine: Yes, it said in the chapter, dog –
Mrs. Reinhart: (interrupts) And she, did Sweetie Pie eat a Litmus Lozenge?
(unclear)
Students: Yes (in unison).
Elena: She spit it out because she didn’t like it.
Lucas: Yeah, she spit it out, she spit it out in chapter 19.
UnknownS: Because she didn’t have a dog.
Mrs. Reinhart: Did she make that comparison to like..(pause) Did she say it tasted
bad
like not having a dog?
Students: Yeah.
Mrs. Reinhart: Wow!
Lucas: Yes, she said “it tastes bad just like not having a dog!” And Opal just
stood there
and walked away.
Mrs. Reinhart: Huh?
Elena: It said, (referring to text) *Sweetie Pie came in and I gave her a Litmus
Lozenge*
(unclear) –
Mrs. Reinhart: (interrupts) So she made a simile Huh?, Sweetie Pie, she’s just a
little one,
and she can make similes as a little girl so she’s a good thinker.
Lucas: Why did she want a dog?
Jasmine: Well, she..she uh likes Winn Dixie, so she wants a dog like him because
he’s nice.
Students: (overlap)
Troy: She wants a dog like Winn Dixie,
Colin: No, she wants Winn Dixie.

In the above excerpt, I highlighted two sets of turns where students seemed to be
the initial stages of problem-solving (i.e., students posed questions). However, the
student problem-solving never really took off in the same way that it did in the Poppy or
Victor discussions. In Winn Dixie, students responded to each other with brief statements, and for the most part, the statements lacked reasons or evidence from the story. The students did not connect their comments for more than two or three turns. Any problem-solving that started simply faded away. In short, some of the discussions looked and sounded like the Winn Dixie discussion - not entirely ineffective, but not reflecting a problem-solving orientation to the task of talking about the text and making meaning collectively.

What does this problem-solving discourse mean for lower-achieving readers? Allington (2001) argued that lower-achieving readers need opportunities to think about text in a thoughtful way, which he characterizes as a kind of thinking about text that extends beyond identifying the literal details of a story. Based on other patterns in the data, I argue that problem-solving promotes opportunities for lower-achieving readers to respond to the text and topic of the discussion in thoughtful ways. In order to illustrate this finding’s plausibility, I must first describe a construct termed ‘exploratory talk’ that operationalizes problem-posing and solving in classroom discourse.

*Exploratory talk* characterizes the collective work of students as they use language to reason together in order to formulate meaning (Barnes, 1992; Mercer, 1995). The collective reasoning is joint intellectual activity that takes place in discussions as students build new understandings together (Johnston, 1999; Langer, 1995; Mercer, 1998; 2000). From Mercer’s (1995, 1998) point of view and building on the work of Wilkinson et al. (2006), who examined exploratory talk in the context of group discussions about literary texts, exploratory talk is a kind of co-reasoning, “where students (sometimes with the teacher) share relevant knowledge, evaluate evidence, and
consider ideas in a reasonable and equitable way” (Wilkinson et al. 2006, p. 28). In essence, it is a way of using language to think collectively or ‘interthink’ (Mercer, 1998). Three essential elements of exploratory talk include students giving reasons for their ideas or opinions, providing alternative views, and challenging each other’s ideas in critical but constructive ways (Mercer, 2002). Table 11 displays an excerpt of a transcript that shows an example of exploratory talk from one of Mrs. Pearson’s fifth-grade, heterogeneous discussions about the short-story, Victor, by James Howe. The students are discussing the authentic question Mrs. Pearson asked at the beginning of the discussion event, ‘Who is Victor?’
Table 11. Example of Exploratory Talk

In episodes of exploratory talk, students go beyond sharing their own unrelated ideas and interests and they go beyond repeating the same kinds of ideas. Instead they share relevant ideas in order to work together to produce an understanding of the text or theme related to the text. Ryan elaborated Mia’s position that ‘Victor is a miracle worker’ (turns 9 and 10). Ryan affirmed this idea with possible evidence from the text, even reading a line from the story. In effect, Ryan’s reasoning made Mia’s idea stronger and more plausible. And together, Ryan and Mia seemed to help Grace understand a new
perspective about the text that she had not previously considered (turn 11). Essentially, during episodes of exploratory talk, students pool their thinking and resources in order to make meaning together.

In addition to providing reasons, students challenge each others’ claims and opinions in episodes of exploratory talk. Grace challenged Katie’s position about Victor (turn 15). As a result, the others pondered, weighed the options, and considered the story rationally (turns 17 and 18). Students in discussions do not always take up a challenge, but in the episode of exploratory talk above, Mia and Ryan considered Grace’s challenge in turns 17 and 18, reasoning about the challenge with relevant information. In sum, participants who take a problem-solving approach in discussions use language as a tool to make reasoning visible and knowledge more publicly accountable, fostering meaning and new understanding (Mercer, 1995).

I identified episodes of exploratory talk in all of the transcripts I coded and noted the density of the discourse that indicated exploratory talk (calculated as the number of student turns within episodes of exploratory talk relative to the total number of student turns in the discussion event expressed as a percentage). Table 12 shows the five richest discussions in terms of problem-solving about the texts in each of the two classrooms as indicated by the density of the discourse that reflected exploratory talk.
Table 12. “Top” Five Discussions with the Highest Proportions (densities) of Exploratory Talk

In almost all cases, the discussions with higher densities of exploratory talk episodes were the same discussions that focal students had reported they enjoyed the most, or I had determined through analyses of their talk that they had contributed to the discussions in thoughtful ways. Put another, there was an intersection between the discussions with lots of problem-solving and focal student turns that suggested engagement in quality thinking about text. Again, drawing on Allington (2001) and the concept of ‘thoughtful literacy,’ I define ‘thoughtful’ comments here as those that suggest the student went beyond identifying the basic, literal details of the story, stretching their thinking toward creating more complex ideas about the text or topic of the discussion that relates to the text. Examples of thoughtful responses from the focal students during various discussions are shown in Table 13. I have added my own commentary to illustrate my rationale for coding the turns as thoughtful responses.
<table>
<thead>
<tr>
<th>Focal Student</th>
<th>Discussion Title</th>
<th>Thoughtful Comment</th>
<th>Researcher’s Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colin</td>
<td>Weasel 2</td>
<td>Yeah, I did that once when I was putting this big earring in my ear once. And it all started to go black.</td>
<td>Connects text to his own experience.</td>
</tr>
<tr>
<td>Elena</td>
<td>Ruby 2</td>
<td>I think that Z is Dallas and Florida’s father because he was married to their mom and he might know cause he hasn’t told them (unclear) and he might tell them, but they’re</td>
<td>Analyzes a text event.</td>
</tr>
<tr>
<td>Jack</td>
<td>Weasel 1</td>
<td>Yeah, it’s like someone that you knew but you didn’t know them very well and they were mean, you would still cry for them ‘cause you knew them.</td>
<td>Creates an analogy.</td>
</tr>
<tr>
<td>Lucas</td>
<td>Ruby 1</td>
<td>I have a connection to Ben’s. Ben said that you can’t feel anything in your dreams and dreams aren’t really real and um…on the History Channel, no, I mean the Discovery Channel um…it said that dreams for centuries have been portals to another realm.</td>
<td>Makes a connection to Ben’s proposal.</td>
</tr>
<tr>
<td>Erica</td>
<td>Wan Li Road</td>
<td>I think that it was kind of like daydreaming, you know, when you’re kind of there and kind of not there, well, I think that’s how his brain was. He kinda thought he was there but kinda didn’t know he was there being a ghost.</td>
<td>Creates an analogy.</td>
</tr>
<tr>
<td>Mia</td>
<td>Giver 2</td>
<td>But there might be another dimension. The shot might not be for it [remove color]. There might be another dimension.</td>
<td>Speculates about a text event.</td>
</tr>
<tr>
<td>Derek</td>
<td>Ghost of Wan Li Road</td>
<td>I think that uh, he had to trick him to get by and uh now I know why he waited to make sure he was a sheep because he said that uh (reads from text) a good black sheep will sell easier.</td>
<td>Refers to the text to provide a reason.</td>
</tr>
<tr>
<td>Matt</td>
<td>Kelly</td>
<td>Maybe… maybe Kelly doesn’t really have friends, so maybe she shouldn’t help her.</td>
<td>Speculates a reason.</td>
</tr>
</tbody>
</table>

Table 13. Focal Students’ Thoughtful Responses during Different Discussions
Table 14 displays the eight focal students’ total number of thoughtful comments during the eight discussions I transcribed in which each focal student participated. I underlined and bolded the discussions with the highest densities of exploratory talk. It was not necessary to control for length because the length of the discussions did not seem to be a factor in the students’ oral participation; some of the shortest discussions elicited higher quantities of thoughtful comments. All of the discussions shown in Table 14 were approximately 25-35 minutes long. The underlined and bolded titles indicate discussions with the highest amounts of exploratory talk.
<table>
<thead>
<tr>
<th>Focal Student</th>
<th>Discussion Title</th>
<th>Thoughtful comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colin</td>
<td></td>
<td>Ruby 1  Victor 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weasel 2  Lion 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winn 1  Winn 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kelly  Ruby 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0  12  53  15  0  7  0  0</td>
</tr>
<tr>
<td>Elena</td>
<td></td>
<td>Ruby 2  Victor 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weasel 2  Lion 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winn 1  Winn 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kelly  Ruby 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37  2  0  15  0  7  0  0</td>
</tr>
<tr>
<td>Jack</td>
<td></td>
<td>Ruby 1  Victor 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weasel 1  Stone Fox</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lion 1  Poppy 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kelly  Ruby 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29  50  51  11  26  41  27  5</td>
</tr>
<tr>
<td>Lucas</td>
<td></td>
<td>Ruby 1  Victor 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weasel 2  Lion 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winn 1  Winn 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kelly  Ruby 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8  9  18  17  0  6  0  2</td>
</tr>
<tr>
<td>Matthew</td>
<td></td>
<td>Ruby 2  Victor 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weasel 2  Lion 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winn 1  Winn 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kelly  Ruby 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11  14  20  14  0  8  2  1</td>
</tr>
<tr>
<td>Derek</td>
<td></td>
<td>Giver 2  Victor 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rules 1  Old House</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wan Li  Mean Rocky</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giver 3  Varjak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6  3  1  0  1  3  0  0</td>
</tr>
<tr>
<td>Erica</td>
<td></td>
<td>Giver 1  Victor 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rules 1  Old House</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wan Li  Mean Rocky</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giver 3  Varjak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18  30  13  33  23  28  2  3</td>
</tr>
<tr>
<td>Mia</td>
<td></td>
<td>Giver 2  Victor 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rules 2  Old House</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wan Li  Mean Rocky</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giver 3  Varjak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27  33  7  16  14  17  1  0</td>
</tr>
</tbody>
</table>

Table 14. Frequency of Focal Students’ Thoughtful Comments during Eight Discussions
In almost all cases, the focal students’ production of thoughtful responses about the discussions or texts tended to occur in the same discussions that had longer or more frequent episodes of exploratory talk. It appears when discussions become exploratory and students engage in problem-solving the topics about the text, lower-achieving readers have an opportunity to go beyond recalling the literal details in their responses, which ultimately bears on the quality of their thoughts about text. This finding may be particularly relevant for lower-achieving readers in the intermediate grades who decode well and read fluently, but struggle with making connections and inferences in order to comprehend text in more thoughtful ways. Indeed, Duke et al. (2004), Dewitz and Dewitz (2003) and other researchers have suggested that readers in the intermediate grades who struggle to comprehend text beyond a basic level might need more practice making connections across text events and between the text and their background knowledge than they need practice in decoding, word study, or other linguistic skills. Exploratory talk might be a kind of discourse and interaction pattern during discussions that creates opportunities for making those connections about text. As a result, this may be a relevant finding for educators who wonder what kind of discourse during reading instruction supports lower-achieving readers’ participation in quality thinking about text.

Mercer (1995) contends that using talk as a vehicle for the construction of knowledge in classroom settings is not about simply putting students in groups and watching what happens. Instead he argues that students construct knowledge when conditions related to the context and the continuity of their interactions are such that the group maintains “the thread of developing joint understanding” (p. 68). By context, Mercer means that, in addition to the environment or things going on around the talk, the
talk itself creates its own context as what is said creates the foundation for the talk which follows. Mercer’s concept of ‘context’ evokes the Bakhtinian notion that the way people make sense of ideas relates to the way they interact (Newman et al., 1989). Newman et al. (1989) used this Bakhtinian perspective to suggest that utterances themselves create a context on which a conversation or discussion is built. Simply, it is the discourse or what the participants say and how they say it in discussions that foster a contextual framework. The productivity of a discussion is not exclusively dependent on a list of rules, a particular group arrangement, a set of ‘teacher moves,’ or textual factors, but a set of contextual foundations the participants use in order to ‘tack’ toward greater understanding and clarity of that which is being discussed. In short, exploratory talk creates a contextual foundation that promotes opportunities for connecting to the text in ways that go beyond basic, literal thoughts and connections (i.e., thoughtful responses).

Regarding continuity, Mercer (1995) wrote, “the process of creating knowledge in classrooms is one in which, in order for it to be successful, themes must emerge and continue, explanations must be offered, accepted, and revisited, and understanding must be consolidated” (p. 68). The problem-solving approach fostered the production of multiple views and explanations, that when resolved, became ideas that were accepted, revisited, and, in many cases, consolidated. I argue that the problem-solving approach within the discourse created continuity, and the outcomes of this continuity were thoughtful responses that reflected the students’ reasoning about the texts. From a sociocultural view of learning in discussions, the students were able to make thoughtful comments about the text because the context of their conversations and the continuity
within their conversations allowed them to do so. Overall, the contextual foundation of problem-solving created an intermental development zone (IDZ) (Mercer, 2002), which supported intramental activity.

Why did the focal students engage more of their intramental efforts in the discussions with more exploratory talk? An answer to this question is uncertain, but some of the focal students’ favorite discussions as reported to me in interviews were also the discussions with a lot of exploratory talk. For example, Jack’s favorite discussion was ‘Poppy,’ which was a discussion filled with exploratory talk. Colin’s favorite was ‘Weasel,’ another discussion full of problem-solving. Derek’s favorite discussion was ‘Victor,’ and Erica’s favorite was ‘Giver,’ both discussions with a lot of exploratory talk (I-N, 4/20/06; I-W, 4/24/06; I-W, 5/4/06).

The findings presented in this section here, illuminating ‘what happens’ when teachers and students enact group discussions about texts, confirm what previous studies have shown about lower-achieving readers’ participation in discussion contexts (e.g., Goatley et al., 1995). That is, discussions have the potential to support readers who simply, for whatever reasons, need more support. I discussed two findings related to comprehension development, which for the population under consideration are relevant and important. The first finding showed the ways the focal students used the discourse as a tool to repair their misinterpretations or extend their level of comprehension of the text. The second finding related to the focal and non-focal students’ natural or organic use of reading comprehension strategies during the discussions. Likewise, I have discussed the contextual features of productive discussions and some of the benefits of these features for lower-achieving readers (i.e., active involvement in producing thoughtful comments).
Furthermore, the findings in this section are similar to those of previous studies because they share a situated perspective, which means the outcomes of the discussions related to reading growth occur as a result of particular contexts and particular circumstances.

**Research Question 2: To What Extent do Lower-achieving Readers Display High-level Thinking about Literary Texts during Group Discussions?**

*High-level Thinking about Text during Discussions*

In this section, I briefly review the features of discourse that indicate students may be thinking in high-level ways in classroom discourse. I show examples of the kinds of responses the focal students made during discussions that displayed these features. I report the number of times the focal students displayed these features in eight different discussions. Finally, I compare the frequencies of indicators of high-level thinking found in focal student discourse to the frequencies of indicators in the discourse of their higher-achieving peers in six discussions.

Palinscar and David (1991) noted in a review of classroom dialogue for diverse students that dialogues serve as a “window on the verbal thought in which children are engaged as they attempt to understand text” (p.127). Using this principle and the adaptation of the Soter et al. (2005) coding scheme, I analyzed the focal students’ and non-focal students’ discourse from 22 discussions, examining every turn of the discussions. The nine discourse features I adapted from Soter et al.’s (2005) coding scheme are: authentic questions (AQ), generalization/analysis (GA), speculation (SP), affective connections (AC), intertextual connections (IT), shared knowledge connections (SK), references to text (RtT), elaborated explanations (EE), and exploratory talk (ET). The features serve slightly different functions in discourse. Authentic questions provide epistemological space for high-level thinking to occur, whereas an elaborated explanation
signifies a student has cognitively restructured information in such a way she can explain her position in considerable detail (Soter et al., 2006). Likewise, exploratory talk is a group phenomenon that I examined but do not discuss in this section. With the exception of authentic questions, each of the other features indicates the speaker may be thinking in high-level ways when the speaker produces the features in discourse. I sometimes refer to the discourse features as “indicators.” Moreover, I report authentic questions separate from the other indicators of high-level thinking because of their unique role in discussions.

What exactly do the responses that suggest high-level thinking about text look like? How substantive are these responses? Table 15 comprises specific examples of discourse from the focal students, providing a range of their responses that typify features of talk related to high-level thinking.
<table>
<thead>
<tr>
<th>Student</th>
<th>Title</th>
<th>Turn</th>
<th>Indicators of high-level thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colin</td>
<td>Weasel 2</td>
<td>Yeah, I did that once when I was putting this big earring in my ear once. And it all started to go black.</td>
<td>Affective connection</td>
</tr>
<tr>
<td>Elena</td>
<td>Winn Dixie 2</td>
<td>Yeah. It said (reads text), <em>Sweetie Pie came in and I gave her a Litmus Lozenge.</em></td>
<td>Reference to text</td>
</tr>
<tr>
<td>Jack</td>
<td>Weasel 1</td>
<td>Yeah, it’s like someone that you knew but you didn’t know them very well and they were mean, you would still cry for them ‘cause you knew them.</td>
<td>Generalization/Analysis</td>
</tr>
<tr>
<td>Lucas</td>
<td>Ruby 2</td>
<td>I have a connection to Ben’s. Ben said that you can’t feel anything in your dreams and dreams aren’t really real and um…on the History Channel, no, I mean the Discovery Channel um..it said that dreams for centuries have been portals to another realm.</td>
<td>Generalization/Analysis; Intertextual connection</td>
</tr>
<tr>
<td>Erica</td>
<td>Wan Li Road</td>
<td>I think that it was kind of like daydreaming, you know, when you’re kind of there and kind of not there, well, I think that’s how his brain was. He kinda thought he was there but kinda didn’t know he was there being a ghost.</td>
<td>Generalization/Analysis Elaborated explanation</td>
</tr>
<tr>
<td>Mia</td>
<td>Giver</td>
<td>But there might be another dimension. The shot might not be for it [remove color]. There might be another dimension.</td>
<td>Speculation</td>
</tr>
<tr>
<td>Derek</td>
<td>Wan Li Road</td>
<td>I think that…he had to trick him to get by and uh now I know why he waited to make sure he was a sheep because he said that uh (reads from text) “a good black sheep will sell easier.”</td>
<td>Generalization/Analysis Reference to text</td>
</tr>
<tr>
<td>Matthew</td>
<td>Kelly</td>
<td>Maybe Kelly doesn’t really have any friends so she shouldn’t help her with the painting.</td>
<td>Speculation</td>
</tr>
</tbody>
</table>

Table 15. Examples of Responses that Indicated High-level Thinking
As can be seen, all of the responses in Table 15 include at least one discourse feature that indicates high-level thinking and, clearly, the comments reflect a kind of thinking that goes ‘beyond the given’ about the text, which is the overarching aim of reading in the intermediate grades. Nystrand (1997) characterized many of the responses like the ones above as responses that provide new information about the text or those that could not be provided through routine recall of literal details about the text, making the responses function as indicators of high-level thinking.

Table 16 reports a tabulation of lower-achieving readers’ overall display of indicators of high-level thinking in the eight discussion events that I transcribed for each focal student.
Fourth-Grade | Colin | Elena | Jack | Lucas | Matthew | Fifth-Grade | Erica | Derek | Mia
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
Total turns | 180 | 65 | 350 | 250 | 108 | 273 | 53 | 248 |
Authentic Questions | 9 | 9 | 9 | 14 | 0 | 11 | 2 | 12 |

**Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Fourth-Grade</th>
<th>Fifth-Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalization/Analysis</td>
<td>50</td>
<td>27</td>
</tr>
<tr>
<td>Speculation</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Affective connection</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Intertextual connection</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Shared knowledge connection</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reference to text</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Elaborated explanation</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 16 reveals that focal students participated in discussions and displayed various indicators of high-level thinking to different extents during eight discussions throughout the year. Likewise, with the exception of Matthew, the students asked
authentic questions during the discussions. The intent here is to provide a general characterization of the extent to which the lower-achieving readers asked authentic questions and displayed their engagement in high-level thinking during discussions about the texts.

One explanation for a lower number of indicators of high-level thinking in a student’s discourse relates to the kinds of turns that lacked the qualities that suggest high-level thinking about texts. These kinds of turns almost always included instances when students gave one-word responses to affirm or disconfirm a previous utterance (e.g., ‘Yeah,’ ‘No,’ ‘Huh-um’), when students faded out without demonstrating a complete idea (e.g., Well, I think….), when students asked procedural questions (e.g., What page is that on?), and when students provided simple reiterations of what another student had said previously or statements of straightforward facts and literal details from the story (e.g., Cody was the sick kid in Victor). For comparison sake, consider the columns reflecting the number of times Mia and Lucas produced the indicators of high-level thinking in eight discussions (Table 21). Mia and Lucas talked nearly the same number of times in the several discussions (248 and 250 turns), but Mia displayed high-level thinking more often in her discourse than Lucas did. We are able to infer from this discrepancy the variations in the content of their discourse. Simply, Lucas’s discourse included more procedural questions, reiterations of what others said, literal details about the story, or indeterminate utterances than Mia’s discourse. The following excerpt is from the ‘Winn Dixie 2’ discussion, and it shows two of Lucas’ turns (highlighted) that reflected reiterations of what others in the discussion had already said, explaining why fewer of his turns were coded with the discourse features that indicate high-level thinking.
Matthew: I see a change in here. He doesn’t really like to talk cause-
Jasmine: Yeah, He’s shy.
Troy: Yeah.
Lucas: Otis is shy.
Jasmine: He doesn’t want to talk anymore, all because he has the idea of
that jail thing–
Lucas: He plays the music to calm – He plays his guitar to calm the
animals down.
UnknownS: (cannot hear) playing the guitar.
Students: (overlap)
Christy: And he got in jail for playing it. (cannot hear) and then they were
putting cuffs on him, but then he knocked one of the police officers down,
so he had to go to jail.
Levi: Yeah, he knocked one of the cops down.. with his guitar.
Mrs. Reinhart: Anything else we need to share?
Colin: Can I share one of these? (refers to post-it notes in his text)

In sum, lower-achieving readers asked authentic questions during discussions and
they displayed a range of indicators of high-level thinking in their talk, answering the
more general question ‘do lower-achieving readers seem to think in high-level ways
during discussions?’ To push these findings further, though, we must compare the high-
level thinking of focal students to the high-level thinking of higher-achieving readers in
the same discussions. In the following several tables, I report the indicators of high-level
thinking in all the focal and non-focal students’ turns in six discussions, providing a sense
of the relative contributions of the focal students’ high-level thinking in discussions.

I chose the following discussions reported here before I tabulated any indicators
of high-level thinking, basing my decision to include the discussions presented here on
the results of my earlier inductive analyses and discourse coding. I chose the following
discussions because they had high proportions of discourse reflecting exploratory talk or
the kind of talk that suggests the students engaged in problem-solving about the texts.
These were the best discussions from Mrs. Pearson’s and Mrs. Reinhart’s perspectives

245
ecause they fulfilled their goals that students would reason about the text and collaborate. Hence, they provide a reasonable basis for comparing the talk of lower-achieving readers and their higher-achieving peers.

Fifth-grade discussions.

Table 17 and 18 depict the frequencies of indicators during discussions about the short-story, Victor, by James Howe in the fifth-grade classroom. The students read the story in pairs or independently prior to the discussion, and, as a pre-discussion activity, they wrote paragraphs that answered the Mrs. Pearson’s question, ‘Who is Victor?’ Once in their discussion groups of 4-5 students (heterogeneous by reading level), the students responded to the same question, ‘Who is Victor’ and other questions, talking for 22 minutes. Derek and Mia participated in ‘Victor 1’ and Erica participated in ‘Victor 2.’ Both discussions elicited collective reasoning and problem-solving about the text (0.84 and 0.62 of all turns respectively). The numbers in the parentheses of the tables indicate the proportions of the total number of the students’ turns that indicated the discourse feature.
<table>
<thead>
<tr>
<th>Student</th>
<th>Mia</th>
<th>Derek</th>
<th>Grace</th>
<th>Ryan</th>
<th>Katie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Questions</td>
<td>5 (0.07)*</td>
<td>1 (0.04)</td>
<td>6 (0.12)</td>
<td>2 (0.04)</td>
<td>5 (0.16)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>20</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalization/Analysis</td>
<td>6 (0.08)</td>
<td>5 (0.10)</td>
</tr>
<tr>
<td>Speculation</td>
<td>1 (0.01)</td>
<td>1 (0.02)</td>
</tr>
<tr>
<td>Affective Connection</td>
<td>0 (0.00)</td>
<td>1 (0.02)</td>
</tr>
<tr>
<td>Intertextual connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Shared knowledge connection</td>
<td>6 (0.08)</td>
<td>3 (0.06)</td>
</tr>
<tr>
<td>Reference to text</td>
<td>0 (0.00)</td>
<td>3 (0.06)</td>
</tr>
<tr>
<td>Elaborated explanation</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
</tbody>
</table>

| Total # of turns | 72 | 27 | 50 | 51 | 32 |

Table 17. Frequencies and Proportions of Authentic Questions and Indicators of High-level Thinking in Victor 1 Discussion.
Compared to higher-achieving readers (i.e., those that achieve at or greater than minimum standards on state, district, and classroom reading assessments), Erica and Mia talked in ways that reflected engagement in high-level thinking to the same extent or nearly the same extent as their peers’ talk reflected high-level thinking. For instance, Grace, Ryan, and Katie each engaged in generalization/analysis 25-30% of their turns. Mia engaged generalization/analysis 28% of her turns. Mia and Derek speculated about the text to the same extent as their peers in the Victor 1 discussion (8-10% of turns), and Mia elicited an affective connection as her peers did (1-2% of turns). Likewise, Mia and Erica made references to the text to support their claims to the same extent as their peers.
According to the discourse, Erica thought about the story with generalizations and analyses of the text to the same or nearly the same extent as her peers did during the discussion. The following excerpt is from the Victor 2 discussion (Table 19), and it shows the similarity between Erica’s participation in the discussion and her peers’ participation in terms of this feature of high-level thinking.
Nicole: Okay. Alright, first question... uhm. Who is Victor?

Erica: Uhm...

Nicole: Go ahead.

Erica: Okay, I think Victor is a thing from the ceiling, I forget what that was called.

Alex: The Land Above.

Erica: Uhm... he used...yeah...he used his imagination for the ceiling people so maybe... he made up Victor and it could be the old man who died and told him the stories...his spirit could change his name like... yeah... that’s pretty much it.

Nicole: Uhm... I thought Victor was God, and the Land Above was Heaven, because uhm... Victor ... because... uhm... in the text it says he was old which you know, God... two thousand years... so the last time he visited Earth was 2006 years ago –

Alex: (interrupts) Yeah, but even then he only partly visited Earth.

Nicole: And uhm and so he’s very old and he was strong but he didn’t say... but he said he wasn’t strong like “bodybuilding strong” he was strong like a strong man like he was... he was like –

Evan: You mean like in the heart and soul?

Table 19. Excerpt from the Victor Discussion Showing Erica’s High-level Thinking
Derek’s proportion of turns that indicated high-level thinking (HLT) in Table 22 is much lower than the others’ displays of indicators. This suggests that most of Derek’s discourse reflected either straightforward statements of fact or reiterations, procedural questions, or indeterminate utterances (e.g. ‘Yes,’ ‘Yeah,’ ‘Huh-um,’ ‘I guess’). In the case of Derek’s turns in ‘Victor 1,’ they comprised a mix of indeterminate “yeah’s” and reiterations of what he had said in previous turns. The following excerpt is from a transcript of the ‘Victor 1’ discussion, and it illustrates Derek’s turns that show his reiterations of what he had stated previously.

Mia:  Where is the paragraph that he felt like an 80-year old man?
Katie:  That’s when Victor was telling the story.
Grace:  Where it says (unclear) It says, (reads from text) Goodbye Victor (unclear) when he looked into the old man’s face.
Katie:  That was when Victor was telling the story.
Derek:  It’s on the page, the page before it.
Students:  (overlap) (suggesting page numbers, looking for the paragraph)
Derek:  (um) See right here. It’s right here. (pointing to text)
Mia:  Yeah, I know the picture of like (pause)
Derek:  That is it, but, it’s right here. (pause)
Ryan:  Okay. Someone else say what you think.
Grace:  What do you think, Katie?
Katie:   Like I said I think Victor is God like not even a miracle worker because he’s somebody like out of (unclear).

The excerpt above shows the kinds of turns in Derek’s talk that were not coded with the features that indicate high-level thinking. It is important to note that the argument here is not that Derek’s participation in the Victor 1 discussion was insignificant (Derek’s learning history in the discussion confirmed the importance of his participation); his discourse simply did not reflect the same kinds or quantities of indicators that suggest high-level thinking. Hence, we know less about Derek’s thinking in the Victor 1
discussion than we do other students like Erica whose turns in Victor 2 reflected more engagement in thinking that went beyond the literal details and reiterations of other students’ ideas.

Two notable distinctions between lower-achieving and higher-achieving readers in the Victor discussions appear to relate to the instances of elaborated explanations in their talk, and to lesser degree, the way the seven indicators of high-level thinking are distributed in the talk of individual students. Regarding the differences in the number of elaborated explanations, lower-achieving readers created elaborated forms of reasoning less often than their peers in the discussions. Erica elaborated a claim with at least two reasons twice in the Victor 2 discussion. I have highlighted and underlined features of her response in the example below in order to point out the elaborated thinking and reasoning that comprises an ‘elaborated explanation.’ Erica said:

I do disagree with her [claim] cause like, um ‘cause like he said that he kind of didn’t want him there but then he did [reason 1] and then I think Victor would have mentioned something and wouldn’t come if he [Cody] said he didn’t want him there but then he did [reason 2].”

Mia and Derek did not elaborate their thinking in either of the Victor discussions, but together the higher-achieving readers expanded their thoughts, using elaborated explanations, a combined eight times in Victor 1 and a combined 11 times in Victor 2. This is significant because Mia, Erica, and their peers participated in the discussion roughly the same number of times, but the way they responded and reasoned when they spoke was qualitatively different in some cases. With the exception of Alex and Katie, the higher-achieving readers in these two discussions reasoned about the text with elaborated responses more often than the focal students (6-13% of turns).
Table 20 reports the number of indicators of high-level thinking in the Old House discussion, which was a discussion recorded from a teacher-led, homogeneous-group reading lesson. I chose the Old House discussion because it was the discussion within a guided reading group lesson that had the highest percentage of student turns identified as parts of episodes of exploratory talk (0.34). Derek, Erica, and Mia and two higher-achieving peers (Cory and Emma) participated in the discussion. The story is about a group of boys who visit an abandoned house in the woods as a dare because one of the boys believed the house was haunted. The students read the story independently and wrote ‘big questions’ about the story prior to the discussion. The discussion lasted 31 minutes.
Old House Discussion

<table>
<thead>
<tr>
<th>Student</th>
<th>Derek*</th>
<th>Erica*</th>
<th>Mia*</th>
<th>Cory</th>
<th>Emma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Questions</td>
<td>0 (0.00)</td>
<td>2 (0.03)</td>
<td>4 (0.10)</td>
<td>0 (0.00)</td>
<td>4 (0.05)</td>
</tr>
<tr>
<td>Indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalization/Analysis</td>
<td>0 (0.00)</td>
<td>13 (0.18)</td>
<td>6 (0.15)</td>
<td>7 (0.30)</td>
<td>9 (0.10)</td>
</tr>
<tr>
<td>Speculation</td>
<td>0 (0.00)</td>
<td>10 (0.14)</td>
<td>5 (0.12)</td>
<td>2 (0.09)</td>
<td>12 (0.14)</td>
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<tr>
<td>Affective Connection</td>
<td>0 (0.00)</td>
<td>3 (0.04)</td>
<td>1 (0.02)</td>
<td>0 (0.00)</td>
<td>3 (0.04)</td>
</tr>
<tr>
<td>Intertextual connection</td>
<td>0 (0.00)</td>
<td>3 (0.04)</td>
<td>1 (0.02)</td>
<td>0 (0.00)</td>
<td>5 (0.06)</td>
</tr>
<tr>
<td>Shared knowledge connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.01)</td>
</tr>
<tr>
<td>Reference to text</td>
<td>0 (0.00)</td>
<td>1 (0.01)</td>
<td>1 (0.02)</td>
<td>0 (0.00)</td>
<td>3 (0.04)</td>
</tr>
<tr>
<td>Elaborated explanation</td>
<td>0 (0.00)</td>
<td>1 (0.01)</td>
<td>1 (0.02)</td>
<td>2 (0.09)</td>
<td>1 (0.01)</td>
</tr>
<tr>
<td>Total # of turns</td>
<td>2</td>
<td>73</td>
<td>41</td>
<td>23</td>
<td>84</td>
</tr>
</tbody>
</table>

Table 20. Frequencies and Proportions of Authentic Questions and Indicators of High-level thinking in Old House Discussion

The information in Table 20 is relatively consistent with the results from the two ‘Victor’ discussions. Mia contributed 41 turns and Erica contributed 73 turns. Derek participated just twice in the discussion, continuing his pattern of low oral participation. Erica and Mia talked in ways that reflected high-level thinking as did the higher-achieving readers in the group (Cory and Emma), and they did so to nearly the same extent for several of the indicators (i.e., generalization/analysis, speculation, affective connections, and references to the text).

Another consistent pattern relates to elaborated explanations. Mia and Erica each elaborated their thinking once during the discussion, which was not different than Emma (1-2% of turns). However, almost 10% of Cory’s turns, suggested he thought in
elaborated forms about the text or the topic of discussion related to the text. Cory’s production of elaborated explanations is consistent with the percentage of elaborated explanations produced by other higher-achieving readers in both Victor discussions (in most cases, roughly 10% of students’ turns).

Looking back at the tables about the Victor discussions and certainly with the Old House discussion, the other notable pattern is the way the indicators of high-level thinking of the focal students’ discourse tend to clump in certain parts of the rows of the tables (largely generalization/analysis and speculation). There are some exceptions to this clumping phenomenon (e.g., Erica in the Old House discussion), but the relevant point is higher-achieving readers seem to respond to the text during discussions, as indicated in their discourse, in a variety of ways. As Emma did in the Old House discussion and as Grace, Ryan, Katie, Nicole and to a lesser extent, John, did in the Victor discussions, the higher-achieving readers responded to the text and displayed the indicators of high-level thinking about the text in multiple ways (i.e., shared knowledge connections, intertextual connections, affective connections, and references to text).

*Fourth-grade discussions.*

Table 21 shows the focal students’ indicators of high-level thinking from the ‘Lion 1’ discussion, which was a discussion that took place in a more homogeneous guided reading group lesson in the fourth-grade classroom. The focal students, Elena, Colin, Lucas, Jack, and Matthew participated with three of their higher-achieving peers (Christy, Ben, and Troy). All the students had read three chapters in *Lion to Guard Us*, by Clyde Bulla, prior to coming to the reading group and having the discussion. The
discussion took place in early December 2005 and lasted approximately 25 minutes, and
the proportion of turns coded as exploratory talk was 0.30. The general topic of the
discussion was whether the three English orphans in the story would make it to North
America to be reunited with their distant relatives.
<table>
<thead>
<tr>
<th>Student</th>
<th>Christy</th>
<th>Ben</th>
<th>Troy</th>
<th>Matthew</th>
<th>Colin</th>
<th>Elena</th>
<th>Lucas</th>
<th>Jack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Questions</td>
<td>0 (0.00)</td>
<td>2 (0.07)</td>
<td>1 (0.07)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.20)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Indicators</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalization/Analysis</td>
<td>0 (0.00)</td>
<td>6 (0.21)</td>
<td>0 (0.00)</td>
<td>8 (0.23)</td>
<td>1 (0.04)</td>
<td>2 (0.40)</td>
<td>12 (0.31)</td>
<td>10 (0.25)</td>
</tr>
<tr>
<td>Speculation</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>4 (0.28)</td>
<td>5 (0.14)</td>
<td>9 (0.36)</td>
<td>2 (0.40)</td>
<td>9 (0.23)</td>
<td>21 (0.52)</td>
</tr>
<tr>
<td>Affective Connection</td>
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<td>0 (0.00)</td>
<td>3 (0.21)</td>
<td>0 (0.00)</td>
<td>4 (0.16)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.03)</td>
</tr>
<tr>
<td>Intertextual connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Shared-knowledge connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>3 (0.08)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Reference to text</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>3 (0.21)</td>
<td>1 (0.03)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>2 (0.05)</td>
</tr>
<tr>
<td>Elaborated explanation</td>
<td>0 (0.00)</td>
<td>1 (0.04)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>4 (0.10)</td>
</tr>
<tr>
<td>Total # of turns</td>
<td>0</td>
<td>28</td>
<td>14</td>
<td>34</td>
<td>25</td>
<td>5</td>
<td>39</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 21. Frequencies and Proportions of Authentic Questions and Indicators of High-level Thinking in Lion 1 Discussion
Table 21 shows that in almost all cases (excluding Christy and Elena), the students participated roughly the same number of times in the discussions, and in many cases, the focal students participated in the discussion in high-level ways to the same extent or to a greater extent as the higher-achieving readers participated. It appears Lucas, Matthew, Colin, and Jack produced the indicators of high-level thinking to the same extent or to a greater extent as Troy and Ben. Jack, Colin, Lucas, and Matthew used the discourse of the discussion to generate several different indicators of high-level thinking about the text (e.g., generalization/analysis, speculation, affective connections). Likewise, the focal students asked authentic questions, which created space for high-level thinking, referred to the text to bolster their arguments, made affective connections, generalized across and analyzed the text or topic of the discussion related to the text, and speculated about the story. With the exception of Jack and Ben, the students did not elaborate their claims about the chapters in the story. The following excerpt is from a transcript of the Lion 1 discussion, showing several of the focal students’ turns.

Mrs. Reinhart: Who asked who for money?
Matthew: Amanda.
Elena: Amanda asked Mrs. Trippet for the money.
Lucas: Amanda asked Mrs. Trippet for the money to get on the ship, but –
Matthew: And her son, um, kicked her out.
Lucas: But she, but she stole all the money from her purse.
Ben: Yeah, didn’t the big fat chubby dude –
Lucas: Randall!
Ben: Randall, yeah, kick them out?
Matthew: Yeah.
Lucas: Yeah, he picked them out and threw them out.
Mrs. Reinhart: But why?
Matthew: And then he –
Lucas: Because he’s, he’s because he said (paraphrasing), ‘how dare you make blah, blah, blah (cannot hear) fainted.’
Matthew: (reads from text) I don’t want to see your face again.
Ben: Yeah, didn’t he say to never show your face in here again?
Lucas: There! That’s the problem. Randall has a very bad temper issue.

I highlighted Lucas’ turns in the above excerpt because he did a lot of the work to understand the story. Many of his responses reflected the discourse feature and indicator of generalization/analysis. Other focal students participated in the excerpt, but their talk reflected attention to the literal details of the story (e.g., Elena reiterated an explicit text detail at the beginning of the excerpt). And Ben (a higher-achieving reader) participated in the excerpt, but not as Lucas did. Lucas’ talk went beyond the literal details many times (e.g., generalization and analysis in 31% of turns) whereas Ben produced generalization and analysis in his responses 21% of turns.

The notable feature from Table 21 is the balanced distribution of indicators that mark high-level thinking in Jack’s discourse. Jack referred to the text to substantiate his thinking, connected his personal experience to the text, elaborated his claims about the text with reasoning, and made speculations. From what we can tell, the features of his discourse inform us that his thinking about the story was just as good in this discussion, and arguably better, than Ben’s and Troy’s thinking (the two higher-achieving readers
that orally participated in the discussion). In other words, Jack’s discourse provides
evidence that lower-achieving readers can and do think in complex ways about text and
the topics of discussion about text.

Tables 22 and 23 characterize the students’ responses that suggested high-level
thinking in the two ‘Weasel’ discussions about the book, Weasel, by Cynthia DeFelice in
the fourth-grade classroom. The discussions took place in March 2006 after the students
had read the text together over several weeks in shared oral readings. Throughout their
work with the novel, the students completed graphic organizers and writing assignments
related to the text’s themes, moods, and its rising and falling actions. They also had
several whole-class group discussions during the shared oral readings. Both discussions
are heterogeneous groups. Mrs. Reinhart organized the two groups in order to, in her
words, “create the best groups for good talking and thinking” (FN-N, 3/14/06). Each
discussion lasted approximately 35-40 minutes.
<table>
<thead>
<tr>
<th>Student</th>
<th>Jack</th>
<th>Ashley</th>
<th>Christy</th>
<th>Jasmine</th>
<th>Trevor</th>
<th>Thomas</th>
<th>Patrick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Questions</td>
<td>0 (0.00)</td>
<td>4 (0.02)</td>
<td>0 (0.00)</td>
<td>1 (0.02)</td>
<td>1 (0.17)</td>
<td>8 (0.05)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalization/Analysis</td>
<td>28 (0.29)</td>
<td>61 (0.33)</td>
<td>1 (0.50)</td>
<td>14 (0.31)</td>
<td>0 (0.00)</td>
<td>28 (0.19)</td>
<td>17 (0.42)</td>
</tr>
<tr>
<td>Speculation</td>
<td>8 (0.08)</td>
<td>8 (0.04)</td>
<td>0 (0.00)</td>
<td>7 (0.15)</td>
<td>0 (0.00)</td>
<td>13 (0.09)</td>
<td>1 (0.03)</td>
</tr>
<tr>
<td>Affective Connection</td>
<td>5 (0.05)</td>
<td>7 (0.03)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.17)</td>
<td>5 (0.03)</td>
<td>2 (0.05)</td>
</tr>
<tr>
<td>Intertextual connection</td>
<td>0 (0.00)</td>
<td>2 (0.01)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Shared-knowledge connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Reference to text</td>
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<td>6 (0.01)</td>
<td>0 (0.00)</td>
<td>2 (0.04)</td>
<td>0 (0.00)</td>
<td>1 (0.01)</td>
<td>1 (0.03)</td>
</tr>
<tr>
<td>Elaborated explanation</td>
<td>0 (0.00)</td>
<td>8 (0.04)</td>
<td>0 (0.00)</td>
<td>1 (0.02)</td>
<td>0 (0.00)</td>
<td>4 (0.08)</td>
<td>2 (0.05)</td>
</tr>
<tr>
<td>Total # of turns</td>
<td>95</td>
<td>186</td>
<td>2</td>
<td>45</td>
<td>6</td>
<td>148</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 22. Frequencies and Proportions of Authentic Questions and Indicators of High-level Thinking in Weasel 1 Discussion
## Weasel 2 Discussion

<table>
<thead>
<tr>
<th>Student</th>
<th>Lucas</th>
<th>Colin</th>
<th>Elena</th>
<th>Troy</th>
<th>Clair</th>
<th>Andre</th>
<th>Ben</th>
<th>Carl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Questions</td>
<td>3 (0.10)</td>
<td>3 (0.05)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>3 (0.05)</td>
<td>6 (0.18)</td>
<td>11 (0.10)</td>
<td>1 (0.08)</td>
</tr>
<tr>
<td>Indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalization/Analysis</td>
<td>12 (0.39)</td>
<td>30 (0.49)</td>
<td>0 (0.00)</td>
<td>7 (0.25)</td>
<td>26 (0.44)</td>
<td>7 (0.22)</td>
<td>35 (0.33)</td>
<td>3 (0.25)</td>
</tr>
<tr>
<td>Speculation</td>
<td>2 (0.06)</td>
<td>17 (0.28)</td>
<td>0 (0.00)</td>
<td>6 (0.21)</td>
<td>12 (0.21)</td>
<td>5 (0.15)</td>
<td>12 (0.11)</td>
<td>3 (0.25)</td>
</tr>
<tr>
<td>Affective Connection</td>
<td>2 (0.06)</td>
<td>2 (0.03)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.10)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Intertextual connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>2 (0.03)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Shared-knowledge connection</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.02)</td>
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<tr>
<td>Reference to text</td>
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<td>1 (0.02)</td>
<td>0 (0.00)</td>
<td>0 (0.00)</td>
<td>1 (0.02)</td>
<td>2 (0.06)</td>
<td>2 (0.02)</td>
<td>1 (0.08)</td>
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<tr>
<td>Elaborated explanation</td>
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<td>0 (0.00)</td>
<td>1 (0.04)</td>
<td>4 (0.07)</td>
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<td>0 (0.00)</td>
</tr>
<tr>
<td>Total # of turns</td>
<td>31</td>
<td>61</td>
<td>0</td>
<td>28</td>
<td>58</td>
<td>32</td>
<td>105</td>
<td>12</td>
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</tbody>
</table>

Table 23. Frequencies and Proportions of Authentic Questions and Indicators of High-level Thinking in Weasel 2 Discussion
Table 22 shows that Jack participated in high-level ways not unlike the others in his group and not unlike his participation in the Lion 1 discussion. Likewise, Colin participated 61 times in Weasel 2 (more times than any other discussion during the year), and his talk was not unlike the higher-achieving readers in the group, considering the indicators of high-level thinking (e.g., generalization/analysis in 49% of turns, affective connection in 3% of turns). And even though Lucas and Matthew participated less often in the discussion, when they did participate, their turns reflected generalizations and analyses of the text to the same extent as the others in the discussion (39% of turns and 35% of turns respectively). Likewise, Matthew elaborated his thinking (i.e., elaborated explanations) to a greater extent than many of the higher-achieving readers in the Weasel 2 discussion.

The distinction, however, between the non-focal students and their peers is related to the distribution of the instances of high-level thinking across the several different indicators. Clair, Ashley, Thomas, Ben, and Patrick responded to the text in multiple ways: asking questions, elaborating their thinking, referring to the text, and making diverse connections to a great extent in the Weasel discussions. For example, Clair asked questions in 5% of her turns, generalized or analyzed the text in 44% of her turns, speculated in 21% of her turns, made intertextual connections in 3% of her turns, made a shared knowledge connection in 2% of her turns, referred to the text in 2% of her turns, and elaborated her responses in 7% of her turns. In other words, when Clair responded verbally to the text, she did so in diverse ways, employing high-level thinking in lots of different ways. Many other non-focal students responded similarly.
On the other hand, the focal students’ display of high-level thinking looked more like Jack’s discourse in the Weasel discussion. Although Jack made one reference to the text in order to bolster his claim about the text, the indicators of his thinking clustered or clumped near the left side of table 27 (generalization/analysis 29% of turns and speculation 8% of turns), which means he thought in high-level ways, but he did not respond to the text with the same kind of range of responses. In both Weasel discussions the range of indicators in the non-focal students’ talk is different than the range of indicators in their peers’ talk. Does this really matter? The list of indicators of high-level thinking is not intended to be a hierarchical one, but something qualitatively different is going on in Clair’s approach to thinking and talking about the text than Matthew’s or Jack’s, for example.

Regarding the other pattern established in the fifth-grade discussions related to the instances of elaborated explanations, higher-achieving readers in the fourth-grade appeared to produce elaborated forms of reasoning about text more often than the focal students. Matthew and Jack are anomalous cases in the Weasel and Lion discussions, but the other four focal students produced a total of two elaborated explanations whereas four of the non-focal students who participated about the same number of times in the Weasel discussions produced 10 elaborated explanations (between 5% and 8% of turns).

Elaborated explanations are defined as: “instances [in talk] in which students explain their thinking in coherent ways” (Wilkinson et al, 2006, p. 23), meaning the students provide detailed descriptions of how they arrived at a claim or a conclusion they made (Wilkinson et al., 2006). There are several possible explanations for this pattern. If lower-achieving readers comprehend less of what they read or comprehend at a basic,
literal level generally, then perhaps the production of elaborated explanations requires a complete or detailed kind of text comprehension because higher-achieving readers who conceivably come to the discussion with a deeper level of understanding of the text elaborate their thinking about the text more often when turn counts are nearly equal. From a cognitive perspective, the explanation for this result might be that the production of elaborated explanations relates to cognitive abilities, and higher-achieving readers are more equipped cognitively to produce reasoning in elaborated forms. On the other hand, from a sociocultural perspective, the explanation might be that participants who elaborate their thinking more often have established a Discourse (i.e., social language) for this way of thinking and talking (Gee, 1996). This means those who create elaborated explanations more often and more consistently in discussions have simply had more practice with this kind of reasoning. For instance, perhaps the students who elaborate their thinking more often have learned the Discourse for reasoning at home, or they have had more experience with others who reason and elaborate their thinking (Gee, 1996).

Webb (1992, 1995) has studied elaborated explanation in student discourse most intently. She found that students listening to elaborated explanations might benefit from these experiences because they have opportunities to understand the topic of discussion in better ways (Webb, 1995; Wilkinson et al, 2006), so even if lower-achieving readers create fewer elaborated explanations, they could still learn from hearing the reasoning of others. This speculation is at the heart of a sociocultural view of thinking and learning in that participants benefit from the experiences and responses of others in a kind of community-of-practice phenomenon (Lave & Wenger, 1991; Rogoff, 1995).
Despite the specific differences in the discourse of lower-achieving and higher-achieving readers (i.e., differences in production of elaborated explanations), the patterns from the frequency tables and the evidence from the excerpts of the transcripts suggest that intermediate-level, lower-achieving readers overall displayed high-level thinking to the same or nearly the same extent as their peers in group discussions about literary texts. This means both groups of readers engaged in discussions about text in high-level ways, and this is important information for teachers who strive for instructional contexts in reading or language arts that foster high-level thinking about text, but at the same time have worried that lower-achieving readers would be lost or unable to have the same kind of rich experience in discussions because their reading difficulties would preclude solid efforts to think in high-level ways about text. It seems when conditions are right, for the most part, lower-achieving readers participate in discussions as their peers participate, which is new information for teachers who have bought into the ill-conceived notion that high-level thinking about text is the same as higher-achievement in reading.

From a sociocultural perspective on learning, perhaps what is being illuminated is that readers are able to use the discourse to mediate their thinking about text and topics related to the text. The bottom line with mediated activity is that the learner is never alone; he or she always takes “certain aspects of patterns of activity that have been performed on an external plane” (Wertsch, 1985, p. 61) to boost her intrapsychological functioning or thinking. Indeed, as Wertsch wrote, “individual response emerges from the collective life” (p.58). Moreover, Bakhtin’s ideas about learning suggest that dialogical events (Bakhtin, 1986) support the meaning-making efforts between people and the way they use language, (e.g., offering different opinions) (Bahktin, 1986). In this
case, the dialogicality of the discussion forged high-level thinking about text, and the provocativeness of this finding is that lower-achieving readers seemed to engage in high-level thinking in ways like their peers.

Question 3: Do Lower-achieving Readers Appropriate Features of the Discourse of Discussions and Demonstrate the Use of Them in Classroom Writing Tasks?

Mrs. Pearson and Mrs. Reinhart wanted to know if the positive outcomes they witnessed taking place in their discussions (i.e., high-level thinking) would transfer to writing assignments (FN-W, 12/6/05; 1/12/06; I-N, 10/3/05). The next question, although needing to be investigated for the field at large, was a question they wanted asked. In short, do lower-achieving readers benefit from the discussions when they write? And if so, in what ways? This section sheds light on the third research question of the investigation. Again, I use the concept of ‘learning histories’ (Hatano & Inagaki, 1991) to illustrate the findings about the appropriation of discussion topics and discourse across classroom contexts. I also use a multi-dimensional view of appropriation when I discuss the findings in this section, drawing on both Rogoff (1995) and Bakhtin (cited in Rogoff, 1995). From a Bakhtinian view of language, I see appropriation as a mechanism for recycling aspects of language (e.g., words). In addition, I consider Rogoff’s notion of participatory appropriation in learning whereby learners use an experience or their participation in the experience from one context to inform their experience in another context.

The focal students in the fourth- and fifth-grade classrooms seemed to appropriate the features of the discourse of discussions into their writing assignments about text in two ways. The first way related to the content of the discussions themselves. That is,
traces of the topics or content of what the students talked about during discussions became embedded in the content of the students’ written responses. A second way involved what appeared to be the focal students’ reproductions of the elaborated forms or structure of reasoning (e.g., claim + reason + evidence) that took place during discussions in subsequent writing assignments that had asked the students to take and defend a position. I trace the learning histories of three focal students to demonstrate the ways focal students seemed to draw on their experiences in discussions when they were completing a writing assignment alone at their desks. I selected these learning histories because they are illustrative examples of the patterns in the data. I have left all spelling and grammar errors intact in the students’ responses.

Making Use of the Content of Discussions in Writing Tasks

Elena’s learning history begins during a language arts lesson about the short-story, *What Should Kelly Do?* (author unknown) (FN-N, 2/15/06; T-N, 2/15/06). The students read the story independently and then they read it a second time during a shared oral reading. Following the reading, the whole-class and Mrs. Reinhart discussed the story for about 20 minutes before they began a writing task (to be completed during writing workshops over the next few days). The goal of the writing task was to write a persuasive response to answer the question, ‘What should Kelly do?’ Mrs. Reinhart provided the students with a graphic organizer and modeled ways to complete the organizer after the discussion and before the writing workshop. Elena worked on her persuasive response during writing workshops for two consecutive days; although some students were still working on the response the following week (FN-N, 2/22/06). Mrs.
Reinhart’s larger goal with the ‘Kelly’ language arts lesson was to “expose students to a persuasive writing task” (a 5th grade indicator in the state’s academic content standards) (FN, 2/15/06).

The story is about Kelly, an elementary student, who enters an art contest. On the day the students are supposed to turn in their entries, she notices that the best artist in the class, Evelyn, has left her painting on the playground and it looks as if it is about to rain. Kelly wants to win the contest and her mother also puts pressure on Kelly to win. So on seeing Evelyn’s painting outside, which is about to be ruined, Kelly is faced with a moral dilemma. Mrs. Reinhart asked the students to persuade other students in the class what they thought Kelly should do in this situation. In part of her directions, Mrs. Reinhart said, “As long as your main idea is supported, then you’re okay. And you know what? If your words are powerful and your reasons are powerful, you might change someone else’s mind with your writing and that would be AMAZING” (FN-N, 2/15/06). Mrs. Reinhart also encouraged the students to write three paragraphs, following an expository text framework (introduction, body, conclusion) (FN-2/22/06). Table 24 shows excerpts from the transcript of the ‘Kelly’ discussion and excerpts from Elena’s final draft of the response to the question, ‘What should Kelly do?’ The juxtaposition of the transcript and Elena’s final draft of the assignment show the similarities in the content of the two events. I have added my commentary and highlighted several turns in the transcript to facilitate the interpretation.
### Table 24. Elena’s Learning History Depicted in a Transcript of a Discussion and Excerpts from her Written Response

<table>
<thead>
<tr>
<th>Transcript</th>
<th>Researcher’s Commentary</th>
<th>Excerpt from Elena’s final draft of the persuasive writing task</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Clair: I think Kelly should just go outside and get it.</td>
<td>24: Clair states a claim that students problem-solve.</td>
<td></td>
</tr>
<tr>
<td>27. Jack: For not telling the teacher where she was.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Elena: But at least she could ask her teacher.</td>
<td>28: Elena’s response suggests she agrees with Clair’s claim:</td>
<td>Kelly should go outside to get the painting.</td>
</tr>
<tr>
<td>29. Thomas: Yeah, but she’s not…but it’s not her painting. She needs to</td>
<td></td>
<td>Elena does not verbally participate again in the discussion.</td>
</tr>
<tr>
<td>30. Unknown Student: (interrupts) (cannot hear).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Thomas: Evelyn needs to take care of her own stuff.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31, 180, and 216-218: Thomas’s counter-proposal becomes a recurring theme of the discussion throughout the conversation.</td>
<td></td>
<td>I think Kelly should not go and get Evelyn’s painting.</td>
</tr>
</tbody>
</table>
| 179: Ashley: Yeah, but she is trying to do the right thing.               |                                                                                        | Because the teacher told all of the students that they had to be responsible for their own painting and not someone elses [sic]. I think that Evelyn should go and get her own painting and maybe if Evelyn has time she could repaint and then turn it in. But she needs to ask her teacher if she can do that. I had a bad experience to [sic] when I left a book outside and then my best friend brought it in for me.
| 180: Thomas: Yeah, but they said that the responsibility is their own this year, so- |                                                                                        |                                                                                                                               |
| 216. Ben: Near the bottom of the last page it says (reads from text) Well, she’s got to want to take care of her own things - |                                                                                        |                                                                                                                               |
| 217. Thomas: (interrupts) She probably wants to make herself… she’s probably wants to make herself feel better that it’s going to get ruined. |                                                                                        |                                                                                                                               |
| 218. Ben: (reads text), The teacher said, We are responsible for our own painting so Evelyn’s responsible for hers...that’s the rule. ‘ So I think it’s tough luck if she doesn’t win first prize. |                                                                                        |                                                                                                                               |
Why did Elena change her mind between the discussion and her written response about what Kelly should have done? Elena’s learning history began early in the discussion (turns 24-28). These turns show that it is likely Elena believed that in the story, Kelly should tell Evelyn about her painting, or should retrieve the painting for Evelyn herself. Elena did not verbally participate again after turn 28, but she must have paid attention to the alternatives that Ben and Thomas posed throughout the rest of the discussion (turns 31-218). I infer this to be the case because of the striking similarity between the words from Ben and Thomas in the discussion and Elena’s words in her written response. Ben and Thomas believed that Kelly should not get the painting because of the words the teacher had used in the story, “be responsible for your own paintings.” Elena’s persuasive response included the following, ‘because the teacher told all of the students that they had to be responsible for their own painting and not someone elses [sic].’ Elena’s position and the ways she defended the position are nearly identical to the words Thomas and Ben used to present their positions during the discussion. The traces of the words from the discussion in Elena’s writing suggest she appropriated the content of the discourse and used it as she thought about the ways she would respond in the writing task. In effect, the discourse of the discussion became pertinent to Elena’s construction of a written response about the story.

Derek also seemed to invoke the words from discussions about the ‘Kelly’ story in his written response about the story, appropriating the content or topic of the discussions in the same way Elena had (FN-W, 1/17/06; WA-W, 1/17/06). Mrs. Pearson asked the students to write a response to the question, ‘What should Kelly do’ before the discussions took place and then again after the discussions. Mrs. Pearson organized the
discussions about ‘Kelly’ as a fishbowl exercise where some students observed several of their classmates participate in consecutive small-group discussions as a model for the discursive practice. During the fishbowl exercise, Mrs. Pearson instructed the students who observed the discussions from the outside to the fishbowl to take notes about things they heard and saw in the small groups that were “positive” (FN-W, 1/17/06). Students read the story independently before writing or discussing.

After reading the story, Derek wrote, “She should tell her or go out and get it for her. Why did she not tell her?” Following the discussion, Derek wrote: “I think Kelly should go get the painting for her or tell her. So what if you have to be responsible for your own painting. I would just get it.”

What is interesting in Derek’s post-discussion response relates to what happened in the several consecutive small-group discussions about the story. I did not record these discussions, but I made notes about the content of them as I observed from the side of the room that day. The following excerpt from my field notes is pertinent to Derek’s second response:

Ryan kept arguing in the third discussion that Kelly should not get the painting. The students in the group picked this up because they kept using the text that said the teacher announced everyone would be responsible for their own painting this year (FN-W, 1/17/06).

It seems as if Derek was arguing back to the students who held the position that Kelly should not get the painting because he wrote, ‘So what if you have to be responsible?’ It seems Derek was directing his response (‘so what’) to his peers in his post-discussion writing assignment in order to formulate a reason for why Kelly should go and retrieve
the painting. In effect, Derek’s observations of the discussions had an effect on what he wrote in the post-discussion response. He appropriated or recycled the topic of the discussions in his second response.

Elena’s and Derek’s learning histories throughout the ‘Kelly’ lessons are illustrative of the ways the content of the discussions crept into the written responses of the focal students. All of the lower-achieving readers used the topics of the discussion and content of the discourse in at least one writing assignment that followed the discussions (e.g., Colin, Jack, and Matthew with the ‘Kelly’ assignment, Lucas with the ‘Weasel’ writing task, and Erica, Mia, and Derek with their ‘Kelly’ assignments).

Further, almost all of the focal students used the content of the discussions in their writing with more than one assignment or on more than one occasion (e.g., Elena with ‘Weasel,’ ‘Ruby,’ and ‘Kelly;’ Colin with ‘Weasel and ‘Kelly,’ Erica with ‘Giver, Victor, and Kelly’).

Previous research has examined the transfer of the content of discussions between the oral discourse enacted in discussions and the written responses from individuals who had participated in those discussions in intermediate grade levels (Goatley et al., 1996; Patthey-Chavez et al., 1996; Saunders, Patthey-Chavez, & Goldenberg, 1997). The findings here confirm what previous studies have shown; that is, the content or topic of the discussion is often “picked up” in the individual’s written response when writing follows the discussion. Bakhtin’s theorized that all language is recycled – the words we use to express our thinking come from others (Bakhtin, 1986). Dyson (2000) characterized Bakhtin’s thoughts about this, stating, “Words we appropriate taste of the situational and relational context in which they were learned” (p. 58). For students who
struggle to express their ideas on paper (often times lower-achieving readers), these are especially important findings. The findings imply that discussions have the potential to become opportunities to practice or rehearse ideas about what to write. Elena’s and Derek’s learning histories demonstrate this point.

Making Use of the Form of Reasoning during Discussions in Writing Tasks

In the fourth-grade classroom, Mrs. Reinhart typically used writing activities as a follow-up extension to the discussions (e.g., the writing workshop about the ‘Kelly’ story). Mrs. Pearson, however, used writing exercises as pre-discussion and post-discussion activities. On three occasions during the year, Mrs. Pearson asked students to write a response before the discussion took place and then asked the students to write a response to the same question after the discussion. She did this during lessons with The Giver, by Lois Lowry, in December 2005, during a lesson with What Should Kelly Do in January 2006, and during a lesson with Victor, by James Howe, in March 2006.

The writing samples collected from these lessons suggest lower-achieving readers in the fifth-grade classroom appropriated the form of the discourse during discussion, or the structure of reasoning about a text (e.g., elaborated explanations), in addition to appropriating the content of the discussion in their writing. Below are four writing samples from the Victor discussions that support this assertion. Mia and Erica each wrote a response to the question, “Who is Victor?” before the small-group, peer-led discussions took place and then wrote a follow-up response to the same question immediately after the discussions. Derek did not write a post-discussion response. Mrs. Pearson’s directions for the writing activities were brief and the same for both pre- and post-discussion tasks, “Write a paragraph telling who you think Victor is” (FN-3/14/06).
Drawing on Wilkinson and colleagues’ concise review of argument structures in a
discourse coding manual (2006), I have made bolded notes in brackets about the different
elements of the argument structure that comprise elaborated thinking in each of the two
responses. The following writing samples are Mia’s.

<table>
<thead>
<tr>
<th>Pre-discussion writing (n=40 words)</th>
<th>Post-discussion writing (n=72 words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think Victor is a miracle worker [claim]. I think that because it seems that he is a real person [reason]. Like it seems like he’s dead, but he’s really not [claim]. It seems that Victor known that Cody was about to die [reason].</td>
<td>It was a interesting story about Victor. I thought Victor wasn’t a real person [claim]. Like an imaginary friend [example]. I thought he wasn’t a real person because his parents barely even know who he was [reason]. Also I thought he wasn’t real because why would his parents let an old man see their son if they didn’t even know who he was [reason]. And that mostly why I think Victor is imaginary or not real.</td>
</tr>
</tbody>
</table>

Consider the excerpt below of the transcript from the ‘Victor’ discussion where Grace stated a reason that Mia seemed to use in her writing. In the excerpt, I highlighted Grace’s turns, showing the topic Mia seemed to take up in her writing.

Katie: I forget what the question was.
Mia: The question was why was Victor here in the first place?
Katie: Oh, yeah.
Ryan: To help him.
Grace: Why would he help him because they don’t know each other at all?
Derek: Well, maybe he did.
Ryan: Because well, I think he knew he was going to die.
Grace: (cannot hear) Yeah, but how does he know the parents?
Mia: He talked to the parent.
Grace: Yeah, how did he talk to the parent? The parents had no idea that Victor existed.
Mia: That’s what I’m talking about.
Students: (overlap)
In examining Mia’s written responses and after reviewing the transcript of the ‘Victor’ discussion, it is apparent Mia appropriated the content of the discussion in her post-discussion response (e.g., the idea about parents). The students in Mia’s discussion had proposed that Victor was ‘imaginary.’ Grace supported the claim that Victor was ‘imaginary’ with a reason; she said, “The parents had no idea that Victor existed.” In all likelihood, when Mia had time to think about her response about Victor after the discussions, she seemed to appropriate the evidence that Grace had used when she wrote, “I thought he wasn’t a real person because his parents barely even know who he was.”

The pertinent question is did Mia appropriate more than the content of the ‘parent idea?’ Mia’s reasoning in the post-discussion written response is more elaborated than her reasoning in the pre-discussion writing sample. In Mia’s first response, she made two claims and supported each claim with one reason. In the post-discussion response, Mia stated her position, provided an example of her position, and supported the position with two reasons that built on each other. Mia used text evidence and background knowledge about parents and strangers to support her claim that Victor “wasn’t a real person” in the post-discussion response. In effect, Mia used reasons the way her classmates did in the ‘Victor’ discussion. Recall from a previous section that the higher-achieving readers posited elaborated forms of reasoning about Victor a combined total eight times during the discussion. Mia’s post-discussion writing reflects this way of using discourse to reason about text; that is, state a view or make a claim and support the claim with more than one reason or a reason and evidence from the text (FN-1/17/06).
Erica’s written responses from the Victor lesson also suggests that she appropriated both the content of the discussion and the form of reasoning students used to reason about Victor’s character in the Victor 2 discussion. Again, Erica participated in the peer-led discussion with four other higher-achieving students. During the discussion, the students generated a combined total 13 elaborated explanations. The following responses are from Erica’s pre-discussion writing and her post-discussion writing to Mrs. Pearson’s question, ‘Who is Victor?’ I have added in bold the parts of argument structure in discourse.

<table>
<thead>
<tr>
<th>Pre-discussion written response (n=58 words)</th>
<th>Post-discussion written response (n=115 words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think Victor is a thing from the ceiling [claim 1]. He used his imagination for the ceiling people, so mabe he mad up Victor [reason]. It could be the old man who dies and told him the storys [claim 2]. His sperit could change its name [reason]. I wish this story wold go on so I could read more. I loved this story.</td>
<td>I think Victor is God [claim]. When I was in my group my friend Nicole changed my idea [reason]. At first I thought it was his imagination. But then when I herd all the cules [clues] that it could be god I changed my mind [reason]. God would not really show his face [reason]. He would try to talk to you [reason]. My group agreed to say maybe Cody was in a coma [claim 2]. We said that he could here breath and funkshon [function] but not talk or move [reason 2]. At the very beging I though he was a lepercon [claim 3]. The auther really wanted to try to see if you know who Victor is [claim 4]. I think the auther does not know who Victor is [claim 5].</td>
</tr>
</tbody>
</table>

Much like Mia’s responses from pre-discussion to post-discussion contexts, Erica seemed to take up the content of the discussion in her writing, explicitly stating in the post-discussion response, “When I was in my group, my friend Nicole changed my mind.” In addition, Erica’s argument is clearer and more elaborated in the post-discussion writing than in the pre-discussion response. In the post-discussion response,
she stated several claims, but her first claim (‘I think Victor is God.’) is the important one because she supported it with four subsequent reasons whereas her pre-discussion writing has two claims each supported by one reason. Erica heard and produced herself a combined 13 elaborated explanations during the Victor 2 discussion. The following excerpts are several ‘elaborated explanations’ produced from students during the Victor 2 discussion:

John: Yes, so am I. I think he's God [claim], he was talking about how he tried to tell him about he's going to live [reason], he was saying Cody like making up stories about Cody that he would go mountain... rock climbing [reason].

Erica: I said kind of this… I do disagree with her [claim], cuz like uhm ... cuz like ... I mean like, he said that he kind of didn't want him there but then he did [reason] and then I think that Victor would have mentioned something and wouldn't come if he said he kind of didn't want him there [reason] and then did.

Evan: Uhm? I thought he was like the old man that the nurses said [claim]... cuz it said uhm... it said that I never did find out about for sure who Victor was [reason/evidence], the nurses said that there was an old man who walked the halls at night [reason]. I thought that Victor was that old man that walked the halls at night [restatement of claim], I thought that uhm he was the old man because of that and that ... and because uhm it said that he had like a deep crackly voice somewhere in the story [reason]. Yeah and then yeah, usually old people have deep and crackly voices [reason]. That's what I thought!

Nicole: I also thought Victor was God [claim] because uhm because Victor was telling him about a boy named Cody and his grandchildren and his children [reason] so, so... he knew Victor's life I mean he knew Cody's life [reason].! But not exactly... like he wasn't going "Oh yes, you're going to survive" [reason] and then when he was... when he said uhm all the people packed up from the Land Above packed up and left... uhm...[evidence] immediately I thought 'Oh wow', people from Heaven aren't going to take he's going to be fine because people from Heaven are not going to take him into Heaven now [reason], he's going to survive and he's going to be fine.

It is beyond the scope of this analysis to claim that the students’ use of discourse to reason in the written responses is a direct result of the discourse of group discussions or the reasoning that took place in the discussions in the form of ‘elaborated
explanations,’ but it is difficult to ignore Mia’s and Erica’s improved reasoning in the post-discussion responses. Their reasoning about the questions and text appeared more cogent and thoughtful in the post-discussion writing whereas their reasoning in the pre-discussion responses was more difficult to follow and less provocative. The common thread here relates to the forms of reasoning that took place in the discussions; in both cases, there were frequent displays of elaborated reasoning about the text.

Other studies, using different research designs, Reznitskaya et al. (2001) and Reznitskaya and Anderson (2002) have argued that learning to reason about text is more about acquiring a ‘schema’ to reason about text than it is about one’s ability or achievement level. They proposed that argument strategies can be learned and they demonstrated this convincingly in quasi-experimental investigations of the effects of Collaborative Reasoning discussions on fifth-grade students’ abilities to construct written arguments in persuasive writing tasks. Taking a sociocognitive view of learning, they suggested that the reasoning during discussions fosters students’ acquisition of a ‘schema’ for reasoning that they are able to use in writing tasks.

Saunders et al. (1997) reported a similar phenomenon. In their quasi-experimental study with 27 fourth-grade students and one teacher, the students participated in one of two conditions: instructional conversation discussions or traditional reading lessons. In both conditions, the lessons were about several texts related to ‘friendship’ (e.g., Charlotte’s Web, by E.B. White). After reading and discussing these texts, the students wrote essays about friendship. The authors ‘traced’ the words and ideas produced in the discussions across contextual boundaries to the written responses of the students much like I have done in the present study. The students’ essays from the
discussion condition contained more complex ideas and themes about friendship than the students’ essays in the other condition, and they contained more of the words and ideas expressed during the discussions than the comparison group’s essays. The authors concluded that the discussions acted as “both a springboard and an anchor” (p.45) for the students in the instructional conversation condition, meaning the students were able to use the discussions in ways that helped them in both the discussion context and other curricular areas.

The metaphor that discussions are an ‘anchor’ and a ‘springboard’ evokes what others have theorized about language and the connections between oral language and written language generally; that is, language is a way of representing our experiences in the world, so the relationship between oral language and written language is such that writing “grows” from talk (Britton, 1970). Dyson (2000) argued a similar point in her review of research and theoretical understandings of the connections between oral and written discourse. She wrote, “Students sustain their written voices through talk with others” (p.52). Perhaps discussions serve as an ‘anchor’ to lower-achieving readers because they are able ‘put down’ their ideas in relation to their experience with the text during the discussions. And at the same time, discussions act as a ‘springboard’ because they cultivate the ideas that become written texts.

I have come to see the relationship between anchor and springboard as an important one, and I believe using Rogoff’s (1995) conceptualization of participatory appropriation illuminates the relationship between oral and written discourse. In effect,
the experience and participation in the context where oral language is used (i.e., discussion) affects the experience a learner has in another context (i.e., writing task). Discussion is first a means of fostering an understanding of text, and then, becomes a critical link between that understanding and the subsequent composition of written texts. It seems the focal students in this study made use of discussions in this way.
CHAPTER 6

CONCLUSIONS

“By word, the mind is winged.” -Aristophanes (448-335 b.c.)

The goal of this investigation was to better understand the ways in which lower-achieving readers use the discourse of discussions to engage in and display high-level thinking and comprehension of text. Again, the three central questions of this investigation were:

1. What happens when lower-achieving readers, their peers, and their teachers engage in group discussions about literary texts?
2. To what extent do lower-achieving readers display high-level thinking about texts during group discussions?
3. Do lower-achieving readers appropriate features of the discourse of discussions and demonstrate the use of them in classroom writing tasks?

The previous chapters supported an understanding of these questions in several ways. Chapter 1 identified the purpose of the study and the rationale for the three research questions. Chapter 2 discussed the relevant research and theory related to reading comprehension of intermediate-level students and group discussions as a context where students can practice reading comprehension and high-level thinking about text. Aspects of sociocultural theory were reviewed and discussed to provide a lens to examine and interpret the findings. Chapter 3 described my approach to data analysis, my roles as
Chapter 4 described the two classrooms, the students, and teachers who participated in this study. In Chapter 5, I presented and discussed the findings as they related to the three research questions. The six major findings of this study were:

1. Lower-achieving readers used the talk during discussions as a tool to improve their comprehension of the texts being discussed. I also referred to this phenomenon as a kind of ‘intellectual scaffolding.’
2. Lower-achieving readers participated in many discussions where the participants engaged in authentic conversations about or made explicit references to particular reading comprehension strategies (e.g., visualizing the text), and these conversations were unprovoked by the teacher.
3. Students and teachers created genuine problem-solving contexts during discussions, and these contexts intersected with more instances of the lower-achieving readers’ responses that went beyond the literal details of the story (i.e., thoughtful comments).
4. Lower-achieving readers’ talk during discussions included features of high-level thinking (i.e., generalization/analysis) to the same or nearly the same extent as higher-achieving readers in the same discussions.
5. Higher-achieving readers produced more elaborated explanations generally than lower-achieving readers in the same discussions.
6. Lower-achieving readers used the talk from discussions in their writing in two ways: they appropriated the content of the discussions and they perhaps appropriated the form of reasoning that took place during the discussions.
Finally, in this chapter, I summarize the new understandings that the findings have illuminated, and I discuss the implications of the findings, suggestions for future research, and limitations of the study.

New Understandings

Based on the previous empirical work in the areas of discussion practices, classroom discourse, and reading comprehension, we know that discussions, as described in this study, can provide useful classroom contexts that enable intermediate-level students to explore texts in authentic ways. Likewise, even though the field has reported mixed results about the effects of discussion on reading comprehension, the overall conclusion is that discussion practices influence students’ comprehension of text in positive ways. In regards to lower-achieving readers in the regular classroom context, previous investigations have determined that discussions can play a vital role in promoting their understandings of the text and in advancing their capabilities to elaborate details about the text in their written assignments. The present study confirmed these results, employing a situated account of what takes place during discussions about literary texts in two intermediate-level classrooms. The remaining question, then, is what has this study clarified or illuminated?

In my estimation, the efficacy of discussions as an instructional approach for lower-achieving readers’ development as readers and thinkers about literary texts has been reinforced. Discussions are contexts where lower-achieving readers may acquire a more complete understanding of the text, practice comprehension strategies in organic ways, engage in high-level thinking about text, and use the discourse from discussions as a tool for subsequent classroom writing tasks. This study documented the way authentic
conversation about reading comprehension strategies emerged in the discussions. Both focal and non-focal students referred to and made sense of particular reading comprehension strategies during discussions. This phenomenon is especially relevant for lower-achieving readers who may need more engagement in and reinforcement of particular comprehension strategies. Likewise, lower-achieving readers who participated in the discussions demonstrated that they engaged in high-level thinking to the same extent or nearly the same extent as their peers.

The common thread across these findings is the way the students and teachers crafted the discourse during discussions that led to these outcomes. The focal students, their peers, and teachers created the contexts of the discussions together as invested participants in classroom literacy acts. In the two classrooms examined, the students and teachers came together as problem-solvers about the texts and topics related to the texts during most discussions, and this problem-solving approach seemed to generate the positive outcomes related to reading and thinking about text described in this study. Without this approach to the discussions, outcomes related to reading and thinking might have been left to chance. In short, lower-achieving readers seemed to thrive as readers and thinkers about text in discussions that included the groups’ engagement in problem-solving.

I came to see problem-solving as an essential contextual foundation in the discussions, and I described it as a kind of ‘tacking’ that the participants engaged in as they moved between posing questions or problems, working to resolve those questions, and then posing new questions. The focal students seemed to produce more thoughtful comments (i.e., comments that indicated they went beyond the literal details of text)
during discussions that created and used a problem-solving approach. As such, lower-achieving readers seemed to excel as readers and thinkers in discussions when the participants were able to create this kind of discursive context.

As mentioned previously, Mercer (1995, 1998, 2000, 2002) has used the construct of exploratory talk to describe a kind of problem-solving discourse that enables children to build the contextual foundations necessary to foster learning in classroom dialogue. His work has established the idea that particular features of a discursive context seem to matter a great deal for intramental activity. His explanations of exploratory talk and his empirical work investigating this kind of talk have helped affirm the fundamental Vygotskian notion that learning begins in the intermental spaces of the classroom before becoming internalized as individual thought.

Mercer (1995) is a psychologist and his studies and interests are largely related to cognition. Hence, his framework explains learning in the classroom, generally, though it seems to be an equally viable framework in which to consider the discourse related to growth in reading comprehension in the intermediate-level classroom. As such, the use of Mercer’s framework and notion of exploratory talk in this study helped confirm the efficacy of discussions for lower-achieving readers in intermediate classrooms. The analyses were able to show ‘what’ the students did in and around discussions, but it was the framework that was able to show ‘why’ and ‘how’ they did it.

In conclusion, Pearson and Fielding (1991) wrote in their review of reading comprehension instruction that there is a transformation process that takes place between authors and readers. Simply, ideas must move from the author to the reader. Discussion
is a necessary mechanism in this transformation process as the problem-solving framework of discussion elucidates for others (e.g., those who may struggle with this process) the ways ideas make this journey.

Implications

In this section, I discuss theoretical and pedagogical implications of the findings. Overall, this study, which took a situated view of discussion and reading development, extends our current understanding of discursive practices that foster development and growth in comprehension and high-level thinking about text. Specifically, it was shown that the discourse provided the necessary intellectual scaffolds for lower-achieving readers who used the talk as a tool to make meaning. The talk during the discussions also provided opportunities for participants in the discussions to draw on their knowledge of reading comprehension strategies and to use those strategies in authentic or organic ways during the discussions. Likewise, the contextual foundations of the discussions that I referred to as a problem-solving approach provided opportunities for the lower-achieving readers to think in high-level ways.

Nystrand (1997) claimed that dialogic discourse (i.e., discourse that is thought-shaping) in classroom contexts is a result of the group’s epistemological stance toward the discourse. Nystrand (1997) noted that beliefs about who has interpretive authority during classroom dialogue seem to matter a great deal as dialogism takes shape. I contend that the students in Mrs. Reinhart’s and Mrs. Pearson’s classes also had beliefs about their roles in creating knowledge during discussions. It seems the students knew that when they questioned, worked together, resolved questions, and posed new questions, they knew they were having a discussion that was designed to build an
understanding of the text. This notion elaborates our theoretical understanding of the ways lower-achieving readers make sense of texts through dialogue about those texts. We know that discourse provides important scaffolding for lower-achieving readers, but it seems to be more an issue of the context that the discourse creates that provides scaffolding and opportunities for high-level thinking. Put another way, an epistemological posture based on problem-solving is a precondition for the kind of discursive practice that generates intellectual scaffolds for others.

Another theoretical perspective that might explain the discussions described in this study is the concept of a ‘third space’ in the classroom. Guttierez, Baquedano-López, and Turner (1997) described the theoretical notion of a ‘third space’ in the classroom, first claiming that classrooms generally build scripts or patterns of interactions that students use as resources in constructing literacy learning. The authors then use the notion of ‘scripts’ to describe the third space as a particular classroom context where the scripts of both students and teacher intersect, producing a classroom community where learning becomes more important than teaching. According to Guttierez et al. (1997), the key features of teaching and learning in the third space include language, organization of learning, and pedagogy. By shifting our traditional conceptualizations of these typical classroom features toward a view that the students’ and teacher’s scripts should work together and not against each other, learning becomes a major focus of both teachers and students.

In this study, discussions became a particular kind of classroom repertoire that some might consider a third space, embodying a reconceptualized focus of the way language, interaction patterns, and pedagogy intersect in the classroom. Lower-achieving
readers and their peers did more than “go through the motions” with the discussions as another “activity” to get through during a language arts block. Instead, they used the discussions to create a third space where their own language and thoughts intersected with the goals of the teacher and the school curriculum (i.e., to improve reading skills and become better thinkers of text). The use of discussions likely transformed what is often considered an “activity” or “lesson procedure” into a dynamic space for interactions and dialogue that became a social resource for the participants, facilitating genuine learning, authentic practice with comprehension strategies, and the construction of new meanings about text. To my knowledge, no author has used the concept of third space to explain discussions in intermediate-level classrooms, so I use it here as an alternative way to consider theoretically the enactment of discussions as a classroom literacy practice that supports achievement in reading.

The major findings of this study have several pedagogical implications. The first relates to the two teacher participants’ beliefs about discussions as a result of the study. Before the study began, I believed Mrs. Reinhart and Mrs. Pearson had a tacit awareness that discussion was a good instructional strategy to use in reading and language arts, but the intensity of the study (i.e., the commitments to the study to facilitate discussions on at least a weekly basis for nearly an entire school year) encouraged them to make major shifts in their beliefs about discussion practices. Consider the following excerpts from interviews with and field notes about the teachers’ thinking, demonstrating these changes. On December 13, 2005, I wrote the following in my field notes about my perceptions of Mrs. Pearson’s beliefs about discussion:

Mrs. Pearson said something to me today that made me think she may not be seeing the connection between discussion, thinking, and reading. She said, ‘I get
that discussions are good for students to improve socially, but I don’t see how they help students with reading, and I definitely don’t see the transfer to paper.’

At the end of the study, I asked Mrs. Pearson in an informal interview if her views about discussions “had changed at all during the year” (I-W, 5/4/06). She replied, “A lot! I can now stand up at a faculty meeting and be an advocate for discussions. I could not have done that at the beginning of the year.” At this I probed, “What do you mean advocate? She said, “I mean tell other teachers in our building that they need to have discussions to let students become better thinkers.”

Mrs. Reinhart had similar views at the end of the study (I-N, 5/5/06). In response to my question, “How do you see discussions fitting into reading instruction, if at all,” she told me, “I don’t think I could have reading instruction without discussions anymore…discussions let students practice comprehension.” And in a subsequent question, I asked, “Is there anything you would tell a new teacher about discussion?” Mrs. Reinhart replied, “I would tell every teacher to do discussion. It’s too important. It’s wrong not to allow kids talk about ideas they have.”

Based on the teachers’ comments about discussion at the end of the year, it appears they made shifts in their thinking and developed passionate beliefs about using discussions in reading instruction as a way to foster students’ thinking about text and a means to promote comprehension. For Mrs. Reinhart, this seemed to be a moral imperative. I believe the teachers expressed a change in thinking about discussions as a result of their persistent implementation of discussions during the year. This is a significant implication of this investigation. I should note that at the time of the final
interviews with the teachers (May 2006), I had not explicitly shared any of the current findings or thoughts. The teachers sensed intuitively only what I would discover throughout my analyses.

For other teachers who work with lower-achieving readers in the regular classroom context, this study should give them confidence that those who do not achieve as well as others on reading assessments still learn a great deal during discussions, not only about the text, but about reading as well. It seems that discussions are a context where lower-achieving readers can gain procedural as well as propositional knowledge about texts and reading. Likewise, it seems that lower-achieving readers are able to think in high-level ways to the same extent or nearly the same extent as their peers during discussions. In short, lower-achieving readers use the discourse of discussions as a tool for thinking about text.

If teachers are to use discussions as part of their reading instruction, they might strive to ensure the students are approaching the discussions as problem-solvers, understanding their purposes in discussions as ‘questioners,’ ‘problem-posers,’ and ‘solvers’ of questions, ideas, and propositions about text. In addition, teachers may need to understand the discourse features that seem to indicate engagement in high-level thinking about text (e.g., elaborated explanations) because an understanding of these features may help teachers listen to the talk of their students in ways that assure a modicum of productivity in the discussions. Likewise, teachers may need to explicitly model the use of these features to help students understand high-level ways of thinking about texts.
This implication suggests teachers would benefit from an understanding of the interaction patterns that characterize productive discussion, which means teacher educators should ensure that instruction in discursive practices is more than a review of a set of “teacher moves” or elements of an instructional framework. Teacher educators should strive to resist the temptation to organize courses in reading pedagogy and professional development in literacy around the finer points of the ‘procedural steps’ involved in particular instructional strategies. Perhaps a reframing of instructional strategies in reading as pedagogies of classroom interaction patterns and discursive practices that foster high-level thinking and comprehension is necessary. A reframing of reading and language arts pedagogies may reduce the perpetuation of the inexorable I-R-E pattern of classroom discourse in many American classrooms.

Teachers and teacher educators might also begin to view discussion practices about literary texts as an effort in the classroom that is linked with other sound efforts (e.g., student choice, use of appropriate texts, frequent and sustained reading). In other words, linking discussions with other sound literacy practices may be viewed by teachers as part of an overall strategy to boost achievement in reading. The focal students revealed their potential to engage in thinking about texts in high-level ways. They each did this to different extents and in different ways, but they each used the discussions as a forum for practicing what good readers do when they read text. Gutierrez (1992) claimed we deny students opportunities to be successful with school literacy when the discourse of literacy is unmanageable or new to the students. In this study, discussions gave eight students who had historically struggled with school literacy the opportunities to engage
with the relevant discourse of school literacy. Experience with literate discourse may be one important classroom practice that when linked with other efforts, encourages growth and development in reading.

Finally, the eight focal students had different but definite difficulties with reading intermediate grade-level texts. The teachers’ judgments and multiple assessment scores indicated that Colin, Matthew, Lucas, Derek, and Jack had good word recognition, but were slower, less fluent readers. This means they could decode well enough, but could not get through the texts at an efficient pace, making it difficult to eventually demonstrate high-level thinking about the texts on assessments. Elena and Erica, according to the teachers and the assessments, decoded extremely well and were fluent readers, but struggled to make connections and inferences to build accurate models of what took place in the text or what the text means. Mia who was the only English language learner in the study was a fluent and accurate reader and was able to make accurate inferences about the text, but lacked sufficient background with new vocabulary, which impeded her comprehension. Several students, according to the teachers and field notes, had difficulties staying focused on tasks such as assessments and language arts assignments (Lucas, Derek, Jack, and Colin).

The implications of the findings suggest that regardless of the particular kind of reading difficulties the students had, all of them benefited in some way from their participation in the discussions. This means discussions may be a context that supports a range of lower-achieving readers. The discussions provided some of the focal students with important opportunities to show their high-level thinking that they could perhaps not do on assessments because of a slower reading pace (as with Jack) or inability to focus on
those tasks (as with Lucas). Moreover, the discussions were a context where these students were given models about what good readers do and a space for practicing making inferences, connections, and reasoning about text that would help them on assessments that asked for demonstrations of those skills. In short, discussions may be an instructional context and tool that support a variety of readers, helping teachers with their planning of practices that support achievement in reading.

Suggestions for Future Research

At this time, I see a need for four directions in future research about discussions and lower-achieving readers. The first direction is for research to provide a better understanding of the discourse features that seem to indicate high-level thinking in talk about literary texts and their role in shaping students’ understanding. This study showed that higher-achieving readers elaborated their thinking more often in discussions than lower-achieving readers; that is, stronger readers reasoned about the text in more elaborate and cogent ways. Does this really matter? In other words, does the ability or propensity to reason about the text in elaborated forms matter in terms of reading comprehension or is it enough for readers to think in high-level ways as indicated by the other discourse features (e.g., speculations, affective connections)? Future investigations are needed to show how the various discourse features shape lower-achieving readers’ reading comprehension.

A second direction for future research is to explore the ways the larger classroom culture mediates what takes place in the contexts of discussions. Patterns emerged in the present study about the relationship between the larger classroom culture and the discussion contexts, but the ways the larger classroom culture mediated the discussion
practices were difficult to explain. Continued study of the relationships between the two contexts may extend our understandings of discussion practices and of the ways these practices support lower-achieving readers’ writing achievement and high-level thinking about text. Moreover, teachers may benefit from knowing more about the mediating effects of one classroom context on another in order to build classroom culture that supports productive discussion practices.

Another promising direction for research relates to the students’ perspectives about the factors that influence engagement in high-level thinking during discussions. I showed representative examples of what happened in the discussions, and typically the outcomes were positive. However, in both classrooms, there were particular discussions during the year that did not elicit student engagement in high-level thinking nor development of a problem-solving approach. Students reported several factors about the texts, discussion contexts, and members of their groups that, upon further investigation, might explain other preconditions for productive discussions. Future research exploring students’ perceptions of these conditions would help teachers and students conduct productive discussions.

Finally, there are few studies that have examined the ways teachers learn how to conduct productive discussions that promote high-level thinking and comprehension. A fourth direction for future research is to investigate teacher learning and understanding of discussions that support lower-achieving readers and their development as readers and writers. Specifically, what do teachers need from teacher educators to help them learn about these practices? Does one-on-one training and coaching support their growth?
Would a classroom discourse coach help teachers lead discussions much like literacy coaches help teachers facilitate language arts instruction? And what kinds of scaffolding might teachers need to promote their understanding of first-rate discussion practices? Research in this direction would support teacher educators and their work in preparing classroom teachers.

Limitations of the Study

This study was situated in the realities of two classrooms, and investigated the experiences of two teachers and 44 students over one school year. Although I have provided a set of findings about what lower-achieving readers might be able to do as a result of their participation in discussions, I cannot claim that the same findings would be true for other students, in other classrooms, and at another point in time. The contexts of classrooms change each year and depend largely on the relationships the students and teachers create. As such, the relationships and classroom community are impossible to predict from year to year. Although teachers aim to enact what they believe ‘works’ each year, the delicate intricacies of human nature, diversity, and language preclude exact replication of classroom practices and contexts. This is why research in education must seek to describe the contexts in considerable detail. I have attempted to do this in the report of this study, and readers of this report need to be mindful of the important role of context in shaping teachers’ and students’ participation in classroom literacy practices.

In addition, the findings related to the students’ demonstrations of generalization/analysis and speculation during discussions should be considered cautiously. The interrater reliability ratings for ‘generalization/analysis’ and ‘speculation’ were lower than the reliability ratings for other features. The discrepancy
constitutes a threat to the trustworthiness of the findings related to the students’ display of these two features in their discourse. Likewise, I adapted the coding scheme I used in this investigation from Soter et al.’s (2006) framework for analyzing the discourse of discussions. Soter et al. (2006) evaluated discussions based on what the questions in the discussions elicited from the participants, whereas I used the same discourse features to examine the content of the individual students’ responses. I adapted their framework so I could identify the nature of individual students’ participation and engagement in high-level thinking. Although I believe my adaptation of their framework is a sensible extension of prior work, it remains to be shown whether the display of certain discourse features influences reading comprehension of texts.

Although I asked questions on an ongoing basis during the study, I sometimes hesitated to talk to the focal students at important times because I was aware and sometimes uneasy about the way my interactions with the students might affect the classroom environments and the discussion practices. During the analysis phase, I realized this error in judgment when I kept wondering to myself, ‘what did he or she say about this,’ or ‘I wish I would have asked her about this.’ In hindsight, I realize I should have talked to the students at all points in the study, taking detailed notes about my role as a researcher in more detail and including these descriptions of my role in the methodology section of the dissertation.

Finally, the findings to the third research question are provisional. My initial plan for the question was based on my assumption that collecting many writing samples would allow me to see the ways students appropriated the features of discourse and used them in their classroom writing tasks. As I began to analyze the writing from journals, practice
assessments, writing workshop assignments, and homework, I realized it was difficult to make claims and support assertions about the relationship between writing and discussions. At that point, I focused my analysis for the third question on the writing tasks that directly related to the discussions (i.e., post-discussion writing tasks). However, I had fewer of these kinds of writing samples.

Concluding Thoughts

The practice of using discussions as a tool for learning is an extremely old practice. The Plato dialogues confirm that Socrates used a process of questioning in dialogue to support the acquisition of knowledge nearly 2,500 years ago (Gunter, Estes & Mintz, 2005). Quite simply, discussion is an ancient pedagogy, and one that possibly outdates any instructional practice that currently exists in the world. In addition, we have been studying discussion practices in the United States for well over 100 years; for example, John Dewey (1990) made claims about recitation and dialogue at the turn of the last century. Why, then, do we continue to study discussion practices? I believe we continue this research because the conventional recitation pattern in classroom interactions and reading instruction and the attendant norms governing teacher and student participation have a tremendous grip on the way we conceptualize learning in classroom settings. By studying classroom discussions, researchers are able to get to the heart of the epistemological and ontological foundations of teaching and learning. Likewise, by studying discussion practices from different perspectives, scholars may finally provide the depth of understanding teachers need to address the root causes of the ubiquitous classroom recitation pattern.
LIST OF REFERENCES


Wilkinson, I.A.G, Soter, A.O., & Murphy, P.K. (2001). *Group discussions as a mechanism to foster high-level comprehension*. Unpublished Proposal, Columbus, OH.


A Framework for Analyzing the Discourse of Discussions (adapted from Soter et al., 2006)

**Questions (Teachers and/or Students)**

Authentic Questions (Nystrand, 1997)

**Student Responses**

High-level Thinking (generalization, analysis, speculation) (Nystrand, 2003)

Affective Response

Inter-textual Reference

Shared Knowledge Response

Elaborated Explanations (Webb, 1991)

Exploratory Talk (Mercer 1995; 2000)

**Examples of Discourse Features (adapted from Reninger, Wilkinson, & Soter, 2006)**

<table>
<thead>
<tr>
<th>Discourse Feature</th>
<th>Explanation and Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Question</td>
<td>Where the person asking the question does not know the answer or is genuinely interested in knowing how others will answer (i.e., the answer is not pre-specified). Almost all student questions are authentic. An authentic question usually allows for a range of responses and generates several responses.</td>
</tr>
<tr>
<td>Uptake</td>
<td>A person asks a follow-up question about something that someone else said previously. Uptake is often marked by the use of pronouns (e.g., “How did it work?,” “What causes this?,” “What city grew out of this?”).</td>
</tr>
<tr>
<td>Generalization / Analysis Speculation</td>
<td>Student talk that shows evidence of high-level thinking in the form of generalization (building up ideas, tying things together, “what’s the point”), analysis (breaking down ideas, “how or why”) or speculation (considering other possibilities, “what if”).</td>
</tr>
<tr>
<td>Elaborated Explanation</td>
<td>Where a student explains her thinking in fairly detailed form to others. Elaborated explanations occur in a single turn where a student explains how she arrived at a conclusion by giving a step-by-step description or detailed account of how a conclusion was reached or how a problem might be resolved. They are elaborated descriptions of how things work, why some things are the</td>
</tr>
</tbody>
</table>
way they are, or how they should be thought about. They include details of how to think about an issue and justification or rationale for thinking that way.

As the phrase ‘elaborated explanations’ suggests, students make some kind of claim and provide either two reasons to support it or one reason and evidence in support of the reason (e.g., I agree with Joseph because he keeps annoying them by saying shut up and I think he is trying to just get them to let him play because they wouldn’t let him play because he didn’t have his glove).

**Exploratory Talk**

A kind of ‘co-reasoning,’ where students (sometimes with the teacher) over several turns share knowledge, evaluate evidence, and consider options in a reasonable and equitable way. In essence, it is a way of using language to “chew on an idea,” to think collectively, to ‘interthink.’ A key feature of exploratory talk is students giving reasons for their ideas or opinion. Hence, exploratory talk typically contains lots of reasoning words (because/’cause/cos, if, so, I think, agree/disagree, would, could, maybe/might/may be, like, but, how, why).

E.g.,

Joanna: Angelique, why do you think she wants to be a kid?
Angelique: Because she likes to swim and she likes to be around a lot of kids.
Tamika: And she likes playing a lot, with the kids and stuff?
Angelique: Yes.
Joshua: And I agree because if she wasn’t swimming she’d probably be sitting back rocking chair... She’s having a lot of fun, some fun like (the) children.
Joanna: I think the same thing as Angelique was saying that she’d probably like to be a kid again, and um, probably she had a good life because she did a lot of stuff and you know how we, um, how we are now....
(Several turns deleted)
Brian: I disagree. I disagree with Angelique... 'Cuz my grandma, she cleans up the House, she goes swimming and everything else, but I don’t think she’d like to be a kid again.
Angelique: Brian, that’s different, but she still probably
wants to be a kid again, this Grandma in
the story.

Brian: If I was that age, I wouldn’t want to be a kid
again because I’d have to go through all
that, getting my license again, getting
more money to get the house, then I’ve got
to go get a job again, and everything over
and over.

Angelique: But that’s probably what she wanted to do.
It doesn’t mean trying to be a kid again.

Affective Response
Student makes connection between the text and his/her
feelings or about his/her life (i.e., text-to-self) (e.g., I felt,
when I was little ...).

Inter-textual Reference
Student makes connection between the text and other
literary or nonliterary works, other works of art, or media,
such as billboards, teLucassion, newspapers or magazines
(i.e., text-to-text) (e.g., In that other book we read ...).

Shared-knowledge Response
Student makes connection between current discussion and
previous discussion the students have had, previous topics
they have talked about, or previous knowledge they have
shared (i.e., discuss-to-discuss) (e.g., Last week we talked
about ...).
APPENDIX B

EXCERPT OF FIELD NOTES
Field Notes – Northview: 12/7/05, 10:00-12:15
Elaborated on 12/8/05

Anthony – absent and has been absent since last week (6 days in a row).
Jasmine – absent and officially withdrawn from the class (in England), but will return.

Came in today and there was a new room arrangement (see handwritten notes). Lara had mentioned that she was going to change around the seats in order to “pull more students in.”

10:00

Lara had the kids on the floor in the middle of the room and was explaining the writing assignment – finish Native American postcard project. The goal was to describe something about the photo and use at least one magic of three to describe. About half the class was publishing their pieces – typing on computer and gluing on construction paper. The other half was still writing a second draft of their paragraphs. Lara told class that they would work on their writing for 30 minutes and then transition to reading groups. I sat to the side of the room (near computers) to observe the writing workshop.

Focal students – Lucas was with Mrs. Carney for reading support, Colin was publishing his piece, Troy was rewriting his draft, Jack was publishing, and Elena was rewriting her draft. All of the focal students seemed to work hard during writing today. They appeared focused on their work with little distraction. Colin was working on cutting construction paper as a background to his writing. Elena wrote non-stop on her final copy. It looked like Lara had made some changes to her draft.

Lucas came in at about 10:20 and could not find his Native American photo, so he selected a new one and started all over again. I tried to help him find it, but neither of us could, and then I suggested he ask Mrs. Reinhart and he told me, “No, I’m going to start another one.” He seemed very determined when he said this. I looked over at Lucas (was at table next to his) and he had started in on publishing – cutting with the fancy scissors, picking out the background from the construction paper pile, taping on his photo, etc…. He chose not to start where it most made sense from a school perspective – writing the paragraph.

10:45 - Snack – Troy helped Lara get the snack organized. I had been reading chapters 1 and 2 of Lion with Troy to catch him up from missing school yesterday.

Lara transitioned the group to reading groups. She focused on getting the Lion to Guard Us group to the work table and the Sign of the Beaver group organized for independent work time. Independent work included – work on Native American photo writing. Sign of the Beaver assignment or silent reading. She stressed that they needed to work quietly and independently.
All ‘Sign of Beaver’ students did work independently and Lara reminded only Ben’s table of her expectations.

A Lion To Guard Us Group (Elena, Christy, Colin, Kyle, Kevin, Lucas, Jon, and Matthew) – Lara started the group with an activity to get students to re-read parts of the text and think about author’s words in their own way. The chart she made on poster board is in my handwritten notes. I taped recorded the reading lesson and interaction between Lara and students.

Student worked on finding author’s words and completing their charts for roughly 10-12 minutes before Lara pulled group together. Jack, Elena, Christy, and Kyle had an easy time finding author’s words to interpret – I based this assessment on their charts – all were writing several different ideas and doing more writing than searching or thinking. They all appeared to “move through” the task without hesitation. Colin and Troy seemed to struggle a little more – neither at the end of the 10 minutes had anything on their charts. I tried to help Troy, referring him to different sections of the text to help refresh his memory (he was absent yesterday), but this did not help him decide on any author’s words to interpret. I was sitting next to Troy, but not Colin. Lara asked Colin if he needed help and he said, “No, I’m still looking.” Lucas, although, not writing as quickly as the others, found and wrote a couple of ideas on his chart. Students wrote their ideas in their writer’s notebooks.

I’m not sure why Troy and Colin had trouble with this – seemed like a relatively straightforward task and one that would engage them with the story. Did they have trouble scanning the text, did they have trouble with the directions and not know how to go about completing the task? Did they not know how to decide what to choose from the text? At the time, I thought they were having a hard time deciding what to write – they seemed to scan the story okay, but couldn’t pick something to interpret on their own? Was it because they had no new thoughts of their own about the author’s words? Was it the thinking skill that seemed to slow them down? This was not a case of not trying, either. Both of them seemed to scan the text.
APPENDIX C

INTERVIEW PROTOCOL FOR SEMI-STRUCTURED INTERVIEWS
Interview Schedule (semi-structured): April 2006

Introduction: Introduce the reason for the interview (so researcher can learn more about what students think about discussions and their participation in discussions). Let children know that the interview will be audiotaped and remind the children that participation is a choice so he or she can stop at any time.

**To orient the student and make certain the students are familiar with what I refer to as ‘discussion,’ ask the following.**

1. Do you remember reading and talking about the story {title} the other day? Tell me a bit about the discussion.

**To establish the student’s overall perceptions of the discussions, ask the student:**

2. What do you do during discussions?
3. How do you feel when your teacher announces that there will be a discussion during {the morning, afternoon}.

**To gain the student’s perceptions of the discussion, refer to different parts of the discussions and ask the following:**

4. Do you remember when the group was talking about {specific topic, theme, or idea}? What were you thinking about that {topic, theme, or idea}?
5. What were you feeling about that {topic, theme or idea}? What about that {topic} made you feel that way?
6. Do you remember when you were talking about {paraphrase student’s response from discussion}? What is it about you, the discussion, or the topic that made you share that idea with the group? Why did you want to share that idea?
7. Are there other reasons that make you want to share an idea during the discussion?

**Okay, let’s keep talking about other discussions. Ask the following:**

8. Thinking back to some of the stories you’ve discussed during {reading, language arts} which story was your favorite to talk about? Why?
9. Should your teacher do anything different next year with the discussions? If so, tell me about what you think she should do differently. *Allow some wait time and if student isn’t sure how to answer, offer some suggestions.* (e.g. would you change the size of the group? Would you change the people in the group? Would the teacher talk more? Would you want to talk more?

**Okay, one last question about how discussions help you. Ask the following:**

10. Do you think discussions help you? If so, how? In what ways? If not, why don’t you think discussions help you?
APPENDIX D

TRANSCRIPT CONVENTIONS
Transcript Conventions
(Adapted from Soter et al., 2006)

General rules about turns: Show the beginning and an end of an utterance by beginning the utterance with a capital letter and ending it with a period, unless the utterance is interrupted (see below). It is important to note than a complete utterance may or may not be a sentence – it may be a fragment in the form of a phrase (e.g., The red hat.) or a subordinate clause (e.g., Because he found it in the kitchen.). Unless the turn has been interrupted or completely fades out, the beginning and end markers are useful to show that an utterance has indeed begun and ended and has not been interrupted.

1. ( ) Parantheses are used for all comments regarding speaking behaviors, such as pauses, interruptions, coughs, laughing. The words should provide details about what the turn may have sounded like. For example, ‘(laughing),’ ‘(long pause).’ Used at the discretion of the transcriber.

2. (-) / (interrupts) Hyphens in parentheses show a speaker has been interrupted before the end of his or her turn. The word ‘interrupts’ at the beginning of the next turn marks clearly who interrupted the speaker.

3. (pause) The word ‘pause’ in parenthesis shows that a speaker has stopped talking momentarily or has completely faded out.

4. (simultaneous) The word ‘simultaenous’ in paranthesis indicates two or more speakers begin talking at the same time.’

5. (overlap) The word ‘overlap’ in paranthesis indicates a speaker interrupts and begins talking over another student who continues his or her turn (i.e., two or more speakers talk at the same time).

6. (,) Use commas to indicate where a speaker is either repeating what has been said or is revising what has been said (e.g., I think, think, know that Bear is sad).

7. (cannot hear) The words ‘cannot hear’ indicate that the transcriber knew the student was talking but could not make out the word(s). Sometimes referred to as “uncertain hearing.”

8. CAPITAL Lexploratory talkTERS represent emphasis.

9. Underlining indicates the standardized format for titles of books or titles of stories or other texts.

10. Italics show where students and/or teacher are reading from a text.
APPENDIX E

DATA DISPLAY EXAMPLE
Example of Data Display Used during Analysis

Theme: Discussion Culture

Taxonomy 3: Things teachers do to scaffold or instruct classroom discourse for discussion.

<table>
<thead>
<tr>
<th>Action/Behavior/Observation</th>
<th>Location in data corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Praise the productive talk</td>
<td>Field notes – 10/18; 11/22; 12/4; 1/31; 2/14</td>
</tr>
<tr>
<td>Model productive talk</td>
<td>Field notes – 10/12; 11/31; 1/25; 3/1; 3/14</td>
</tr>
<tr>
<td>Facilitate a ‘debrief’ about discussion</td>
<td>Transcripts (pre-discussions)</td>
</tr>
<tr>
<td>Ask students to reflect on discussion</td>
<td>Field notes – 11/22; 12/13; 12/14</td>
</tr>
<tr>
<td>Remind students of the purposes of discussion</td>
<td>Transcripts (pre-discussions)</td>
</tr>
<tr>
<td>Remind students how to talk in a discussion (i.e., ground rules, manners)</td>
<td>Transcripts (pre-discussions); Debrief sessions; Field notes – 10/5; 10/12; 10/25; 10/26; 10/17; 11/22; 12/14; 1/10; 2/15; 3/14</td>
</tr>
<tr>
<td>“Coach” how to talk in a discussion</td>
<td>Field notes – 10/5; 10/12; 10/25; 10/26; 10/17; 11/22; 12/14; 1/10; 2/15; 3/14</td>
</tr>
<tr>
<td>Review/practice ground rules</td>
<td>Transcripts (pre-discussions)</td>
</tr>
<tr>
<td>Set and share goals for discussion</td>
<td>Field notes – 10/17; 11/15; 12/2; 12/14; 3/14</td>
</tr>
<tr>
<td>Ask questions</td>
<td>Transcripts</td>
</tr>
<tr>
<td>Fishbowl activities</td>
<td>Field notes - 1/17</td>
</tr>
<tr>
<td>Play cooperative games to create comfort</td>
<td>Field notes - 2/8</td>
</tr>
<tr>
<td>Meta-discourse</td>
<td>Field notes – 1/11; 3/14; Transcripts (coded)</td>
</tr>
</tbody>
</table>