

Abstract

The purpose of this study was to investigate teacher talk during elementary reading instruction. The study was designed to gain insight into existing discourse patterns and to understand how change in these patterns might be facilitated. The design of the study evolved after a review of existing literature on the topic of teacher talk indicated a lack of widespread, intentional focus on classroom discourse and its potential impact on student learning.

Qualitative methods were used to capture the language used by third-grade teachers during read aloud instruction. Data sources included audio recordings of lessons and teacher interviews. These methods were used to identify common communication patterns in the participating classrooms. After the initial analysis of discourse, the two most commonly used types of teacher talk, questioning and feedback, were investigated with more depth. The goal was to determine not only the types of questioning and feedback used by teachers but also the purpose of these two types of discourse.

Data were analyzed using a sociocultural lens based on the work of Vygotsky. The study was built upon theoretical and empirical evidence that effective teacher talk promotes student learning. The participating teachers were involved in data analysis as they reviewed transcripts of the read aloud instruction and responded to questions related to their use of discourse in the lessons. Results from the study highlight the need for an intentional focus on the discourse used by classroom teachers and provide insight into social and cultural factors that inhibit productive discourse.

Student learning is the primary purpose of schooling, and the teacher's role is to create an environment that maximizes student learning. A component of that critical learning environment is the verbal interaction, or discourse, that occurs within the social and cultural context of the classroom. The discourse facilitated by

the teacher, often referred to as teacher talk, is the focus of this investigation.

Vygotsky (1986) recognized the importance of social and cultural contexts to learning, and his theory of cognitive development, now known as sociocultural theory, emphasized the interdependence of social and individual processes. He recognized a number of internal developmental processes which operate only when the child is interacting with people in his environment. One of these processes, internalization, occurs as social activities evolve into internal mental activities. The Russian psychologist used the example of problem solving in children to illustrate this developmental process. When children find themselves unable to solve a problem, they routinely turn to an adult and verbally describe the situation. As they develop, children replace socialized speech with egocentric speech as language becomes an intrapersonal function in addition to its interpersonal use. He believed that only when speech became internalized did it begin to organize the child's thought as an internal mental function.

Vygotsky (1978) used the term "meaning-making" to describe the process of linking new learning with what is already known. He theorized that meaning-making is dependent upon utterances. The purpose of these utterances is joint meaning-making as one makes meaning for oneself and extends one's own understanding while producing meaning for others. He concluded that the child develops into himself based on what he produces for others (Wells, 1999).

Vygotsky's theory (1978) provided a firm theoretical basis for learning and development that is of central importance to education. He agreed with controversial thinkers of his time period that individual developmental change was not simply biological but also rooted in society and culture. His work expanded on writings of his contemporary psychologists who were beginning to recognize the importance of the interaction of humans with their environment. He recognized the important distinction between animals and humans: animals react to their environment while humans have the capacity to alter the environment for their own purposes (Schunk, 2008).

Vygotsky (1978) suggested that the use of sign systems (language, writing, number systems) was unique to humans, evolved as a culture developed, and led to behavioral changes and cognitive development. Despite his interest in language as one of these sign systems, Vygotsky's writings lacked specific guidance on the types of language that would best facilitate the learning process in the classroom (Wells, 1999).

Despite this apparent gap between theory and practice, educators who support social learning theories believe that knowledge and practical application of Vygotsky's theory will allow teachers to maximize student learning. Vygotsky recognized the crucial role that expert members of the culture (such as parents or teachers) play in providing guidance and assistance to learners. However, he cautioned against too much guidance and assistance as the goal should be that children will become increasingly competent and autonomous participants in learning activities (Wells, 1999). Vygotsky's sociocultural theory is based on the belief that 'good learning' occurs within a zone of proximal development (ZPD), which is just beyond what the child can do independently, or in advance of their development (Vygotsky, 1978).

Researchers in England developed a teaching approach called Thinking Together, with the goal of putting "a sociocultural theory of education into practice" (Mercer & Littleton, 2007, p. 69). Their approach places a special emphasis on the teacher as a guide and model for language use. Teachers encourage students to give reasons, seek clarification, ask questions, and listen to each other's ideas. The results of a multiyear study indicate that the Thinking Together program had a positive impact on children's collective problem-solving as well as their individual reasoning capabilities. This provides evidence to support Vygotsky's (1978) theory that social interactions begin on an interpsychological plane and influence individual thinking or the intrapsychological plane. The researchers concluded that the quality of dialogue between teachers and learners and among learners has a potentially powerful impact on learning (Mercer & Littleton, 2007).

Numerous researchers have called attention to the value of talk and social learning within the classroom setting (Cazden, 2001; Skidmore, Perez-Parent, & Arnfield, 2003; Wells & Arauz, 2006). When evaluating characteristics of effective teachers, Flynn (2007) concluded that teacher behavior, teacher-subject knowledge, and teacher-pupil interaction had more to do with successes than nationally prescribed objectives. The author asserted that teacher-pupil interaction, which included high-quality questioning and conversations designed to meet the needs of the group and individuals, appeared to be a key feature of the success of teachers' lessons.

The question-answer relationship (QAR) strategy has been implemented during reading comprehension instruction to facilitate meaningful conversations about text (Raphael, 1982). It is a strategy designed to "provide a common way of thinking about and talking about sources of information for answering questions"

(Raphael, Highfield, & Au, 2006, p. 18). The language used with this strategy teaches students that answers can be found in the text or in background knowledge and experiences. By using the QAR strategy, students are taught to make decisions about where the answer to a question would be found. Questions that are in the book are labeled either Right There or Think and Search, while those which require students to use background knowledge to answer are called Author and Me or On my Own (Raphael, Highfield, & Au, 2006).

Statement of Problem

Despite theoretical and empirical evidence which points to the potential impact of effective teacher talk on student learning, findings from research have not been translated into common teaching practice. Studies have determined that classroom discourse lacks evidence of effective strategies illuminated in research. Instead, researchers in two studies found similar results: classroom discourse is typically teacher centered, interactions follow traditional initiate-response-evaluate (IRE) patterns, and questions are recall based, or those which elicit a single, correct answer (Myhill, 2006; Skidmore, Perez-Parent, & Arnfield, 2003).

Purpose of the Study

The purpose of this study was to examine discourse, primarily in the form of teacher talk, as an instructional practice in elementary classrooms. The teacher talk that occurred during reading instruction in separate classrooms was examined generally and then more specifically. Closer examination focused on the types of questions asked by teachers during read aloud and the feedback that teachers gave to students' responses. Finally, the study gave teachers an opportunity to critically examine and reflect upon their existing discourse practices as they reviewed transcripts of their teacher talk.

Four research questions, related to questioning and feedback guided the study. The fourth research question from the larger study will be highlighted in this article. The question was: To what extent do teachers' perceptions concerning the use of questioning and feedback during reading instruction align with actual practice? This question was chosen because it combines data from each of the preceding research questions in order to compare teachers' perceptions concerning questioning and feedback with actual practice.

Method

Participants

The three participating teachers are third grade teachers at a K-5 elementary school in rural north Georgia. The participants were selected based

on convenience. The school has a population of approximately 550 students. The school is classified as a Title 1 school based on a lower socioeconomic background of more than 50% of the students. The student population is mostly Caucasian, with about 15% of the students classified as Hispanic. At the time of this study, the school was in the final year of participation in the federally funded Reading First grant.

Each of the participating teachers was assigned a pseudonym to protect their anonymity throughout the study. The pseudonyms used for the study were Beth, Susie, and Ginger. Each of the participating teachers had teaching experience in other grade levels, but they were all new to the third grade for the 2009–2010 school year. These teachers were intentionally moved to third grade by the principal at the beginning of the school year, which suggests that she is confident in their teaching ability and competence because of the importance of success for students in third grade. Third grade is a year of high-stakes testing because third graders who do not pass the reading portion of the state-mandated test are not supposed to be promoted to fourth grade.

Data Collection

Teacher interviews and audio recordings of instruction were the two data sources for this study. An interview was conducted with each teacher prior to audiotaping in each classroom. Teachers were asked general questions related to the use of questioning and feedback during read aloud. They were also asked to explain how teacher talk during read aloud affects student comprehension and what variables impact the effectiveness of teacher talk. Questions for this interview were based on the research questions for this study and were designed with the goal of identifying teachers' beliefs about these topics. The questions were somewhat predictive in nature as they allowed teachers to make statements about the topics before being recorded or reviewing any transcript data. Each interview was audiotaped for transcription and analysis.

Questions Before Recording

- 1) How do you decide what kinds of questions to ask during a read aloud?
- 2) How do you decide what kinds of feedback to give to student responses during a read aloud?
- 3) How does your teacher talk during affect reading comprehension?
- 4) What are some factors that impact your teacher talk during read aloud?

Each of the participating teachers was audiotaped using a voice recorder during read aloud instruction.

For three consecutive weeks, each teacher was audiotaped once each week. The third-grade teachers were all required to do with their homeroom class daily. Homeroom classes were heterogeneously grouped, so during the read aloud time, each class contained students with a variety of reading abilities. Reading teachers chose a book to read aloud to students, often related to grade level science or social studies standards, and they prepared comprehension questions in advance to ask students before, during, and after the reading of text. The literacy coach provided reading teachers with guidelines to follow when developing comprehension questions. These guidelines included a list of comprehension strategies and a schedule for teaching specific strategies.

After the three weeks of audiotaping, transcripts were created from each read aloud session. Teachers were given a copy of the transcripts and allowed some time to read and reflect upon the content of the transcripts. The teachers were then interviewed using questions that were related specifically to the transcripts and based on the research questions. The questions for this interview focused on the actual use of questioning and feedback during the read aloud time. These interviews were recorded for transcription and analysis.

Questions While Reviewing Each Transcript

- 1) How did your teacher talk affect student comprehension during the read aloud?
- 2) What was your purpose for questioning during the read aloud?
- 3) What types of questions did you use during the read aloud? (higher level/recall)
- 4) What was the purpose of the feedback you gave to students during the read aloud?

Two weeks later, the researcher interviewed each teacher again using culminating questions based on the research questions. Questions for this interview were created with the goal of allowing teachers to reflect on their actual practice. The questions were also designed to address differences between beliefs and practices that emerged when prior interview responses were compared to the read aloud transcripts. The qualitative nature of this research permitted the adjustment of the interview questions as the study progressed. The questions were refined slightly based on patterns and questions that emerged during data collection. These final interviews were also recorded for transcription and analysis.

Final Questions

- 1) How do you decide what kinds of questions to ask during a read aloud?
- 2) Do you normally have a "correct answer" in mind when you ask a question?

- 3) How do you decide what kinds of feedback to give to student responses during a read aloud?
- 4) How does your teacher talk during read aloud affect reading comprehension?
- 5) What are some factors that impact your teacher talk during read aloud?
- 6) Are you generally satisfied with your teacher talk during read aloud? If not, what would you change if no limiting factors existed?

To compare teachers' perceptions regarding teacher talk during read aloud instruction with actual practice, frequency tables that were created after coding of transcripts were compared to interview data. Teachers were asked during each of the three interviews to reflect upon their existing and future practices as they identified areas for improvement. Though this study was not designed to facilitate change among the participating teachers, this type of reflection upon effectiveness is critical to improved teaching behaviors (Topping & Ferguson, 2005). Allowing teachers to compare their thoughts about the subject of teacher talk with their actual practice promotes awareness of effective and less than effective teaching practices.

Results and Analysis

The research question which guided the study was as follows: To what extent do teachers' perceptions concerning the use of questioning and feedback during reading instruction align with actual practice? To answer this question, transcript data was compared to teachers' interview responses.

Analysis of Teacher Questioning

Transcript data revealed that assessment was the most commonly used purpose for questioning. An example of this frequent pattern of questioning occurred when Susie was introducing a book about Eleanor Roosevelt to her students. She used questions and feedback to determine if students could name text features which are often found in nonfiction text. This was an assessment of prior learning:

Susie: What kind of things might we see in a

nonfiction book?

Student: The headings.

Susie: Headings, good, what else?

Student: Captions.

Susie: Captions, good, what else?

Student: Subheadings. Susie: Subheadings. Student: Graphs.

Susie: Yes, graphs.

(Students continue naming text features.)

Susie: Yes, all those things that we've talked about all year in nonfiction we might find in this book about Eleanor Roosevelt, okay?

The frequency of assessment-type questions in the transcripts supports what the teachers said in interviews about knowing correct answers in advance and guiding students toward those correct answers. The teachers planned questions that typically had a single correct answer and they frequently assessed the students to be sure that they also knew the correct answer. This practice led to a predictable, teacher-dominated communication pattern which was especially noticeable when listening to the recorded. The teachers in this study did not seem willing to sacrifice control of conversations; they had an apparent recognition that they wouldn't always know where the conversation might lead if controlled by students.

In another study, teacher and researchers who were intentionally attempting to infuse more student initiated dialogue into reading instruction described how they wrestled with decisions about when to enter conversations to explicitly teach reading strategies or interject accepted interpretations of text (Aukerman, Belfatti, & Santori, 2008). They worried not only about what would be said but also about what would be learned. This struggle was based, in part, on the recognition that in an educational system driven by assessment and accountability, students will at some point be expected to know the one correct answer and that answer may or may not emerge during a student-led discussion.

Further analysis of the teachers' perceptions about the purpose of questioning compared with actual practice suggests that teachers may be unaware of their multiple purposes for questioning. Each of the teachers described her purpose for questioning very specifically: to teach students the QAR strategy. As predicted, the transcripts did contain multiple references to the QAR strategy. Students in all three classes were regularly asked which strategy ("right there," "think and search," "author and me," or "on my own") would help them find the answer and then they were asked to explain why they chose that answer. However, the data suggests that the primary purpose of questioning for all teachers was assessment. This included assessing student knowledge of the QAR strategy but also the assessment of content knowledge, vocabulary, comprehension of text, and text features. An example of this pattern of assessment from Ginger's transcript:

Ginger: There's that vocabulary word-diligence, what does that mean?

Student: Working hard.

Ginger: Yes, what was the time called?

Student: The Great Depression.

Ginger: Good, the great depression (reading from text) Okay, we talked about that word, migrant workers, it means people who move from place to place in search of work, there's a picture there of a young migrant child and they work just as hard and often times for as many hours as the adults do and we read that Cesar even a lot of times didn't attend school, he went to work to earn money for his family. And if you'll look at the picture here the caption shows us a family picking grapes in California. Okay, I want you to turn around and get with your group to discuss what were some of the working conditions for these migrant farm workers?

Students: (Discussing with group)

Teacher: Ok, what type of question? Are you having to use the book at all or is it completely in your head? I see three groups holding up think and search, that is correct, you had to use the book because the book, the author, gave us clues about what the migrant workers were dealing with. Now, was the answer in just one sentence or on just one page?

Student: No

Teacher: No, and that is why it is a think and search question.

Another inconsistency related to the use of questions during was noted when the transcript data and interview data were compared based on the nature of questioning by teachers. Each of the teachers described her questioning as somewhat balanced. Beth noted, "One read aloud which was fictional had more recall-type questions, but there was a good mix of recall and higher level questions on the other two read aloud lessons which were based on nonfiction text." Susie stated that she "tried to incorporate all types of questions, especially higher-order thinking questions," and she also described the types of questions that she used as "recall questions in which students had to think and search for the answers and inferential questions." Ginger also felt like she "had a good mix of questions, with QAR, the 'right there' and 'think and search' are more recall where 'author and me' and 'on my own' are generally higher level." The teachers recognized that effective questioning is balanced (Cruickshank, Bainer, & Metcalf, 1999; Topping & Ferguson, 2005). Despite this recognition, the majority of questions used by all teachers would be considered lower level based on the Cognitive Process Dimension (Anderson, et al, 2001, p. 67-68). Most of the time, students were asked questions which required them to remember or understand, which are considered the lowest two levels of the cognitive model based on the

cognitive processes required to answer those types

of questions. An analysis of the transcripts revealed that Beth most often used remembering questions that required students to recall or repeat facts from text or previous instruction. This type of question was used when she was reviewing vocabulary words: "Okay, what's knowledge?" or "What does text mean?" These questions required students to recall definitions they had previously learned, so they would be considered lower level based on the cognitive process involved in answering. These questions promote retention of facts but not transfer of knowledge.

On the other hand, Susie and Ginger used more understanding questions which required students to classify or explain answers. These questions were often used when students were asked to explain the type of question (based on QAR strategy), such as when Susie asked, "Why was this a 'think and search' [question]?" The teachers used a limited amount of applying and analyzing questions during the. Ginger asked her students to analyze a character's feelings when she said, "How do you think he is feeling now, and how have his feelings changed?" This question is considered higher level and an example of a question that promotes meaningful learning. Susie was the only teacher who used a question that required students to evaluate when they were giving their opinion about text.

Analysis of Teacher Feedback

When asked about their purpose for giving feedback to student responses the teachers indicated that they normally used feedback to guide students to the correct answer. In fact, based on the feedback given by teachers in the transcripts, this was often unnecessary because students had already given a correct answer. This is apparent because teachers responded with acknowledging and accepting efforts or praising and accepting efforts about 75% of the time. These types of responses indicate that the students gave a correct answer. In contrast, teachers clarified or corrected and encouraged much less often, about 25% of the time, which indicates that students gave incorrect, incomplete, or hesitant responses far less frequently.

The limited amount of correction and encouragement would suggest that students spent little time working in what Vygotsky (1978) called their zone of proximal development (ZPD). According to Vygostky, to promote cognitive development, students should be performing tasks, with the help of a teacher, which they could not perform independently because of the difficulty level (Schunk, 2008). In this study, teachers seem to be performing tasks with or for students that the students could perform independently without teacher assistance. Even the students seem to recognize that they need more independent practice with text. An example of this is found in Beth's transcript:

Beth: What are some text features that we might see in a nonfiction book?

Beth: Okay, let's open up the book and do a picture walk. First of all, on the first page we do have a table of contents. How many chapters do we have in this book?

Student: five

Beth: Where could we go in this book if we don't

remember what a word means?

Student: glossary

Beth: Okay, do we have a glossary?

Student: Yes

Beth: (continues reviewing text features...maps,

photographs, etc.)

Student: Are we going to read?
Beth: Yes, we're going to read

Student: Can we read by ourselves?

Beth: We will start reading (teacher reads from text)

This dialogue illustrates the lack of challenge for students as they are not required to think about answers to questions. As Vygotsky explained it, "the only good learning" is that which is in advance of development (1978, p. 89).

Teachers in this study used vague terms to describe the types of feedback they used. They described their feedback as "encouraging" or "not negative." However, an analysis of the kinds of feedback used determined that the majority of feedback was evaluative in nature. Teachers used feedback to evaluate student responses, and they maintained strict control of the conversation, usually following the IRE pattern of communication. This common pattern consisted of the teacher initiating a conversation (often with a question), the student responding, and the teacher evaluating the student's response. Here are samples of this frequent discourse pattern:

Beth: By looking at this book, who can tell me—is it going to be fiction or nonfiction? (Initiate)

Student: Nonfiction (Respond)

Beth: Nonfiction is correct, how do you know—look at the clues on the front of the book. (Evaluate/Initiate)

Student: A photo. (Respond)

Beth: A photo, exactly, it has real pictures. (Evaluate)

Susie: Okay, Emily, What did Eleanor do to help Franklin win the presidency? Tell me the type of question that is. (Initiate)

Student: Think and search (Respond)

Susie: Good, it's a think and search, now let's answer that, what did she do? (Evaluate/Initiate)

Student: She walked through the crowds and then that showed respect from her. (Respond)

Susie: Okay, she roamed through the crowds to talk to people because he couldn't. (Evaluate)

This pattern is consistent with what Mehan called the "teacher's agenda" (1978). It is a stance adopted by teachers for the purpose of achieving educational objectives while maintaining social control (Mehan, 1979). Throughout this study, teachers fulfilled their responsibility of evaluating the performance of students. Teachers in this study seemed to be aware of the time involved in mastering all of the standards and their obligation to evaluate student performance and then "move on" to new concepts.

The alignment between perceptions and actual practice was also explored during the interviews. These interviews allowed teachers to explain the social and cultural context which encompassed the verbal interactions. During the interview conducted while teachers reviewed transcripts and in the final interview, teachers were asked what changes (if any) they would make in the teacher talk that might improve comprehension. Teachers were also asked what factors might prevent those changes from being made.

Beth felt like she "should have given the students more opportunities to respond to what they had heard." She said, "I should have used more open-ended questions related to why they chose a specific QAR strategy." She noticed what was evident in the transcripts; she had used 106 assessment type questions and only 18 open-ended questions. Beth added that being "assigned a specific comprehension strategy... we must focus on that strategy" limited her ability to change her teacher talk.

Susie mentioned that she would like to be able to ask questions that "involved multiple strategies" when practicing reading comprehension. She agreed with Beth that being required to "stick to a certain comprehension strategy limits the type of questioning a teacher can do." Though the participating school discourages multiple strategy reading comprehension instruction, a well-known national reading document published by the National Institute of Child Health and Human Development states that multiple strategy instruction seems to be the most effective way to teach cognitive strategies (2000). In addition, the report concluded that teaching a variety of strategies can result in increased learning, increased memory and understanding of new text material, and better reading comprehension.

Susie also noted that time was a limiting factor in improving reading comprehension. She "was surprised at how often I mentioned that we were in a hurry, I believe that might have hindered comprehension." Susie recognized an example of this hurried discussion in her transcript. She posed a genuine information question before reading that was intended to build background knowledge as students shared experiences from their own lives. Susie asked the question and allowed students to discuss their answers with their peers, but when it came time to share their thoughts with the whole group, the discussion was cut short by the teacher.

Susie: Okay, listen for this question. Have you ever been somewhere and been homesick and wished you were at home? Talk to your partners about what kind of question that is, and then answer that question with your group.

(Students talking in groups)

Susie: Okay, guys, my turn. Emily, what kind of question is that?

Student: On my own.

Susie: Okay, why is it 'on my own'?

Student: Because it's not about the book.

Susie: Excellent. I'm not asking you about the book. It's not really about the book although this person is in the same predicament. I'm asking about you.

Susie: Cody, tell me about a time, real quick.

Student: Well, my maw-maw and paw-paw were taking me and my sister to this Christmas party, and I wanted to be at home with my parents.

Susie: Okay, you missed your parents; homesick is a bad feeling. Okay, hands down. We don't have time for everybody's story.

When asked about changes that she would like to make, Ginger expressed a desire to do more "handson and technology activities as follow-ups to my (especially for science and social studies themes)." This statement suggested that Ginger has a desire to create a more social, less teacher-directed climate during the read aloud time. She also believed that time was a limiting factor and "guidelines and expectations [as a result] of the Reading First grant" inhibited changes.

Each of the teachers mentioned challenges to effective teacher talk related to the school culture. It seemed that teachers control interactions in the classroom setting while administrators and the literacy coach exhibit control over instructional strategies (such as questioning and feedback) used by teachers. It is evident from teachers' responses that the culture of

the school influences student learning.

Teachers were also asked during the culminating interview about their "general level of satisfaction" with the teacher talk used during read aloud. This question was added to the final interview after the transcripts were created because the researcher wanted to determine if teachers were satisfied with the lessons after reviewing the transcripts or if they had specific changes in mind when they had a chance to review the lessons. Despite statements by each of the teachers which indicated a sense of resistance to "being told what to do" during, each of the participating teachers expressed an overall satisfaction with the read aloud lessons.

Though Susie expressed an overall satisfaction with the teacher talk used during her, she did mention two possible changes that she felt could improve her lessons. She was concerned that she "rushed the students...I was surprised at how often I would say 'Okay, quickly' or 'I need an answer right now." Another area of concern was the focus on a single comprehension strategy. She said, "It would be wonderful to be able to plan a read aloud and then ask whatever we thought was appropriate for the particular book. I would like to be able to do that."

When Ginger was asked the same question about her level of satisfaction and the changes that could improve her lessons, she also described herself as "overall pretty satisfied with it." She did point out that she felt "somewhat scripted...with [questions] prepared [in advance for]." However, she admitted that she doesn't "always stick to that." She explained further:

I do if I think about a question when I'm reading; I do ask it or talk about it. If a student asks me something in the middle of reading I try not to ignore that even though that's not something I originally planned to talk about.

Implications for Action

This investigation of teacher talk was designed to gain greater insight into existing discourse patterns and to attempt to understand how change in these patterns can be facilitated. The focus of this study was the discourse used by classroom teachers. However, the results of the investigation identified another potential influence on teacher talk in classrooms: those outside the classroom such as administrators, professional development providers, and policy makers. More productive discourse will be the result of changes facilitated by both of these groups.

Implications for Classroom Teachers

Teacher talk is a potentially powerful instructional tool.

To take advantage of this instructional tool, teachers must become aware of their current practices, intentionally use questions and feedback for multiple purposes, and strive to move students more quickly to a level of independent learning by actively involving them during instruction.

Though participation in this study was somewhat inconvenient for busy classroom teachers, they seemed to appreciate the opportunity to review the transcripts from their recorded instruction. Each teacher recognized areas for potential improvement. These areas of improvement would not have been uncovered without participation in this study. To disrupt comfortable habits, classroom discourse must become a deliberate object of study (Cullican, 2007). Recent studies have concluded that opportunities to analyze and reflect upon classroom discourse can lead to greater understanding by teachers of the impact discourse has on student learning (Reznitskaya, 2012; Thwaite & Rivalland, 2009).

Questioning of students should continue to be a common strategy used during reading comprehension instruction. Teacher's questioning as an ongoing evaluation tool fulfills a major part of the teacher's responsibility in the classroom. However, adjustments to the types and purposes of questions are necessary to maximize student learning. The results of this study highlight a noticeable lack of balance in the types and purposes of questioning used by teachers. Feedback should also be used for multiple purposes, such as building upon student responses or inquiring further, not simply to evaluate student responses. According to Vygotzky, every function in the child's development occurs twice; first, on the social level, and later, on the individual level (1978). Guided practice using questions and feedback which invoke higher order thinking skills will allow a child to develop cognitive processes first, between people (interpsychological) and then apply those processes as an independent task inside the child (intrapsychological). Changes in the types of statewide end of year assessments support this needed shift in focus toward more cognitively challenging tasks for students. According to the National PTA, states (including Georgia) are moving towards assessments in which "students will be asked not only what the answer is to a question, but why-i.e. how they know or what evidence supports their answer." (National PTA, 2013)

Teachers need to move students more quickly to the independent stage during reading comprehension instruction. This need became apparent during the analysis of explicit language used during instruction involving the QAR strategy. Teachers focused, for at least three weeks, on teaching, modeling, and

practicing a strategy that students had been using for over a year. Although the authors of this strategy endorse a "gradual release of responsibility" when using the strategy (Raphael, Highfield, & Au, 2006, p. 37), the teachers appeared to be reluctant to move toward more independent practice for students. This independent practice seemed appropriate and necessary based on the level of student success indicated by the teachers' frequent use of affirming and praising feedback during the strategy instruction. Vygotsky (1978) recognized that children are capable of doing much more in "collective activity or under the guidance of adults" (p. 88) and warned that "learning which is oriented toward developmental levels that have already been reached is ineffective" (p. 89).

Implications for Administrators, Professional Development Providers, and Policy Makers

Some of the necessary changes to teacher talk are beyond the control of classroom teachers. Those who make decisions about time allocated for planning and instruction and those who develop timelines and curriculum maps must allow and support an intentional focus on teacher talk as a powerful instructional tool. Teachers need to be given time to focus on improving instructional practices related to teacher talk, and they must have professional development opportunities that link the latest strategy for reading instruction to educational theory. In addition, outside observers must recognize the benefits of social learning in classrooms.

The results of this investigation of teacher talk indicate a need for teachers to have time to record themselves and then reflect on their practice. A researcher who has studied classroom discourse around the world concluded that regular monitoring of classroom discourse and self-evaluation as part of in-service training was necessary for teachers (Wells & Arauz, 2006). Teachers also need to be given opportunities to reflect on their beliefs about teaching practice. This is the key to connecting theory and practice (Hardman, 2008).

References to educational theory as the basis for teaching practices were noticeably absent from teachers' interview responses. Professional development providers need to recognize that teacher training for new strategies, such as QAR, needs to be more detailed. This includes any learning theory the strategy is based upon. Teachers in this study appeared to be implementing strategies that they were not well informed about. Without a thorough explanation of the strategy, teachers may not be implementing it properly. If teachers are unfamiliar with why a specific strategy is beneficial, they may become resistant to implementation. This could explain teachers' statements regarding the timetable

for teaching specific comprehension strategies at the participating school. Teachers explained unenthusiastically, "Basically, we just do what we're told to do." They reiterated, "A comprehension strategy is chosen for us and we must focus on that strategy."

Those who influence classrooms from the outside must recognize and discourage questioning and feedback practices which promote short-term memorization rather than meaningful learning. In addition, those who are observing classrooms need to look for and encourage a greater balance between teacher and student directed activity during reading instruction. Vygotsky's theory (1986) described the progression to reflection and logical reasoning at the intramental level as a result of discussion, interaction, and arguments at the intermental level. The apparent absence of social interaction at the intermental level could be affecting learning at the intramental level. Vygotsky described social interactions as the foundation of learning, "social relations or relations among people genetically underlie all higher functions and their relationships" (Vygotsky, 1981, p. 163). Those who influence classrooms from the outside need to encourage social interaction during reading instruction; this can strengthen the foundation for meaningful learning.

Concluding Remarks

This investigation of teacher talk revealed discourse patterns which are consistent with those commonly described throughout educational research on the topic. The researchers in this study identified a gap in existing research, a frequent absence of the teacher's voice in studies of classroom discourse. For that reason, the teacher's voice was intentionally included in this study. Further exploration into external influences on the discourse used by classroom teachers is necessary to gain greater insight into the problem of ineffective discourse practices and possible solutions.

To maximize student learning, the discourse that occurs within the social and cultural context of the classroom must be targeted for examination and improvement. This type of improvement is not simple. It requires teachers to "partially relinquish control of the flow of discussion, give up the habit of evaluating each student contribution, and allow students to initiate when they have something that they consider relevant to contribute [to conversations]" (Wells, 2007, p. 264). Despite the challenges, improved classroom discourse is possible when the topic becomes an intentional focus of instructional practice and teachers take advantage of the social aspects of learning.

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