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Text Difficulty and Bilingual Student Interactions in Informational Book Discussions

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Many reading curriculum publishers include libraries of leveled books to support small-group reading in elementary schools. Teachers commonly have sets of books for each week in the curriculum: some books below grade level, some books on grade level, and some above. With so many resources, teachers can match books to readers. But, what exactly makes a match?

Traditionally, teachers pair students with books at their instructional level or books they can decode fluently while comprehending most of the ideas (Betts, 1946; Fountas & Pinnell, 1996). This common practice (Ford & Opitz, 2008) allows teachers to move young readers up a gradient of complexity in response to observations about their literacy development (Clay, 2001). Using books matched to students' levels helps students avoid struggles with texts that do not facilitate “smooth, proficient processing—no matter how expert the teaching” (Fountas & Pinnell, 2012, p. 270). Many researchers advocate for developing readers to spend lots of time reading texts they can tackle successfully (Allington, 2014; Menon & Hiebert, 2011).

However, new standards have raised the levels of text difficulty that young readers experience in schools beginning in second grade (Council of Chief State School Officers, 2010). Related to this change, the instructional practice of close reading of complex texts has made its way into elementary classrooms (Fisher & Frey, 2012). Furthermore, students often express interest in texts beyond their identified “levels” and extend great collaborative efforts to learn from such texts (Hoffman, 2017). Teachers may also find that harder texts provide more support for young readers to follow a story (Clay, 2001), learn new vocabulary (O'Connor et al., 2002), or develop their second language (Wong Fillmore, 2014). Thus, determining the “right” level for a reader is not straightforward.

Small groups provide an interesting site to consider text difficulty. Groups provide supports not present when students read on their own: a teacher's scaffolding and instruction and the collaborative space of a group conversation. Stahl and Heubach (2005) studied a literacy program in which students made impressive gains while reading texts at their frustration (rather than instructional or independent) levels. They concluded that this success occurred despite the difficulty because of the high degree of scaffolding. They suggested that “the more support given, the lower the accuracy level needed for a child to benefit

from instruction” (p. 55). Out of all times in the school day, the small reading group may provide some of the most individualized support many students receive. It is worth investigating how students interact around difficult texts in this supportive setting.

Most research that explores text difficulty evaluates proficiency-related outcomes, usually fluency and sometimes comprehension, after students have read texts of different difficulty levels. These studies often do not find a difference in comprehension but sometimes find that students improve their fluency more when they read less difficult texts (Brown, Mohr, Wilcox, & Barrett, 2017; Morgan, Wilcox, & Eldredge, 2000; O’Connor et al., 2002; O’Connor, Swanson, & Geraghty, 2010). My sociocultural orientation to reading and research led me to undertake a study of small-group reading discussions of matched and difficult texts that prioritized different outcomes. While I did collect traditional proficiency-based data (Kelly, 2019a; Kelly, 2019b), I also recorded and analyzed the conversations students had about different levels of texts in order to shed light on their interactions. My research question addressed bilingual third graders talking about matched and difficult texts in small groups. I wanted to know: How do students interact when discussing different levels of text? The experiences of bilingual students matter particularly in reading research because large-scale policies—such as standards mandating harder materials in earlier grades—are often implemented in the United States without particular attention to the experiences and outcomes of bilingual students, who make up a growing proportion of students (Ryan, 2013).

Theoretical Framework

Sociocultural theories emphasize that learning occurs as people become enculturated into the practices of communities (Lave & Wenger, 1991). Less experienced people learn from those more experienced and, with support, begin to approximate the practices of experts (Vygotsky, 1978). Bundick, Quaglia, Corso, and Haywood (2014) suggested the importance of a sociocultural approach to describe “the complexities of classroom contexts” (p. 6) as well as “the interaction of students and their environments” (p. 7).

The zone of proximal development (ZPD) is a metaphorical social space in which children succeed at a task slightly beyond their developmental level because they receive support from a teacher or peer. The ZPD is not a theory of language learning or reading, but grows out of how sociocultural theory addresses human development in its social, cultural, and historical context. Vygotsky (1978) described the ZPD as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). He suggested the instructional importance of the ZPD, stating “what is in the ZPD today will be the actual developmental level tomorrow—that is, what a child can do with assistance today she will be able to do by herself tomorrow” (p. 87). Vygotsky believed that what children could do with support provided more important information about their mental development than what they could do alone. Cazden (1981) summarized the ZPD as “performance before competence” (p. 5), which highlights how in the ZPD a learner receives support to successfully perform a task and then applies that support to later perform the task independently.

The ZPD does not independently exist across contexts. It varies for each learner, and in any given context the participants jointly construct ZPDs through interaction (Wells, 1999). Social interactions form the crux of the ZPD. Considering the interactions between the students and the teacher allows researchers to understand the type of supports or scaffolds (Wood, Bruner, & Ross, 1976) that students take up and offer each other as they collaborate to comprehend texts of different difficulty levels.

Literature Review

Reading Levels

Tools like informal reading inventories (Nilsson, 2008), curriculum-based measures (Hosp, Hosp, & Howell, 2016), and computerized assessments (Renaissance Learning, 2015) assign reading levels to children. Quantitative tools analyze semantic or syntactic properties of texts to give reading levels to texts (Lennon & Burdick, 2004; Nelson, Perfetti, Liben, & Liben, 2012). Despite such tools, matching readers to texts remains complicated because multiple dimensions affect the complexity of a text for a particular student.

Different factors affect text complexity: qualitative factors, quantitative factors, and reader- and task-related factors. Qualitative factors include levels of meaning, text structure, language use, and knowledge demands. The Common Core State Standards, which call for complex texts, still urge that “multiple quantitative measures be used whenever possible and that their results be confirmed or overruled by a qualitative analysis of the text” (Council of Chief State School Officers, 2010, p. 8). This suggestion makes sense given the problematic nature of readability formulas that often fail to capture certain linguistic, cognitive, and discourse-level features (Foorman, 2009). However, the standards do provide “text complexity grade bands and associated Lexile ranges” (Appendix A, p. 8), and qualitative evaluations of text complexity require substantial linguistic knowledge and professional teaching experience. Thus, many teachers will rely on quantitative measures for initial judgments of text complexity, and most research has conceptualized text complexity by quantitative measures. In this study, I did the same, but I use the term “text difficulty” to acknowledge that by using readability scales for text selection, I did not capture the full range of what makes a text complex.

Debate About Text Difficulty

Some have suggested that offering students difficult texts provides motivation. Explaining that “grappling with rich, complex texts is an exciting, thought-expanding experience” (Brown & Kappes, 2012, p. 5), these authors suggested that challenging texts offer readers advanced concepts that lead to engaging discussions. Some researchers have suggested that difficult texts may emphasize challenge and avoid stagnation, and that perhaps the call for difficult texts is a “message long overdue” to correct the previous “intense concern about avoiding frustration” (Mesmer, 2015, p. 84).

Others have positioned access to challenging texts as an equity issue. The ancillary documents that accompany the Common Core State Standards (Coleman & Pimentel, 2012) suggest that it does not benefit learners who need additional support to not have access to the same grade-level text (and therefore content) as their peers.

Wong Fillmore (2014) suggested that students learning English particularly stand to benefit from more challenging texts. She explained that the texts offered to emerging bilingual students are often simplified and offer little example of the academic language and discourse that students need to master. She described ineffective practices that plague many programs for emerging bilingual students wherein “language required for advanced literacy and learning in school is treated as a prerequisite for working with complex and demanding curricula” (p. 627) rather than seen as a result of working with challenging curricula.

Glasswell and Ford (2010) explained that developing readers “can access grade-level appropriate material if we facilitate their interactions with it” (p. 57). They suggested instructional support that allows students

to work with grade-level content “is both necessary if we want to accelerate growth and desirable if we want [developing] readers to see themselves as competent and confident readers” (p. 57).

Yet, researchers have raised concerns that increasingly challenging texts may not be appropriate for elementary students learning to read. Difficult text may not provide an inviting introduction to reading for primary readers (Shanahan, 2011; Snow, 2013). Allington (2009) explained that for young readers to develop fluency, comprehension, and a large sight vocabulary, “a steady diet of high-accuracy reading is essential” (p. 49). After a survey of research on text difficulty, Allington, McCuiston, and Billen (2015) recommended that teachers continue to use texts that students can read with 95% accuracy or higher until more research about the impact of varying levels of text becomes available.

Classroom Talk, Teacher Support, and Text Difficulty

Educators and researchers who emphasize reading in social contexts have applied the ZPD to reading instruction. For example, Van den Branden (2000) offered fifth-grade students reading in a second language several levels of text difficulty and then gave time to discuss the difficult texts. Discussion allowed students to “look for the meaning of unfamiliar input collectively” (p. 437), leading to positive impacts on comprehension. In that study, students bridged the gaps through discussion with each other and the researcher, and the researcher found that this social interaction allowed children to support each other to higher levels of comprehension.

Clay and Cazden (1990) provided a Vygotskian analysis of Reading Recovery. They referred to teachers selecting texts “on an increasing gradient of difficulty” (p. 219), and they described the interaction between teacher and student. They explained that “the scaffold of teacher support continues, always at the cutting edge of the child’s competencies, in his or her continually changing zone of proximal development” (p. 219).

Finally, Miller (2003) analyzed open-forum literature discussions among secondary students to study how they facilitated learning in the ZPD. She found that in classrooms with teachers who supported the discussion, the social space allowed students to “think in increasingly complex ways about texts” (p. 312).

Such studies emphasize the important role of discussion in comprehending texts, and they show how teachers and students collaborate to create a ZPD to tackle texts more complex than what students might comprehend independently.

I could locate no studies that set out to examine student talk in small groups as a function of text difficulty. This study contributes to the existing literature by elucidating how six students interacted across several weeks of text-based discussion about books of different difficulty levels.

Methods

Six third-grade students who spoke Spanish and English participated in ten reading discussion groups about informational texts of different difficulty levels. I qualitatively analyzed the discussion to understand how they interacted.

Participants

A teacher recommended students to participate based on their current or former status as students learning English as a second language and based on district benchmark assessments that identified them as needing additional support to read at grade level.

Group 1 included Alyssa, Jack, and Rosa. Jack scored intermediate on the state's English assessment, and Alyssa and Rosa no longer received supplemental English support. Based on an informal reading inventory that I conducted, Group 1 read about a year below third-grade expectations.

Group 2 included Elise, Gabriela, and Sarah. All three students received supplemental English support, and they all talked regularly in small-group discussions. Based on the informal reading inventory, Group 2 read about a year and a half below third-grade expectations.

Text Matching

I administered the Fountas and Pinnell Benchmark Assessment (Pinnell & Fountas, 2010) to identify students' instructional reading levels. Based on the results, I separated students into homogenous groups (Groups 1 and 2). I located books at students' instructional levels (matched books) and books one year ahead of their instructional levels (difficult books) using Fountas and Pinnell's (1996) text gradient system. To keep genre and format consistent, I selected all informational picture books about science topics. The appendix (online) lists the books.

Small-Group Format

Each group met separately and had five conversations about matched books and five conversations about difficult books. I randomly interspersed matched and difficult books and did not say anything to students about the difficulty level of any of the books. Students met with me for thirty minutes on a daily basis in a quiet office in the school. The thirty minutes included a brief text introduction (2 minutes), a read-aloud from me to model fluency and jump start the session (5 minutes), time for silent reading and marking of interesting of passages (5 minutes), and then group discussion (~12 minutes). Students drove the discussion by sharing passages they had marked or related ideas and questions from reading the text.

Data Collection and Analysis

I video-recorded and transcribed each session. Transcriptions included all audible speech and gestures related to discussion such as pointing at a picture.

Based on understanding of engagement as students' social interaction and strategy use around texts in an effort to construct meaning (Guthrie & Anderson, 1999; Unrau & Quirk, 2014), I began with an a priori code *interaction for meaning*. (Due to space, this manuscript does not report findings related to strategy use.) I generated potential inductive subcodes based on prior research on children's literature discussions (Kelly & Moses, 2018): *ask*, *answer*, *clarify*, *agree*, *disagree*, *peer coach*, and *build on previous comments*. I refined these inductive codes based on the data through the constant comparative method (Corbin & Strauss, 2007; Saldaña, 2013). I kept the original subcodes, but I divided *answer* into *answer peer/self* and *answer teacher*, and I added *introduce new* for when students moved the discussion along to a new topic.

A second researcher reviewed 25% of the dataset and verified that I applied the codes consistently according to the codebook (Table 1).

After coding, I totaled the codes to identify differences in the number of times students interacted in certain ways with each level of book. I selected representative examples of discussion for further analysis to explain differences between matched and difficult text-based conversations.

Findings

I analyzed how students interacted with each other and me to understand how discussion dynamics changed with more difficult text. Students interacted in these ways: answering the teacher (me), building on previous ideas, asking questions, introducing new topics, answering their own and each other's questions, disagreeing and agreeing with each other, and providing peer coaching. While text difficulty did relate to how frequently students made each of these moves, students applied a few of them consistently. In all the groups, the most common move was to answer the teacher, and the least common move was to provide peer coaching. In most groups, asking questions and building on previous comments figured prominently, but students seldom agreed or disagreed with each other aloud.

Many interactions involved a student answering me. When students introduced what they wanted to talk about (often as a question), other students would take up the issue, and so asking questions, building on a previous topic, introducing new ideas, and answering peer/self all occurred frequently. Other than insisting on basic school norms of turn-taking and listening to other speakers, I did not teach or emphasize interaction strategies, which may explain why students infrequently agreed, disagreed, or provided peer-coaching.

Text difficulty affected the groups differently. Students agreed, disagreed, or provided peer-coaching evenly with matched and difficult texts. Every other interaction differed for both groups (but not always in the same way) according to text difficulty. Both groups had more instances of answering me and answering themselves with matched texts. However, Group 1 asked more questions with matched texts, and Group 2 asked more with difficult texts. Additionally, Group 1 introduced new ideas and built on each other's ideas more often with difficult texts, but Group 2 did the exact opposite by introducing and building ideas more with matched texts (Tables 2 and 3).

Diverging Patterns: Group 1 (Asking with Matched and Building/Introducing with Difficult)

Across the ten days, Group 1 asked over 20 more questions with matched texts than with difficult texts. In the interaction that follows, Jack and Alyssa engaged the matched book *Antarctica* through a rapid succession of questions. The page showed skuas (a predatory bird) raiding a penguin rookery for its eggs.

Alyssa: Those are a kind of birds? Are the eggs already big? Or, are they still squishy?

Researcher: When a bird lays an egg, does the egg get any bigger?

Jack: Same size.

Researcher: The egg stays the same size. What's getting bigger?

Alyssa: The baby.

Jack: Why does a bird eat another bird?

Alyssa: Penguins are birds?

Researcher: What makes them birds?

Alyssa: A chicken is a bird. They have wings. Feathers. Beaks.

Jack: How is its mouth that wide? (looking at picture of skua's open mouth)

Alyssa: When they're in the egg, do they already have fur?

Jack: No.

This discussion illustrates the ways that matched texts generated interaction around questions. Students rapidly asked questions and responded to each other and me as we engaged their wonderings.

When Group 1 read difficult texts, they asked fewer questions, but they more commonly introduced new ideas and built on them. When they had matched texts, they stayed on one topic for longer often asking many questions about it, and thus they introduced fewer ideas. In the transcript that follows, students discussed the difficult book *What If You Had Animal Hair?* Rosa introduced the idea about the Arctic fox having white hair in the winter, and students built up an idea about how the animal's hair changes with the seasons as they referred to the picture. It showed one fox, but half of the illustration showed its white hair against a winter landscape while the other half of its body showed its brown hair against a summer background.

Rosa: It says that an Arctic fox hair is snow white in the winter.

Researcher: What did you think about that?

Jack: That the hair from this side is brown, and (gesturing) that side is white.

Researcher: Why is that?

Alyssa: It's because she got the fur from this, and then she got her regular hair. No, it's because its fur . . .

Jack: It's because in the winter, Arctic foxes are white, and in the spring or summer, it's brown.

Researcher: How can you tell?

Jack: Cause right there (pointing to book), it has trees that have leaves, and the other one doesn't.

Researcher: What about the pictures of the fox on this page?

Alyssa: This one's white and black. And this one matches with that one. I was going to say because her hair changes every season.

This interaction exemplifies how students introduced and built up new ideas with difficult texts. In this discussion, the students did not ask any questions, but they elaborated their thinking before moving on to a different idea.

Why did Group 1 ask questions more with matched texts and introduce and build ideas more with difficult texts? These transcripts suggest that longer conversations on one topic, which happened more often with matched texts for Group 1, created more space for questions. Students in Group 1 asked questions as a way of having a conversation, not necessarily to clarify confusion. They asked conversational questions like "Is it bigger than this?" (while stretching out arms) or "Is this table wood?" (while reading *Acorn to Oak Tree*). In contrast, when Group 1 talked about difficult books, they introduced and built ideas quickly before moving to new ones; they did not often develop extended discourse from one idea, creating space to ask questions about it. The transcript above from *Animal Hair* is not long, but it is one of the longest instances in the data of the students interacting about the same idea from difficult texts.

Diverging Patterns: Group 2 (Asking with Difficult and Building and Introducing with Matched)

Group 2 defied the patterns established in Group 1. They asked questions more with difficult texts, and they introduced and built ideas more with matched texts. In contrast to Group 1, who asked questions to move the conversation along, Group 2 asked questions to clarify concepts they did not understand in difficult text. In the difficult book *What Do You Do When Something Wants to Eat You?*, they learned

about how the glass snake, when attacked by a predator, can release its tail to escape and later grow a new one. The students labored to wrap their minds around this concept and then to explore related issues.

Elise: How did it . . . Did they actually cut the tail?

Researcher: You might need to read that text to see.

Elise: So, it breaks in half?

Researcher: The tail breaks into . . .

Elise: “small . . .

Researcher: “small wriggling pieces.” What does wriggling mean?

Gabriela: It means like, broke in very, very little pieces.

Researcher: That’s what small means, but what does it mean that they’re wriggling?

Sarah: That they’re wriggling.

Gabriela: (gasp) It’s not dead.

Sarah: It’s dead?

Gabriela: No, it’s not dead. It just keeps going.

Researcher: So, some kind of creature is on its tail, and its tail, when that happens, is going to break. And, these pieces are going to do what?

(Elise flops her hand around on the table.)

Researcher: Flop around, right? What will happen to the animal that’s trying to kill it when it sees its tail doing that?

Sarah: He’s going to go away.

Gabriela: Eat it.

Researcher: Why do you think it might go away?

Sarah: Because, it broke in half.

Researcher: When you said eat it, Gabriela, what part were you thinking it would eat?

(Gabriela points to broken tail pieces.)

Sarah: I was thinking the same thing with Elise because how . . . How is going to break? Does it get a new tail?

Gabriela: Those (pointing to snake that lost its tail) survive?

Researcher: Mmhm. This part of the animal survives, and that part breaks off.

Gabriela: What happens when they step on its head?

Researcher: I don’t know. It has to break part of the tail.

Sarah: How ’bout if another predator sees it, and then it has its tail and all that stuff, and he just capture it and he breaks it, and how about like if it breaks again?

Sarah: Going to eat it?

Researcher: I guess so.

Gabriela: Or dead.

The students collaborated to understand the text (“When it is grabbed by the tail . . . its tail breaks into many small, wriggling pieces.”) and the illustration. Their questions arose from a combination of fascination and confusion, and they represented a way of trying to understand the text.

In a discussion of a matched text, *About Fish*, Group 2 introduced and developed ideas related to the pufferfish. Elise knew they puffed up to protect themselves, so she found it strange that one in the illustration was puffed up and the other right by it was not. If one was in danger, they both were in danger and should both protect themselves.

Elise: It's so weird because this one has spikes, and this one's not.
Researcher: Why do you think that is?
Gabriela: Maybe because its spikes are camouflaging it.
Researcher: Is this the same kind of fish? (tapping both fish on the page)
Gabriela & Elise: Yes.
Researcher: So, why this this one puffed up, and this one's not?
Sarah: That means that there's danger.
Researcher: So, do you think that this one maybe sees some danger that this one doesn't see?
Gabriela: Yes.
Researcher: If this one maybe sees it in a minute, what will he do?
Elise & Sarah: He'll puff up.
Researcher: But, Elise, you think it's strange that they're so close to each other and only one of them's puffing.
Gabriela: (pointing to book) Maybe that's their enemy.
Researcher: You think he hasn't seen yet?
Gabriela: No.

This transcript shows Group 2 introducing and building on ideas about a matched text that they understood. They did not ask questions, but they used their background knowledge and prior learning from the text to develop an idea about why one fish puffed when the other one did not.

When Group 2 asked questions with matched books, they did not arise from not understanding the text. They asked questions about pictures (“what is that?”), that arose from childhood curiosity (“This reminded me . . . do bees blink?”), and that arose from confusion about genre (“wait . . . is this real?”). They asked these questions about difficult text too, but difficult text also generated the kinds of questions reflected in the transcript above: questions that conveyed that they did not understand the text and that they were puzzling through complicated ideas. For Group 2 then, difficult texts generated more questioning, and matched texts provided an opportunity to leverage their understanding to introduce and build on ideas in a discussion.

Discussion

The two groups showed opposite interaction patterns around difficult and matched texts. Unfortunately, the data do not speak to determining exactly why Group 1 and Group 2 responded differently—whether reading proficiency, group personality, some combination, or something else entirely. However, over time each group developed a personality and “ways of being” during the course of discussion that I described in the findings. Possibly if these same students had been grouped with other students or met a few months earlier or later, different interaction patterns would have developed. At the time of this study and with the children who participated, difficult texts pushed Group 1 to introduce and build on ideas and Group 2 to ask questions while matched texts did just the opposite.

Yet, one of the study's most salient findings is that students interacted meaningfully—albeit differently—around both levels of text. When I conceptualized the study, I expected to find that students had a strong, obvious differences in the ways they interacted around texts. I was not sure how this difference might play out, but I wondered if they would have short, basic interactions around the matched texts or ask questions that reflected the difficult texts were too difficult. Yet from participating in discussions, it was not immediately apparent to me that students interacted around the texts differently. It took the coding

and analysis described in this manuscript to identify any differences between the discussions. While the analysis showed different types of interaction, nothing suggested that one type was “better” than the other. For example, discussion did not devolve into fruitless arguments or result in students simply reading lines of text without having anything to say about it with either level of text. Rather the study showed that in the supportive space of the discussions, the students co-constructed with me and each other zones of proximal development that allowed them to have interesting interactions around both matched and difficult text.

Relation to Existing Literature

This study looked at different outcomes than most studies of text difficulty, but like much of the existing research base (O’Connor et al., 2002; O’Connor et al., 2010), it did not find a clear advantage for matched or difficult texts. After surveying a large database of students’ reading behavior and achievement, Topping, Samuels, & Paul (2008) concluded that determining an exact range of text difficulty for students’ free reading “is not critical for achievement gain” (p. 519). The current study suggests that determining the exact right level does not matter for facilitating interactive discussions in small groups either. Some researchers have worried that difficult texts increase frustration and decrease motivation (Snow & O’Connor, 2016), but in the context of supportive small-group discussions, those fears did not play out in ways that impeded students’ interaction in this study.

When teachers adopt dialogic discussion practices, students participate and understand that discussions help them clarify their thinking about text (Aukerman & Chambers Schuldt, 2015). While I did not always facilitate in a purely dialogical style, students still adopted interaction patterns that moved them towards understanding. In this study, students interacted around difficult and matched texts as have students in other studies that did not foreground text difficulty. The students in this study made claims about text and used text and illustrations to support their claims (Martinez, Roser, & Dooley, 2003); they also monitored and responded to the claims of their peers (Aukerman & Chambers Schuldt, 2015).

Aukerman, Chambers Schuldt, Aiello, and Martin (2017) described small-group shared reading and discussion with bilingual elementary students. They found that students engaged each other’s ideas by building on, affiliating with, and challenging them. Students did not merely repeat each other, but added new and related ideas. Even when elaborating their own ideas, students often related them back to peers’ contributions. In their study, students rarely changed the subject, leading to “highly coherent” (p. 494) conversations driven by a small number of new ideas. In the present study, students built coherent conversations around the same topic through asking questions (which Group 1 did most with matched texts and Group 2 did with difficult ones). In other conversations—conversations about difficult books for Group 1 and matched books for Group 2—the students frequently introduced new topics and did not build up previous ideas for long.

For Group 2, the group needing the most support to read at grade level, the matched texts were rather simple with strikingly less text and fewer ideas. For Group 1, the difference between matched and difficult texts was less pronounced. Thus, it may be that for Group 1, difficult texts seemed just a bit beyond reach to develop extended discourse while Group 2 had the opposite problem: Their matched texts were too simple for them to talk about any one idea in the texts for long. Group 1’s interaction, but not Group 2’s, supported Boyd’s (2015) finding that bilingual students in a small-group text discussion had more elaborated talk with a text they found easier.

Aukerman, Johnson, & Chambers Schuldt (2017) inferred that the interaction patterns children adopted supported their comprehension as a group and suggested that “they may be able to enjoy and make sense of texts that would look too hard when seen through the lens of an individualized view of meaning making” (p. 487). They concluded that bilingual students “can participate competently and meaningfully in [second language] text discussions. . . . During each discussion, the students appeared as competent, engaged, and thoughtful readers” (p. 505). The present study supports their conclusion.

In another analysis of text discussions in bilingual classrooms, Aukerman et al. (2017) found that students took up few discourse practices. I also identified only a small core of interactions in the data here. Johnson (2017) noted that teachers have many reasons for having students discuss texts, and teachers find it challenging to balance all those reasons at once. She particularly observed teachers struggle with the tension between interactions that foster comprehension versus conversation skills. Teachers had a hard time letting students lead discussions when they felt students missed key details in comprehending texts. They found some students “were not yet skilled in sustaining respectful conversations with peers, particularly when the text under discussion was challenging” (p. 334). Teachers have to make trade-offs in terms of prioritizing the discourse practices they want to foster within a narrow activity such as text discussions.

These studies reflect how children talk about texts complex enough to warrant a conversation. Indeed, researchers have suggested that richer interaction and more interpretive talk developed around somewhat ambiguous or otherwise challenging texts (Moses, Ogden, & Kelly, 2015). However, none compared how children talk about matched versus difficult text. This study uniquely contributes evidence to suggest that children can interact around a variety of levels of text, and matching the text level to the readers is not essential for elementary small-group discussions. Indeed, children adopt a variety of interaction patterns in response to the text to help them co-construct meaning within their ZPDs.

Limitations

This study did not elucidate a strong instructional protocol for small-group reading with bilingual students. While developing a protocol was not the purpose here, several findings highlight the weaknesses of the protocol that I implemented. The interactions showed that despite my attempts to foster discussion, our groups still relied heavily on the students directing their comments to me, a pattern that researchers have criticized for failing to stimulate the kind of dialog that really fosters learning (Cazden, 1988). No doubt students’ interactions would have been different if I had explicitly taught and encouraged interaction patterns like agreeing/disagreeing and peer-coaching that occurred rarely in this study. Future research should explore how various interaction patterns support students’ comprehension and identities as readers and what kind of scaffolding students need to take up those patterns.

Additionally, many factors influence children’s interactions. I followed a consistent protocol with both matched and difficult texts, but there may have been factors beyond text difficulty that affected children’s interactions on any given day. I have addressed additional limitations and challenges associated with school-based research elsewhere (Kelly, 2020).

Implications

This study, the other parts of this study that looked at different outcomes (Kelly, 2019a; Kelly, 2019b), and other studies of text difficulty cited above struggle to identify a strong advantage in favor of either matched or difficult texts. For teachers, this lack of difference may suggest that they do not need to worry greatly about small differences in text difficulty levels to make a perfect match. If they select different

levels of texts for different purposes, they can focus on instructional practices that will help students benefit from different levels and types of texts (Saul & Dieckman, 2005). For policymakers, it seems that categorically mandating one level of text or the other is not the reform that will produce major changes in children's reading outcomes. Researchers may wish to look at other questions relating to text difficulty (beyond which text level is the "best" one?). Some of the most relevant questions in the current policy environment in the United States may relate to supporting teachers' professional knowledge, decision making, and instructional practices with a variety of text levels.

Conclusion

This study contributes to the literature by presenting and analyzing student talk as bilingual students interact around matched and difficult texts. It joins the chorus of voices advocating for teachers and policy makers to recognize bilingual students as "thoughtful textual meaning makers we believe them to be, rather than as struggling readers" (Adair, Colegrove, & McManus, 2017; Aukerman et al., 2017, p. 484; Hopewell & Escamilla, 2013). Small-group text discussions provide a promising site for bilingual students to interact around challenging texts in ways that facilitate their comprehension and access to grade-level content.

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Table 1

Codebook Used to Categorize Verbal Interactions for Meaning

| | |
|---|--|
| Interaction: ask | Student asks a question about text/topic/picture. |
| Interaction: answer peer/self | Student addresses a peer's question or addresses a question he or she initially raised. Includes questions repeated or rephrased by teacher, but originally raised by student. |
| Interaction: answer teacher | Student answers the researcher's question. |
| Interaction: clarify | Student seeks clarification of what another participant has said. |
| Interaction: agree | Student agrees with another participant about discussion of text. |
| Interaction: disagree | Student disagrees with another participant about discussion of text. |
| Interaction: peer coaching | Student offers peer support such as coaching for unknown word or directing them to a page that addresses their question. |
| Interaction: building on previous comment | Student continues discussion by contributing an additional statement or elaborating a previous statement on the same topic. |
| Interaction: introduce new | Student continues discussion by contributing a statement on a new topic. |

Table 2

Number of Common Student Interactions by Reading Group

| | Answer teacher (D) | Answer teacher (M) | Build (D) | Build (M) | Ask (D) | Ask (M) | Intro (D) | Intro (M) |
|----------------|--------------------------|--------------------------|--------------|--------------|------------|------------|--------------|--------------|
| Alyssa | 70 | 89 | 30 | 20 | 8 | 20 | 14 | 7 |
| Jack | 60 | 62 | 37 | 26 | 10 | 18 | 13 | 10 |
| Rosa | 7 | 14 | 14 | 5 | 0 | 1 | 11 | 9 |
| Group 1 totals | 137 | 165 | 81 | 51 | 18 | 39 | 38 | 26 |
| Elise | 11 | 8 | 7 | 4 | 9 | 8 | 1 | 4 |
| Gabriela | 46 | 72 | 14 | 42 | 21 | 28 | 2 | 4 |
| Sarah | 51 | 64 | 27 | 38 | 21 | 28 | 2 | 4 |
| Group 2 totals | 108 | 144 | 48 | 84 | 51 | 58 | 5 | 12 |

Note. The table shows the number of times each student implemented an interaction out loud in the discussions. Columns marked with (M) refer to discussions about matched texts, and columns marked with (D) refer to discussions about difficult text.

Table 3

Number of Less Common Student Interactions by Reading Group

| | Answer peer/self (D) | Answer peer/self (M) | Disagree (D) | Disagree (M) | Agree (D) | Agree (M) | Coach (D) | Coach (M) |
|-------------------|----------------------------|----------------------------|-----------------|-----------------|--------------|--------------|--------------|--------------|
| Alyssa | 2 | 9 | 1 | 0 | 0 | 2 | 0 | 1 |
| Jack | 2 | 11 | 0 | 3 | 1 | 2 | 1 | 1 |
| Rosa | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Group 1 totals | 4 | 20 | 2 | 3 | 1 | 4 | 1 | 2 |
| Elise | 6 | 5 | 0 | 0 | 2 | 0 | 1 | 0 |
| Gabriela | 4 | 8 | 3 | 1 | 1 | 1 | 0 | 0 |
| Sarah | 8 | 11 | 4 | 2 | 1 | 3 | 0 | 0 |
| Group 2 totals | 18 | 24 | 7 | 3 | 4 | 4 | 1 | 0 |

Note. The table shows the number of times each student implemented an interaction out loud in the discussions. Columns marked with (M) refer to discussions about matched texts, and columns marked with (D) refer to discussions about difficult text.

Appendix (Online)

Books Used in Discussion

Group 1, Matched

Brubaker Bradley, K. (2001). *Pop! A book about bubbles*. New York, NY: HarperCollins.

Cowcher, H. (2009). *Antarctica*. New York, NY: Square Fish.

de la Bedoyere, C. (2016). *Acorn to oak tree*. London, UK: QEB/QED Publishing.

Jenkins, S., & Page, R. (2008). *What do you do with a tail like this?* Boston, MA: HMH Books for Young Readers.

Tatham, B. (2002). *Penguin chick*. New York, NY: HarperCollins.

Group 1, Difficult

Fraser, M. A. (1998). *Where are the night animals?* New York, NY: HarperCollins.

Markle, S. (2014). *What if you had animal hair?* New York, NY: Scholastic Paperbacks.

Peterson, C. (2012). *Seed, soil, sun: Earth's recipe for food*. Honesdale, PA: Boyds Mills Press.

Serafini, F. (2010). *Looking closely in the rain forest*. Toronto, ON: Kids Can Press.

Squire, A. O. (2012). *Fossils*. Chicago, IL: Children's Press. (chapter 1 only)

Group 2, Matched

Cowley, J. (2006). *Red-eyed tree frog*. New York, NY: Scholastic Paperbacks.

Franco, B. (2002). *Amazing animals*. Chicago, IL: Children's Press.

Posada, M. (2000). *Dandelions: Stars in the grass*. Minneapolis, MN: Carolrhoda Books.

Sill, C. (2013). *About birds: A guide for children*. Atlanta, GA: Peachtree.

Sill, C. (2017). *About fish: A guide for children*. Atlanta, GA: Peachtree.

Group 2, Difficult

Arndt, I. (2014). *Best foot forward: Exploring feet, flippers, and claws*. New York, NY: Holiday House.

Bishop, N. (2007). *Spiders*. New York, NY: Scholastic Nonfiction.

de la Bedoyere, C. (2012). *I am a frog*. Thaxted, UK: Miles Kelly.

Jenkins, S. (2001). *What do you do when something wants to eat you?* Boston, MA: HMH Books for Young Readers.

Simon, S. (2003). *Cool cars*. New York, NY: Scholastic.
