

CHAPTER 6

Using Strategy Instruction to Promote Reading Comprehension and Content Learning

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Reading is a complex process for all of us, a task that is becoming increasingly more challenging with the demands and opportunities of the digital age. Reading for understanding can be complicated for emergent bilingual learners when they are able to read phonetically but may struggle to comprehend. The issues only become more pronounced when emergent bilingual youth are in middle school or high school, when language learning intersects with fluctuating motivation, personal interest, familiarity with text topics, and difficult content. Even adults who are competent speakers and readers of English are likely to leaf through the newspaper or a website, choosing to read one article and not another, based on their goals for reading.

In classrooms, students often do not have much choice about what they read. Think about the typical content of a school day through the perspectives of emergent bilingual learners. The day begins with a science class where the topic is, for example, the earth's structure and the content includes *seismic waves*, *lithosphere*, *core*, and *crust*. The next class is English language arts (ELA), where the focus is on a story of a young boy, a refugee from Nazi Germany, who goes to work in a logging camp in the northwest of the United States. This text brings in terms related to the boy's Jewish heritage (*kosher*) as well as a host of words related to a logging camp (e.g., *jacks* for loggers). ELA is followed by social studies, where the focus is on the U.S. Constitution with key concepts such as *federalism* and *separation of powers*.

All students need to be exposed to challenging content (Common Core State Standards [CCSS]; National Governors Association Center for Best

Practices & Council of Chief State School Officers [NGA & CCSSO], 2010), but for many emergent bilingual learners, the challenge may be intense, especially in contexts where little support is provided in either their native language or in navigating vocabulary and unfamiliar topics while reading. When we consider how difficult it is to learn rigorous academic content while simultaneously developing the language skills needed to take in this new information and to process and represent understanding (Coleman & Goldenberg, 2012), it should not be surprising when emergent bilingual learners lag behind their grade-level peers in reading performance.

Strategy-based reading models offer promise for increasing metacognition, reading comprehension, and equitable participation. We first provide research on reading strategy instruction to promote comprehension and content learning for adolescent emergent bilingual learners. We then use Collaborative Strategic Reading to illustrate how teachers across content areas can teach before, during, and after reading strategies with scaffolds that allow students of various learning and language backgrounds to work together to learn from challenging texts. Finally, we present recommendations for practice.

Reading Strategy Instruction and Emergent Bilingual Learners

An important shift in instructional expectations resulting in part from the CCSS and the Next Generation Science Standards (NGSS) is the way reading is approached in secondary science, social studies, mathematics, and even language arts classrooms. Teachers are now being asked to approach reading differently, not just as a means to gather content-specific information, but also as an opportunity to teach students the discipline-specific reading skills that are particular to a designated content area. For example, students in social studies need to know how to read texts that represent multiple perspectives, a task requiring much more than “understanding” what the text is about: “Analyze the relationship between a primary and secondary source on the same topic” (CCSS.ELA.RH.6-8.9). And in high school science, NGSS expect students to use texts to evaluate claims: “Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information” (RST.11–12.8).

Yet, if students are to use texts to think like historians and scientists, they also need foundational reading comprehension skills to help them understand what they read. Often referred to as *general reading strategies*, instruction in this area “seeks to uncover and teach strategies, routines,

skills, language, and practices that can be applied universally to content area learning and are by definition generalizable to other domains” (Fagella-Luby, Graner, Deshler, & Drew, 2012, p. 69). *Discipline-specific strategies* build on general reading strategies. One is not more important than the other, but rather, for our adolescent emergent bilingual learners and other students who require support to access grade-level text, the teaching of general reading strategies continues to be important in secondary settings. Armed with the ability to apply general reading strategies in content classrooms, students are ready to combine their understanding of text with the higher-order applications that are required in the examples described above.

The National Reading Panel (2000; August & Shanahan, 2006) and RAND Reading Study Group (2002) have identified several instructional strategies associated with improved outcomes in reading comprehension, especially for emergent bilingual learners: (1) teach students to monitor their comprehension and the procedures for adjusting when difficulties in understanding arise; (2) use cooperative learning practices while implementing comprehension strategies in the context of reading; (3) provide graphic and semantic organizers that assist students in writing or drawing relationships; (4) provide support for questioning strategies that assist students in answering critical questions about the passage, feedback to students regarding their answers to questions about the text, and opportunities for students to ask and answer questions about the text; (5) teach students to write important ideas about what they’ve read and to summarize these ideas after reading longer passages; (6) combine multiple strategies; (7) embed comprehension instruction within subject-matter learning, such as history or science; (8) provide explicit strategy instruction, particularly for low-achieving students; and (9) build vocabulary knowledge. These are all reading strategies that support understanding, but may not be automatically deployed by students who have difficulty with comprehension. For those students who are reading below grade level and for emergent bilingual learners, teachers can provide explicit instruction in reading strategies, including what the strategy is, how to perform it, when it is used, and why it is important in the reading process. When students are taught the strategies used by strong readers and apply them over time, comprehension improves.

From the expansive National Reading Panel list above, we highlight several recommendations that have been well established to support reading comprehension. Although these are not the only high-yield strategies, we have chosen them because they are accessible to emergent bilingual learners, are widely used in reading strategy interventions, and can be combined in various ways to support comprehension.

Visual Images

One of the most effective ways to tap into emergent bilingual students' background knowledge and experiences related to the content, concepts, and academic vocabulary of a lesson is through the use of visual images (Harvey & Goudvis, 2000; Herrera, 2010; Herrera, Perez, Kavimandan, & Wessels, 2013; Tompkins, 2007; Wormeli, 2005). Visual images provide emergent bilingual learners with comprehensible input that may help them access and articulate prior knowledge of a topic. Teachers can then use students' interpretation of a visual image (provided as a supplement by the teacher or contained within a text) as a way to enhance students' memory and understanding of new concepts, identify misconceptions, and fill in gaps when students are building knowledge about a specific topic.

Explicit Vocabulary Instruction

Another strategy that facilitates reading comprehension and content learning for emergent bilingual students is explicit and interactive vocabulary instruction (Marzano, 2004; Baker et al., 2014) that occurs throughout the week. Keys to vocabulary learning are the selection of target words and the practice opportunities that are provided to students. (See Crosson, Chapter 5, this volume, for a detailed discussion of selecting and teaching vocabulary.) As students develop their understanding of essential vocabulary, they can expand upon and use this knowledge of individual words to comprehend key concepts and ideas.

Student-Generated Questions

Students can ask questions at any phase of the reading process, but teaching and prompting student-driven questions is essential. Many teachers tell us that they have important questions to ask students as a way to scaffold their learning or to check for understanding. Although teachers can certainly ask questions of students, valuing and creating opportunities for students to ask and answer each others' questions is associated with improved reading comprehension. For example, Berkeley, Marshak, Mastropieri, and Scruggs (2011) taught seventh graders, 23% of whom were emergent bilingual learners, a prereading self-questioning strategy they used during reading. Using grade-level social studies materials, emergent bilingual learners improved their comprehension and content learning. Taboada and Buehl (2012) reported similar results when teaching a postreading questioning strategy to students in middle school science classrooms. Both emergent bilingual learners' questioning skills and their comprehension improved after the intervention. Further, in a study of student text-based discussions

in collaborative learning groups, Eppolito, Boardman, Lasser, and Wang (2016) found that when students were discussing each others' questions, they reached the highest levels of thinking, as measured by Bloom's Taxonomy (i.e., analyze, evaluate, create)—a level of thinking that is important for language development.

Oral Language Development

Recent reviews of best practices emphasize the importance of incorporating discussions into content teaching as a means to improve reading comprehension (Lawrence, Crosson, Paré-Blagoev, & Snow, 2015; Murphy, Wilkinson, Soter, Hennessey, & Alexander, 2009) and content learning (Baker et al., 2014). Teachers are encouraged to provide daily opportunities for students to talk with one another about the content they are learning.

Cooperative learning is one way to increase the amount and quality of discussion for all learners. Though definitions vary (e.g., Johnson & Johnson, 2008; Kagan & Kagan, 2009; Cooper, 1999), in general, *cooperative learning* refers to using small, student-led, heterogeneous groups to accomplish both group and individual learning goals through negotiated, discussion-based participation. When all students are active and participating members of the learning community, the contribution of each individual is valued by the group and benefits the collective learning. Many models for teaching comprehension strategies utilize some form of cooperative grouping (e.g., Klingner, Vaughn, Boardman, & Swanson, 2012; Pressley et al., 1992; Vaughn et al., 2013).

When done well, cooperative learning supports a variety of learners (Cohen, Lotan, Scarloss, & Arellano, 1999; Cohen & Lotan, 2014; Klingner & Vaughn, 2000; Slavin, 1991; Vaughn et al., 2009) and can enhance student engagement and learning, especially for students whose native language is different from that of their peers and the curriculum. For example, in a study of 37 fifth-grade emergent bilingual learners, Klingner and Vaughn (2000) found that up to 25% of student discourse included students helping one another. Similarly, Antil, Jenkins, Wayne, and Vadasy (1998) reported enhanced academic achievement with cooperative learning. The authors noted the benefit of "kid talk," that is, the use of familiar, modified language to discuss academic concepts. Calderon and colleagues have also identified the benefits of cooperative learning on reading and language development (Calderón, Hertz-Lazarowitz, & Slavin, 1998; Calderón et al., 2005). For emergent bilingual learners, these researchers and others have emphasized the importance of (1) using heterogeneous groups; (2) explicitly teaching social and group work skills; and (3) actively monitoring, facilitating collaboration, and providing feedback

on both group work and student learning (Baker et al., 2014; Calderón et al., 1998; Eppolito et al., 2016; Herrell & Jordan, 2015). Further, encouraging students to discuss ideas about text in their primary language (or a combination of English and the primary language) allows them to activate all available resources for comprehension (Ballenger, 1997; Hampton & Rodriguez, 2001; Kearsy & Turner, 1999).

Connecting Reading and Writing

Integrating reading and writing also supports reading comprehension and content learning (Baker et al., 2014). For example, students can write questions about what they read, respond in writing, or extend their learning with longer writing assignments. Key here is that students combine skills that simultaneously develop language use and support content understanding. By reading, sharing ideas, listening to others, offering feedback, and documenting their emerging understanding and questions in writing, students greatly increase their learning potential (e.g., Saunders & Goldenberg, 1999). Blackorby and colleagues (2014) found that middle school students who received reading strategies instruction that included a writing component made significant gains on the state assessment in writing when compared with students who did not receive the same instruction.

Multicomponent Models

Multicomponent approaches to teaching reading strategies typically include a set of strategies to be applied in a routine before, during, and after reading. These models are recommended in elementary (Shanahan et al., 2010) and upper grades (Edmonds et al., 2009) and are often used with expository text in content-area classrooms. Both teachers and students become familiar with these reading routines, which can incorporate a host of evidence-based practices for teaching and learning.

A recent study provides an example of how reading strategies can be incorporated into content learning. Including 239 teachers from 41 schools in the same state, Herrera, Perez, Kavimandan, Holmes, and Miller (2011) found that teachers in classrooms with emergent bilingual students demonstrated higher-quality instruction when intentional strategy instruction was incorporated into their lessons. These same authors proposed the use of biography-driven instruction (BDI) when working with emergent bilingual learners. “BDI strategies assist teachers in providing all learners with the tools, skills, and knowledge necessary to support their own learning within a grade-level, standards-based, and standards-driven curriculum” (Herrera et al., 2013, p. 2). These BDI strategies include:

- Incorporating students' background knowledge and experiences regarding literacy and language development into subsequent instruction.
- Fostering a learning community in which students are encouraged to share personal connections to the content being taught.
- Being explicit about standards and expectations for cognitively demanding activities while simultaneously monitoring students' progress through these activities with feedback.
- Allowing opportunities for students to articulate thinking and promoting elaboration by "revoicing" student connections (Herrera et al., 2013).

Other multicomponent models that have been used with emergent bilingual learners and native English speakers in heterogeneous general education classrooms include reciprocal teaching (Palinscar & Brown, 1984), Collaborative Strategic Reading (Klingner et al., 2012), transactional strategies instruction (Pressley et al., 1992), and Promoting Acceleration of Comprehension and Content through Text (PACT; Vaughn et al., 2013). Interestingly, recommendations do not lead to using one particular set of strategies over another, and each may be useful in different contexts. In the remainder of this chapter, we focus on Collaborative Strategic Reading (CSR), a representative example of a multicomponent strategic reading approach that incorporates the recommended practices in a comprehensive manner that is appropriately applied in multiple content areas.

Collaborative Strategic Reading

CSR combines cooperative learning (e.g., Johnson & Johnson, 1989) and explicit reading comprehension strategy instruction (e.g., Palinscar & Brown, 1984) to promote content learning, language acquisition, and reading comprehension in diverse classrooms that include emergent bilingual learners (Klingner et al., 2012; Klingner, Vaughn, & Schumm, 1998). Originally designed as an extension to models of reciprocal teaching (Palinscar & Brown, 1984), CSR provides access for emergent bilingual learners in inclusive general education classrooms comprised of students from a wide range of learning and language backgrounds (see Klingner & Vaughn, 1996). From the start, components were incorporated to support emergent bilingual learners, such as activating background knowledge and encouraging students to draw on their native language along with English during text-based discussions. Research on CSR has yielded positive effects for struggling readers, emergent bilingual learners, students with disabilities,

as well as average and high-achieving students in upper elementary and middle school classrooms (e.g., Boardman, Klingner, Buckley, Annamma, & Lasser, 2015; Boardman, Buckley, Vaughn, Reutebuch, Roberts, & Klingner, 2016; Klingner, Vaughn, Argüelles, Hughes, & Ahwee, 2004; Klingner & Vaughn, 1999; Vaughn et al., 2011). Over the years, we have worked with practitioners to support the integration of CSR into content classrooms, most frequently at the upper elementary and middle school levels. In the following sections, we use examples drawn from more than 400 classrooms participating in two large-scale studies of CSR across several school districts to explore the components of the model and implications for practice.¹

CSR is comprised of five reading strategies that are used together while students read content-specific text in student-led cooperative learning groups. Strategy use is supported by a number of classroom resources, including a *learning log* (see Figure 6.1), on which students record their ideas throughout the reading process; *cue cards* (see Figure 6.2) that guide role experts (i.e., Leader, Clunk Expert, Gist Expert, Question Expert) to facilitate the process for each strategy; and student resources that include lists of affixes, fix-up strategies, discussion stems, and question starters. Teachers begin by introducing the strategies one at a time to students, using modeling and guided practice, and then by having students apply strategies in cooperative learning groups. Teachers also provide explicit instruction on cooperative learning practices so students learn to both use strategies and to work together (see toolkit.csreolorado.org for classroom resources and online professional learning modules). In the following sections, we explain the CSR process, emphasizing supports for emergent bilingual learners.

Preview

The Preview portion of CSR, designed to engage students and have them attend to lesson objectives, provides a brief introduction to the content of the text. The teacher first introduces the topic. Next, students brainstorm individually what they already know and then share ideas with a partner or their small group. Teachers might offer students more than one brainstorm prompt as a scaffold. For example, when students in eighth-grade science are learning about the merging of technology and human resources, the following two brainstorm prompts could be provided. *What do you know about the increasing ability of technology?* (requires students to make a

¹The examples described here were drawn from research supported by Grant No. R305A080608 from the Institute of Education Sciences, U.S. Department of Education, and by Grant No. U396B100143 from Investing in Innovation, U.S. Department of Education.

CSR Learning Log

Name _____ Date _____ Period _____

Today's Topic _____

Before Reading: Preview

Brainstorm: Connections to prior knowledge

Key Vocabulary _____

Purpose: _____

During Reading: Section 1

Clunks _____

Gist _____

During Reading: Section 2

Clunks _____

Gist _____



CSR Colorado
High Level Learning

During Reading: Section 3

Clunks _____

Gist _____

After Reading: Wrap-Up

Questions: (write questions and answers)

Q: _____

A: _____

Q: _____

A: _____

Q: _____

A: _____

Review: (Connect to the purpose / CLO)

FIGURE 6.1. CSR learning log. From Klingner, Vaughn, Boardman, and Swanson (2012). Reprinted with permission from John Wiley & Sons, Inc.

Clunk Expert

The Clunk Expert will:


- make sure that students write their clunks in their learning logs.
- help students use fix-up strategies to figure out the meaning of unknown words or ideas.
- prompt group to justify their answers using textual evidence.

DURING READING



- Who has a clunk?
- Does anyone know the meaning of the clunk?

IF NO: (no one knows the meaning of the clunk)

- Turn over this card. 

IF YES: (someone knows the meaning of the clunk)

- (Name), please explain what the clunk means.



Use textual evidence: reread the sentence and make sure the definition makes sense.



Write the definition in your learning log.

DURING READING

IF NO: (no one knows the meaning of the clunk) Support your group to use the fix-up strategies to figure out the meaning of your clunks.



Discussion
[Use fix-up strategies]

1. Reread the sentence with the clunk, looking for key ideas.
2. Reread the sentences before and after the clunk, looking for clues.
3. Break the word apart. Identify a prefix, suffix, root word, or smaller word you know.
4. Look for a cognate that makes sense.



Let's reread the sentence and make sure the definition makes sense.



Write the definition in your learning log.

[Repeat steps for additional clunks]

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FIGURE 6.2. CSR Clunk Expert cue card. From Klingner, Vaughn, Boardman, and Swanson (2012). Reprinted with permission from John Wiley & Sons, Inc.

content connection) or *How can technology make your life easier?* (allows students to make a personal connection to the content). Sharing brainstorming ideas is a low-stakes practice that demonstrates early in the reading process that everyone has something to contribute and that everyone participates. After brainstorming, the teacher might also choose to introduce a few key concepts or vocabulary terms using visual aids, demonstrations, or a short video clip to contextualize meaning. Finally, the teacher sets the purpose for reading. This purpose is closely aligned with the content and/or language objective of the lesson. Overall, these CSR Preview practices should take about 10 minutes to complete.

Click and Clunk

After reading a short section of text (usually ranging from a few paragraphs to about a page in length), students stop to individually identify confusing words or ideas (clunks) and then use fix-up strategies to figure them out (click). Click and Clunk is a metacognitive strategy that cues students to notice when understanding breaks down and to take action to repair the misunderstanding. Students use one or more of the following fix-up strategies: (1) reread the sentence with the clunk and look for key ideas to help you figure out the word; (2) reread the sentences before and after the sentence with the clunk; (3) break the word apart and look for word parts or smaller words you know; and (4) look for a cognate that makes sense.

Consider the following section of text:

Life history strategies of virtually all taxa vary along a slow-fast gradient. Slow strategies are characterized by slow growth, low total parental effort for fewer offspring but high effort per offspring. Fast strategies are characterized by the opposite. (Martin, 2015, p. 659)

After the first sentence, you might wonder what the author means by a “slow-fast gradient.” Rereading the sentences around the clunk might help, because the slow-fast aspect of life history strategies are explained (fix-up strategy #2), as will making connections to the word *grade* as it is used in relation to roads (e.g., the grade on a road varies). This usage must refer to variation that occurs along a continuum from slow to fast (fix-up strategy #3). In Spanish, some people might make a connection to the term *gradiente* (fix-up strategy #4). As one of the sixth-grade science teachers from our study noted regarding the use of fix-up strategies among students in mixed-language groups:

“Just allowing them to use different types of language support brings that in too for language learners. But then also students who aren’t

language learners, they can be in a group with someone who is a language learner and knows those cognates, and a native-English speaker could learn more from that bilingual student as well” (interview, November 2013).

Fix-up strategies, along with the support of group members, help students unpack difficult words and ideas, as well as create a routine in which engaged readers use resources when they are confused by something they read.

Get the Gist

After students complete the Click and Clunk strategy, they move on to generating the main idea or *gist* of the section. They do so by first identifying the most important “who” or “what” that the section discusses. Then students identify the most important information, or key ideas, about the “who” or “what.” Students next write their own gist statement in a complete sentence of about 10 words. Finally, students share their gist sentence with group-mates and provide each other with feedback. The Gist Expert uses his or her cue card (see Figure 6.1 for a sample cue card) to guide students through the steps of writing and discussing gist statements (an important aspect of this strategy because the cue card scaffolds the process by breaking down the steps), reminding students when to work individually and when to work together, and providing discussion frames that support high-quality dialogue (e.g., “How are our gists similar and different?”; “My gist is similar to _____’s because. . .”). Students then read the next section of text and repeat the Click and Clunk and Get the Gist processes.

General Questions

In CSR, students generate questions at different levels after reading the entire text. They write questions that are factual (i.e., the question and the answer are found in one place in the text) and questions that require synthesis, inferencing, or making connections. There is an emphasis on writing important questions that help them understand and remember the text—the types of questions a teacher might put on a quiz. Some teachers use Raphael’s (1986) Question–Answer Relationships as a question generation guide, whereas others apply different questioning models or encourage students to ask questions using a range of question words (*who*, *what*, *when*, *where*, and *why*). Question starters support emergent bilingual learners by providing the form for the question writing in English as well as other languages (e.g., “What are some of the reasons for _____?”; “¿Cuáles

son algunas de las razones por las cual _____?”). We have often observed students referring to the Spanish (or other language) question starters before writing questions in English. Students ask and answer each others' questions in their small groups or may move to other groups to ask, answer, and discuss questions.

Review

The final step in CSR is Review. Students first write a few sentences summarizing the most important information from the passage. They then share their writing with their small group, providing evidence for why their review statement includes the most important information. Once students have reviewed their key ideas, the teacher brings students back together for a whole-class review that might include focusing on discipline-specific literacy strategies (e.g., evaluating the author's claims in science), making connections to big ideas or learning objectives, or extending learning with additional activities such as a lab in science or an essay comparing and contrasting viewpoints in ELA.

Once students have learned the CSR strategies, they typically apply them with a content-focused text during one or more class periods weekly. If implementation is schoolwide, students might use CSR once a week in their social studies, science, and language arts classrooms. Regardless, teachers are integral to the successful application of CSR strategies because they facilitate individual and group learning and collaboration in small groups. In addition, teachers decide when to fine-tune strategy use with mini lessons for the whole class or small groups of students who may need additional support. Above all, teachers are encouraged to *use* CSR to teach their content rather than *doing* CSR simply to practice reading. Although the distinction may seem nuanced, research supports a focus on comprehension of important content that begins with selecting high-quality texts that are aligned with the curriculum, and promoting use of strategies and peers as a means to learn new and essential grade-level material.

Recommendations for Teachers and Schools

Over the years, we have worked closely with teachers, coaches, administrators, and school district personnel to implement CSR in ways that are beneficial to students and feasible for teachers. Although the following recommendations are not exhaustive, they do represent some key lessons learned. Please also see Chapter 7 (this volume) in which Ossa Parra and her colleagues offer important recommendations related to facilitating

discussions in student-led groups; the facilitation of high-quality discussions is an essential component of CSR instruction.

Maintain a Focus on Reading Specific to the Content Area

Content-area teachers are responsible for teaching content that addresses their curriculum standards. For this reason, there can be tension when there is a perception that reading and language development take priority over the essence of the course material. For example, consider the NGSS for middle school around engaging in argument based on evidence: “Standard MS-ESS3-4: Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems.” CSR can be a useful model to support students in reaching this standard. Teachers might involve students in a series of CSR lessons to help them gather evidence from texts that focus on human consumption of natural resources that will be used to construct an argument. (For more information on teaching students to write arguments, see Brisk, Kaveh, Scialoia, & Timothy, Chapter 8, this volume.) Through CSR, they will apply reading strategies, check their understanding with peers, and begin to draw conclusions—a process that supports improved reading outcomes and increased content learning.

Content-area teachers can support students in their efforts to attain these standards and develop reading comprehension using CSR in several ways. In a study analyzing student discussions that included emergent bilingual learners and nonemergent bilingual learners in heterogeneous middle school science and social studies classrooms, Eppolito and colleagues (2016) found that student participation was more equitable (i.e., emergent bilingual learners participated similarly to nonemergent bilingual learners) and that the quality of discussion in student-led groups was higher (e.g., more discussion of higher-level content-related ideas) when teachers focused on the content of the text and used discipline-specific academic language coupled with modeling on how to talk about academic content. We caution against providing feedback that focuses solely on the process of CSR at the expense of attending to content learning. Additionally, we encourage practitioners to promote collaboration among students rather than positioning themselves as the authority that knows all of the correct answers. For example, if a student says, “We don’t know what this section is about,” join the conversation with the small group of students, using the CSR strategies as an entry point, rather than telling students what they need to know. A teacher might respond by saying, “Gist Expert, where is the group stuck?” and then proceed by working through the gist strategy alongside students to see where understanding is breaking down and to facilitate a resolution.

Integrate Reading Strategies into the Curriculum

Although many studies have examined the impact of reading comprehension models on student outcomes, these practices are often tested by inserting reading comprehension instruction into a teacher's weekly curriculum (e.g., Thames et al., 2008; Vaughn et al., 2011). Yet even models like CSR that are known to support comprehension and content learning as part of content-area instruction are often treated as a supplement or add-on (e.g., using a reading on how mountains are formed during a unit on the Bill of Rights), which may hinder the transfer of skills and the sustainability of a practice. If teachers feel that reading is not related to content understanding, they are unlikely to promote the practice or to continue it over time. It is also difficult for students to find relevance from a text that is disconnected from the content.

We recently observed 15 middle school science, social studies, and language arts teachers throughout a week of instruction to understand the extent to which they integrated CSR into their instruction (Boardman, Moore, Schmidt, & Scornavacco, 2016). Findings indicated that high-integration teachers embedded CSR lessons into their curriculum and reinforced CSR strategy use throughout the week. These teachers discussed student growth as a result of CSR and the ways that CSR fit into their teaching. For example, one teacher began each week with a CSR lesson to "set the tone" for the week of instruction (interview, May 2015). The reading she selected for her CSR lesson launched the topic for the week (e.g., analyzing the role of formal vs. informal education) and was referenced throughout each lesson we observed. Another common theme among high-integration teachers was the use of portions of CSR daily to reinforce students' reading, writing, and speaking skills. For instance, one teacher had students working in collaborative groups daily, writing main-idea statements and generating questions and answers from their readings at the end of each lesson. The importance of CSR for student learning and for teaching their curriculum was evident for all of these teachers who had found ways to seamlessly integrate CSR and reading strategies into their content-area classes.

Use Cross-Content School Models to Increase Teacher Collaboration

When teachers in different content areas use a common instructional model, they are able to collaborate and plan in new and different ways. In one urban district whose students were comprised of 35% emergent bilingual learners, social studies, science, and language arts teachers implemented CSR weekly with students, focusing on using the same reading strategies to access discipline-specific texts. Collaboration occurred in various ways,

from more standard team planning (e.g., science teachers working together to select appropriate texts and thoughtfully integrate CSR into the curriculum) to larger professional learning communities and data teams. For example, in one school, teachers selected main-idea writing as a schoolwide student learning goal. Teachers across content areas met monthly to discuss student progress in main-idea generation. They brought student CSR work samples and discussed key areas of instruction, such as how to provide feedback to students during small-group work and on their written products. As one teacher noted:

“CSR gave an entry point for science and social studies teachers, especially into data teams because our data teams are based on literacy, so by having teachers trained in CSR, we were more able to think about integrating more literacy strategies into our classroom and to be mindful of that data” (interview, March 2015).

Another teacher in the same school commented:

“One of the goals that we set at the beginning of the year for CSR for us at [school name] is common language and common strategies. It’s something that has become very important to us over the last couple of years, making sure that as kids go from classroom to classroom, no matter what the content is, that they are hearing the same language, especially around Gists and Clunks” (interview, March 2015).

And as noted by a teacher in another school, “CSR supports everything in the building . . . and because it moves [from] content area [to] content area and grade to grade. . . . There’s just this thread that strengthens the culture of the building” (interview, May 2015). In addition to the benefits of using a schoolwide model for reading comprehension, teachers have also learned that planning is important. For example, because it is an intensive reading model that uses a predictable structure and requires students to maintain a high level of engagement and focus, it can be demanding to use CSR in its entirety in different subject areas on the same days. For this reason, teachers in some schools have chosen to designate a “CSR day” (e.g., science on Tuesdays, social studies on Thursdays).

For emergent bilingual learners in particular, common routines such as these can decrease the cognitive load of figuring out what is happening in each individual class and allow students to devote resources to the learning of the day. Further, practicing similar reading strategies across classes provides important rehearsal time for developing listening, speaking, reading, and writing skills that can increase learning outcomes.

Conclusion

Emergent bilingual learners have always needed access to rigorous content and learning activities that develop their age-appropriate thinking and learning capacity and increase their language learning. Given that the new standards emphasize the importance of providing students with rigorous reading opportunities, the demands are raised for teachers and students alike. Models such as CSR hold promise for teaching students reading strategies that can transfer across content areas and become available to them in daily life. When teachers in different disciplines work together to integrate CSR meaningfully into their curricula, they share a common language that goes beyond lesson planning to focus on improving the achievement and opportunities for all students, regardless of where they are in their language or learning trajectories.

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