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## **How and Why Strategy Instruction Can Improve Second Language Reading Comprehension: A Review**

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### **ABSTRACT**

*Increasingly, children enter the school system with a home language that differs from the language of the majority. Consequently, classrooms have students with diverse language backgrounds and teachers must develop reading comprehension instruction that meets the needs of all their students. To successfully plan instruction, it is critical for teachers to understand the strengths that second language learners (SLLs) bring to the classroom as well as the potential difficulties they face. Here we review the literature on reading comprehension development and utilize cognitive frameworks to describe the knowledge, skills, and processes involved during reading for meaning. We use these theories to explain why SLLs may have difficulty with reading comprehension and how we might leverage their strengths in domains such as executive control to support their reading comprehension development. We further highlight for educators how strategy instruction aligns directly with cognitive theories of reading comprehension. Ideally, such examples will enable educators to explicitly articulate for their students how effective strategies enable the development of comprehensive mental representations of the text, and ultimately enable good text comprehension.*

### **INTRODUCTION**

For mainstream classroom teachers, the diversity that arises from the varied language backgrounds of their students is an everyday reality. Yet, defining what constitutes a second language learner is no easy feat. Several terms are often used interchangeably to describe individuals who know more than one language, for example, English Language Learners, English Learners, Heritage Speakers, and Bilinguals. Here we use *Second Language Learners* (SLLs) to describe students for whom their home language differs from the language of their schooling.

Although we have chosen to focus our paper on reading comprehension in SLLs, reading comprehension performance is an important concern for all developing readers. The US National Centre for Education Statistics (2015) reported that 24% of US students in Grade 8 were unable to comprehend text at a basic level and only 34% were classified as proficient comprehenders. A better understanding of the knowledge and skills that support reading comprehension success will enable teachers to better target instruction to all their students in need of additional support, regardless of their language background. For both mainstream classroom teachers and second language teachers alike, one of the most relevant challenges is identifying which skills and knowledge support or hinder their students' reading comprehension development, and consequently need to be assessed and/or targeted for instruction. That is, teachers may ask: *What are the strengths and needs of the SLLs in my classroom and how can I leverage their relevant strengths to support their needs?*

In this paper, we take a cognitive approach to identify factors that support successful reading comprehension. We outline why SLLs may excel or struggle with reading comprehension given their language experience. Our explanations are grounded in three prominent cognitive theories of reading comprehension that can inform educational practice. Our goal is to provide educators with a theoretical understanding of how reading comprehension unfolds, thereby enabling them to be strategic in their approach to reading comprehension instruction. Finally, we describe how reading strategies can support reading comprehension success and suggest teaching approaches to improve reading comprehension for SLLs.

## **Research and Theory**

In general, SLL researchers have focused on the importance of language-based skills and knowledge for reading comprehension success. They have found that in childhood SLLs exhibit word reading abilities that are similar to those of first language users (see August & Shanahan, 2006 for a review), yet SLLs often obtain lower reading comprehension scores (e.g., Aarts & Verhoeven, 1999; August & Shanahan, 2006; Geva & Farnia, 2012). Neither finding is particularly surprising. There is no reason to believe that SLLs cannot readily learn the letter-sound correspondences in their second language (L2) and consequently decode words. However, less experience in their second language makes it more challenging to acquire L2 vocabulary knowledge (e.g., Bialystok, Luk, Peets, & Yang, 2010) and thereby makes it more challenging to identify word meanings from decoded words. Likewise, less second language exposure means less familiarity with a language's grammar (Trapman, van Gelderen, van Steensel, van Schooten, & Hulstijn 2014), which may make constructing meaning more challenging. Indeed, the U.S. National Centre for Education Statistics (2015) reported that SLLs in the U.S. are obtaining, on average, basic competency in reading in both fourth and eighth grade, performance that is significantly lower than their monolingual peers.

### **Theories of reading comprehension.**

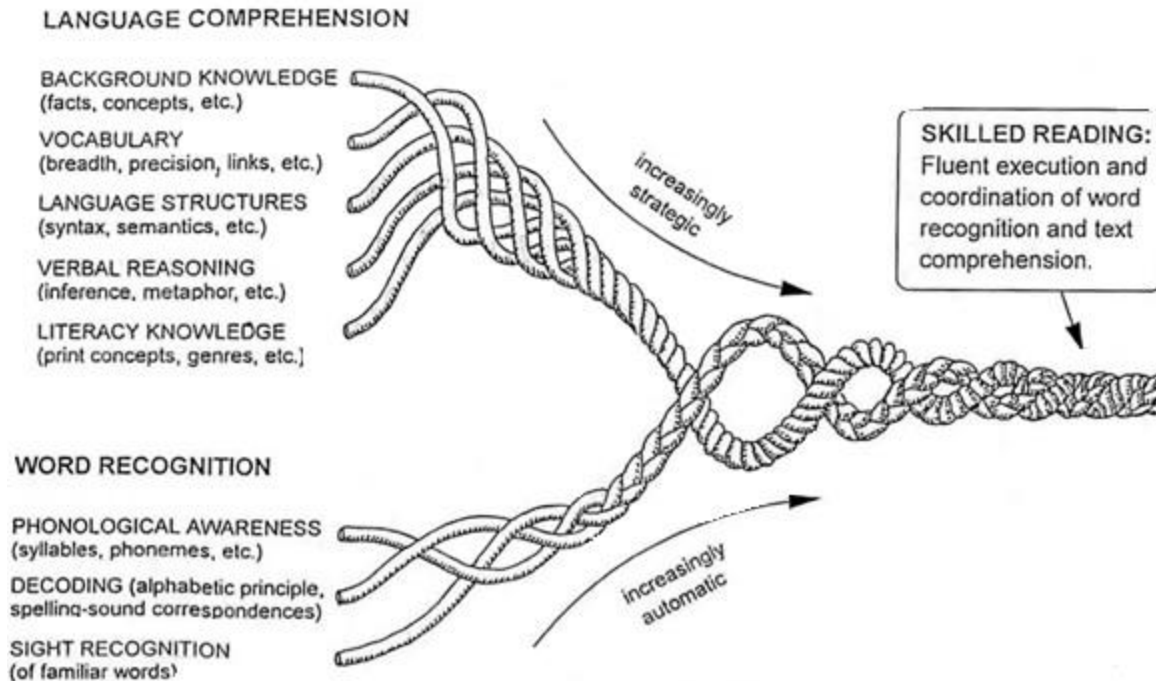
These reported findings can be explained by cognitive models of reading comprehension. These models can be applied equally to both monolingual and L2 readers. For example, the Simple View of Reading (SVR; Gough & Tunmer, 1986; see Figure 1) suggests that reading comprehension success depends on both word reading ability and language comprehension ability. Difficulties in either domain may result in poorer reading comprehension ability for both

monolinguals and SLLs. Indeed, several studies find that both L2 word reading ability and L2 listening comprehension skills predict L2 reading comprehension success (e.g., Erdos, Genesee, Savage, & Haigh, 2010; Geva & Farina, 2012; Hoover, & Gough, 1990; Sadeghi, Everatt, McNeill, & Rezaei, 2014). Thus, less experience with L2 listening comprehension can account for group differences between monolingual and second language readers.



**Figure 1.** The simple view of reading (Gough & Tunmer, 1986).

The Reading Rope Model introduced by Scarborough (2001) also highlights the important contributions of word reading and language comprehension (See Figure 2). Note that in this model, the subskills involved in word reading and language comprehension are identified and work together to produce skilled reading. As readers become more skilled, these pre-requisite components are better able to work in concert. If SLLs have less knowledge about L2 vocabulary (e.g., Bialystok et al., 2010) and L2 language structures (e.g., Trapman et al., 2014), this may undermine their reading comprehension ability according to both the SVR and Reading Rope models.

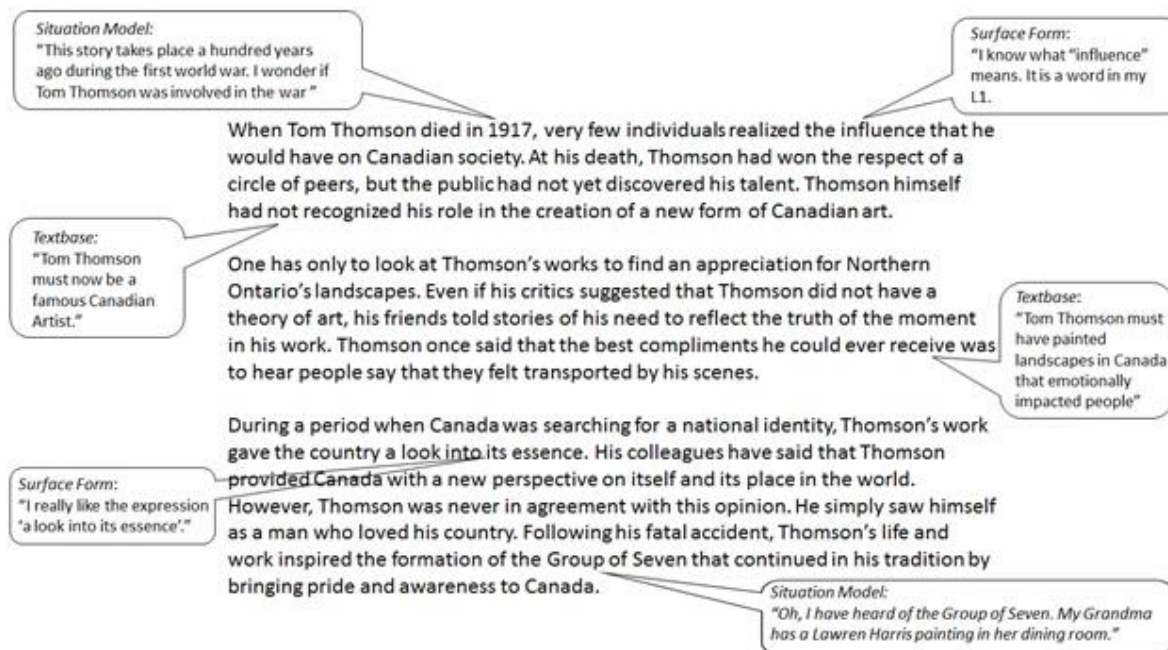


**Figure 2.** The reading rope model of literacy development (Scarborough, 2001).

Where the theories differ is that the Reading Rope model postulates that readers become more strategic in their deployment of language comprehension knowledge as they become more skilled. Since strategy use development does not come naturally, students must be taught to use these strategies to effectively attend to relevant components of texts (Dewitz, Jones, & Leahy, 2009). Strategy use becomes critical by fourth grade, since students must “read to learn” rather than “learn to read” (Chall & Jacobs, 2003). Here many students experience difficulty because the language of the content may exceed students’ current abilities and knowledge (Gee, 2008). For all students in middle and high school, instruction in strategy use enables readers to utilize their knowledge more effectively during text comprehension. This concern is particularly relevant for SLLs who may need even more support to approach these more difficult texts.

The third model outlined here is the Construction-Integration (CI) Model (Kintsch, 1998, 2005; Kintsch & van Dijk, 1978). Where the SVR and the Reading Rope Models highlight the importance of skills and knowledge sets for successful reading comprehension, the CI Model describes the development of a mental representation of the text during reading (Kintsch, 1998, 2005; Kintsch & van Dijk, 1978). The model assumes that three types of information about the text can be retained in memory: the surface form, the textbase, and the situation model. The *surface form* is the text as a verbatim word by word representation. It is rarely retained in its entirety in memory as part of a good reader’s understanding of a text, but struggling readers tend to focus on it (Faulkner & Levy, 1994). Good comprehenders form a meaning-based representation called the *textbase* which includes the main ideas from the text. However, to retain the meaning of a text in long term memory, it is integrated with already existing knowledge; this newly formed representation is called the *situation model*. Figure 3 provides examples of reading

behaviours that demonstrate the development of a surface form, textbase, and situation model.



**Figure 3.** Examples of statements that reflect the three different types of text representation according to the construction-integration model (Kintsch & van Dijk, 1978). The Passage is adapted from Friesen & Jared (2007).

To form a textbase and situation model, language knowledge that matches the degree of difficulty of the text may be required. Readers must be able to automatically identify words and their meanings, and utilize their knowledge to identify the words' role in the sentence (Sesma, Mahone, Levine, Eason & Cutting, 2009). L2 readers may find creating a textbase and situation model more challenging. Indeed, less skilled L2 readers tend to be more focused on the surface form than more skilled L2 readers (Friesen & Jared, 2007). By necessity, they may focus on identifying individual word meanings and the relationship between words rather than on combining main ideas to form the textbase or combining ideas from the text with their background knowledge to form a situation model.

### **Executive control and strategy use.**

Importantly, reading comprehension success is not solely determined by a reader's language knowledge, but also by how a reader engages in strategic behavior to understand a text (Scarborough, 2001). Less language knowledge may be supported by engaging in strategic processing (Carrell, Pharis, & Liberto, 1989; Kolić-Vehovec & Bajšanski, 2007). Strategies are behaviors that are consciously selected to facilitate understanding (Nordin, Rashid, Zubir, & Sadjirin, 2013). For example, readers decide how much time to spend looking at a word, whether to reread a section or to skip a section. They must decide when to summarize, question the text, or make predictions. To use reading strategies to form a textbase, readers depend on their executive control abilities (Arrington, Kulesz, Francis, Fletcher & Barnes, 2014; Cartwright, 2012).

Executive control is an umbrella term for cognitive processes that are required in independent goal-directed behaviour and include processes such as working memory (WM), inhibition, and sustained attention (Cartwright, 2012; Sesma et al., 2009). Individuals with faster processing speed (e.g., Christopher et al., 2016), better sustained attention (e.g., Stern & Shalev, 2013), larger working memory capacity (e.g., Christopher et al., 2016) and more effective strategy use (e.g., Sesma et al., 2009) have all been shown to demonstrate better reading comprehension success. These processes are common to all readers, but may differ in their efficiency (Arrington et al., 2014).

Working memory is the ability to keep information in memory while processing additional information (Baddeley, 2003). Working memory is necessary for readers to keep previously read information in mind while incorporating newly read information (Cain, Oakhill, & Bryant, 2004). Inhibition and sustained attention may be thought of as complementary processes and involve ignoring irrelevant information in favour of focusing on relevant content (Stern & Shalev, 2013). To comprehend texts, readers decide when to focus attention to identify main points and when to disregard less relevant information or distracting circumstances.

Strategy use is a very good indicator of skilled text comprehension (Carrell, 1989; Estacio, 2013). However, readers differ markedly in how they select strategies. Significantly, metacognition (i.e., the ability to reflect on your own cognitive processes) enables the active selection of reading strategies to improve comprehension (Kolić-Vehovec & Bajšanski, 2007). Readers must utilize executive control to identify effective strategies and dismiss strategies that are not relevant (Baker, Zeliger-Kandasamy, & DeWynngaert, 2014). Notably, readers can engage in a multitude of strategies before, during, and after reading. Each of these strategies can support the development of a mental model of the text. Teachers at all grade levels should model how readers can utilize strategies effectively, particularly if readers are encountering a new text structure (e.g., expository text).

### **Second language learners and executive control.**

Given that executive control and strategy use are key skills in successful reading comprehension, they should be considered in any instructional practice with SLLs. This is particularly true if students need to supplement their language knowledge. There are several reasons to assume that SLLs would be predisposed towards success in strategy instruction. First, several studies find that bilingual children and adults excel on non-verbal tasks that tap into executive control (e.g., Friesen, Latman, Calvo, & Bialystok, 2015; Martin-Rhee & Bialystok, 2008; Poarch & Van Hell, 2012; see Bialystok, Craik, Green & Gollan, 2009 for a review). This is believed to be the case because bilinguals gain extensive practice using these executive control skills to juggle both of their languages. Importantly, ignoring irrelevant information to focus on relevant information is also important for reading comprehension success.

The second consideration is that bilingual children also perform well on tasks that require metalinguistic awareness (see Adesope, Lavin, Thompson, & Ungerleider, 2010; Friesen & Bialystok, 2012, for a review). Metalinguistic awareness requires that attention be intentionally focused on the explicit properties of language (Bialystok, 1997). Young bilingual children recognize that names are arbitrarily assigned and interchangeable; that is, a *table* could have been labelled a *chair*. This flexibility likely arises because bilinguals learn early in language development that objects have names in both of their languages (Bialystok, 1997). Importantly, metacognitive awareness has been shown to be important in deciding which reading strategies to employ (Kolić-Vehovec & Bajšanski, 2007).

This is not to suggest that strengths in these domains means that SLLs will outperform monolinguals on reading comprehension tasks. Indeed, as we have seen above, SLLs may have greater difficulty with reading comprehension. Additionally, findings reported on executive control and metalinguistic awareness are typically observed with highly proficient bilinguals and it is not clear if similar results would be found with children with lower L2 proficiency. Nonetheless, in addition to targeting language knowledge, targeting reading strategies that capitalize on potential strengths in executive processes and metalinguistic awareness should result in improved text comprehension for L2 readers (Carrell, 1989; Estacio, 2013).

### **Strategy use.**

An understanding of what distinguishes good comprehenders from poor comprehenders with respect to strategy use is essential for targeting effective instruction. Cain et al. (2004) identified three factors that distinguish good comprehenders from poor comprehenders with monolingual students in elementary school: comprehension monitoring ability, the ability to draw inferences, and knowledge of text structure. Comprehension monitoring is a series of behaviours to ensure you understand a text. It involves behaviors such as pausing to assess your knowledge, re-reading and using context to understand. Here metacognitive ability is critical for the reader to evaluate what they understand and do not understand.

Inferential ability is the ability to draw conclusions from a text (Cain, 2010). To form a textbase, linking distinct parts of the text requires making necessary inferences. These inferences involve identifying information that is not explicitly found in the text but is required for understanding the text. For example, recognizing what pronouns refer to in a text. Elaborative inferences are made when a reader makes an inference that is not necessary to understand the text, but might link the text to their background knowledge. Knowledge of text structure refers to understanding the key features of several types of texts, for example the difference between narrative and expository texts (Cain, 2010). Knowledge of text structure enables a reader to organize incoming information more effectively and to predict upcoming events given their background knowledge of how a story typically unfolds.

Less research has examined strategy use in SLLs. One study by Jiménez, García, and Pearson (1996) investigated the reading behaviors of successful and less successful Latina/o readers in sixth and seventh grade. The Latina/o readers were biliterate in Spanish (L1) and English (L2) and had been schooled for at least four years in English in the US. Jiménez et al. found that successful Latina/o readers utilized more reading strategies than both monolinguals and the less successful Latina/o readers. Strategies they used included resolving unknown vocabulary, asking questions, monitoring comprehension, connecting text to previous knowledge, and making inferences/conclusions. Less successful Latino/a readers indicated that their main goal was to finish the text rather than understand it. They also identified words they did not know but failed to utilize strategies to resolve the unknown vocabulary. Other reading behaviors included failing to reinterpret the meaning of the text when inconsistencies were identified.

It appears that a minimum degree of language proficiency may also be necessary for readers to engage in successful reading strategies. For example, Droop and Verhoeven (1998) found that L2 readers in third grade used their cultural background knowledge to increase comprehension and reading speed when reading texts that were simpler. Once text difficulty exceeded their language ability, accessing global metacognitive strategies online was no longer possible. Both Kolić-Vehovec and Bajšanski (2007) and Carrell et al. (1989) stated that good L2

readers may compensate for a lack of L2 proficiency by utilizing additional reading strategies to support their understanding.

Indeed, Hong-Nam and Page (2014) reported that more successful L2 adult readers placed higher importance on using metacognitive/global approaches than poorer comprehenders. For example, Nordin et al. (2013) found that high achieving L2 readers spend more time on post-reading activities such as summarizing the text, posing questions, seeking additional resources. Skilled first and second language readers both engage in metacognitive strategies that remove cognitive demands by constructing a framework or scaffold on which to organize newly encountered information. They do this by making predictions, generating questions, and summarizing texts. However, in general, SLLs tend to favour problem-solving strategies that occur when difficulties are encountered (Hong-Tam & Page, 2014; Malcolm, 2009; Mokhtari & Reichard, 2004; Sheorey & Mokhtari, 2001). Although important to resolve inconsistencies, this approach is reactive rather than proactive. Engaging in behaviors such re-reading and pausing increases a reader's cognitive load by asking them to keep previously read information in mind while they resolve their confusion; this puts added strain on working memory and results in difficulty with textbase construction. Although it is unlikely that readers will be able to remove all confusion, ideally, it is better to engage in strategies that minimize the initial confusion. Importantly, comprehension monitoring during reading can be used to check predictions and organize the textbase within the framework developed prior to reading.

SLLs may fail to use proactive strategies because they do not have a “threshold” level of language proficiency (Cummins, 1991; Schoonen, Hulstijn & Bossers, 1998). This does not mean that teachers should wait until language skills develop to engage SLLs in proactive strategies. Two points are worth noting: 1) these metacognitive skills do not develop automatically and strong language abilities are no guarantee that readers will utilize these skills. Indeed, monolingual poor comprehenders do not engage these skills automatically (Cain & Oakhill, 2006). 2) A below “threshold” degree of proficiency suggests that L2 readers cannot engage these strategies independently. Thus, more than ever students need explicit instruction on how to engage these strategies for texts at their reading level. The question becomes how we can support SLLs with lower language proficiency to engage in these more effective strategies.

### **L1 knowledge and beliefs about bilingualism.**

SLLs may also benefit from relying on knowledge from their first language. However, metacognitive awareness is critical for L2 readers to utilize cross-language strategies to support reading comprehension (Jiménez et al., 1996). That is, readers need to be aware of the relationships between their languages to use shared vocabulary or to translate. For example, readers with explicit knowledge of cognate status (i.e., words that share spelling and meaning across languages, e.g., *animal* is the same word in English, French, and Spanish) have been shown to can take advantage of the shared vocabulary to improve L2 reading comprehension (e.g., Jiménez et al., 1996; Nagy, Garcia, Durgunoğlu, & Hancin-Bhatt, 1993).

In addition to cognitive factors, socio-cultural factors also impact reading success. For example, Jiménez et al., (1996) reported that successful L2 comprehenders had a positive self-concept about their bilingual status and stated that knowing two languages is beneficial. In contrast, less successful readers viewed bilingualism as a disadvantage and did not see value in engaging in cross-language strategies. Thus, it appears that explicit knowledge about the relationships between languages and the perceived value of bilingualism is critical to successful reading comprehension.



## Teaching Approaches

Although SLLs can face challenges during L2 reading particularly when reading to learn, reading strategies and choices made by the classroom teacher can support reading comprehension success (Yuill & Oakhill, 1991). First and foremost, an assessment of students' strengths and needs is paramount. Even though, on average, SLLs have lower language proficiency than their peers (Bialystok et al., 2010), this might not be the case with specific students and will undoubtedly depend on their language background. However, an awareness of their language knowledge both in the language of the classroom and their home language will help focus your choices for strategy instruction.

Given our review above, it may seem reasonable to target underlying executive control skills, such as working memory or attention that support strategy use, directly. However, unless a student is struggling with attention and working memory, we would not recommend this method. There is mixed evidence about whether targeting working memory directly will lead to improvement in a more complex task like reading comprehension (Dahlin, 2011; Carretti, Caldarola, Tencati, & Cornoldi, 2014). Working memory training programs consistently improve performance on working memory tasks, but generally do not meaningfully affect abilities like problem solving or reading comprehension (Harrison et al., 2013). Thus, we recommend teaching reading strategies that will decrease some of the demands placed on executive control and improve the development of a textbase and situation model.

One approach that is specific to SLLs is to encourage students to make direct links between their first and second languages (D'Angelo, Hipfner-Boucher, & Chen, 2017; Jiménez et al., 1996; Nagy et al., 1993). Students with strong oral language or literacy skills in their home language may engage in comprehension strategies to associate what they read in their L2 to their first language, either by translating the text or identifying similar and different language structures (e.g., shared syntactic forms or shared vocabulary). A key factor is that students are explicitly aware of these relationships between their languages and can analyze their value (e.g., D'Angelo et al., 2017; Jiménez et al., 1996; Nagy et al., 1993). Additionally, opportunities to read an L1 translation can solidify the development of a good situation model of a L2 text (Friesen & Jared, 2007). By relying on representations in the first language, SLLs can reduce the cognitive load produced by reading in their second language.

L2 readers can also be taught to effectively anticipate and organize the content of a text as part of effective strategy instruction (e.g., Carrell et al., 1989; Padrón, 1992; Razi, 2014). Engaging in pre-reading activities that involve activating background knowledge and emphasizing text structure, enable students to predict both the content and the structure of a text (Cain, 2010). Consequently, readers can insert content into the framework they have already created and can start to build a situation model by making links between the content on the page and their background knowledge or their first language. Teachers may facilitate this process by providing graphic organizers as the basis for the development of a textbase/situation model and by explicitly teaching students the importance of creating their own textbase and situation model. Of key importance is to make explicit the processes that skilled readers may take for granted.

To decrease the cognitive load for SLLs during L2 reading comprehension, you can make explicit the strategies that successful readers engage in implicitly during reading itself. Targeting metacognitive knowledge and strategy use can improve reading comprehension in L2 (e.g., Carrell et al., 1989; McKeown & Gentilucci, 2007; Razi, 2014); importantly, such instruction

can support all learners, but these elements are often not explicitly included in curricula (Dewitz et al., 2009). Key for both educators and students alike is an understanding of why engaging in such strategies enables the development of a good mental model of a text.

Table 1 outlines specific steps for how to make strategy use an explicit process. First, it is important for teachers to assess what strategies their students are already using as well as whether they are effective in supporting reading comprehension development, so that they can plan their strategy instruction appropriately. This can be done with “think-alouds” (Seipel, Carlson, & Clinton, 2017). A think-aloud offers the observer an opportunity to determine what strategies the reader uses to facilitate comprehension by asking them to report what they are thinking during reading (Myers & Lytle, 1986). It provides a more nuanced approach to understanding students’ processing during reading comprehension tasks than a text summary or comprehension questions do (Caldwell & Leslie, 2010). Indeed, as a teacher, you may already model your own comprehension strategies (Wang, 2016; Fisher, Flood, Lapp, & Frey, 2004) and this is one way of introducing your students to effective strategies that can be used for pre-reading, during reading, and post-reading. Finally, it is important that students engage in an evaluation whether their chosen strategies led to successful comprehension and that they can select a different strategy if necessary. This requires a degree of self-regulation, or learners’ personal control of the learning environment and their behaviour in it (Svinicki, 2010). Monolingual studies suggest a positive effect of integrating self-regulated learning strategies with more general reading comprehension strategies (Mason, 2013; Stoeger, Sontag, & Ziegler, 2014), although it remains to be seen whether these results extend to SLLs (Stoeger et al., 2014).

**Table 1.** Advice for Teachers on Making Strategy Use an Explicit Process.

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1. Identify what comprehension strategies your students are currently employing by asking them to read or listen to a short text and report on their thought processes.
  2. Identify what the common strategies are within your classroom and whether they are leading to successful comprehension.
  3. Introduce your students to effective strategies that can be used for pre-reading, during reading and post-reading.
  4. Explicitly discuss with your students how a text is remembered and how strategies aid in the construction of a text representation.
  5. Teach and encourage your students to evaluate whether their chosen strategies lead to successful comprehension and to select a different strategy if necessary.
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Another teaching approach that is associated with think-alouds and can facilitate the development of skilled strategy users is the interactive read-aloud. A significant difference between the two is that content raised during interactive read-aloud is deliberately selected by the classroom teacher. Commonly associated with the preschool and early elementary grades, an interactive read-aloud is a “planned oral reading of a book or story in which the teacher builds background knowledge, explicitly teaches vocabulary, reviews text structure, and models comprehension strategies in text” (Fien et al., 2011, p. 308), all while using a text that is at an appropriate level of difficulty and that a student can relate to. Table 2 provides questions you

should consider to plan an effective read-aloud. A recent review of the literature on read-alouds suggests that well-planned, engaging, and interactive read-alouds are effective in developing students' comprehension skills, and recommends that they be used even more frequently to support comprehension development for students at-risk (Lennox, 2013). An important caveat to this is that the complexity of the language used during these interactions should be matched to the students' level of understanding (Mascareño, Snow, Deunk, & Bosker, 2016), a potential challenge in today's diverse classrooms.

**Table 2.** Effective Reading Strategies, Teacher Considerations and Text Representation Development during a “Read aloud”

	<b>Strategy</b>	<b>Teacher Considerations</b>	<b>Text Representation Level</b>
Pre-reading	Identifying reading goals	<i>What are the goals of reading the text?</i>	
		<i>Acquire language knowledge?</i>	Surface Form
		<i>Acquire content?</i>	Textbase
		<i>Link content to background knowledge?</i>	Situation Model
	Activating relevant background knowledge		
	- Content	<i>What do students already know about the content?</i>	Situation Model
	- Text structure	<i>Do students know the features of an expository text? A narrative text?</i>	Surface Form
	- Vocabulary	<i>What terminology should be reviewed to support student reading?</i>	Surface Form
	Global predictions	<i>How can the type of predictions students make inform the level of scaffolding needed?</i>	Situation Model

During Reading	Comprehension monitoring	<i>Given the pre-reading, where in the text might difficulty arise?</i>	All Levels
	- Checking understanding		
	- Pausing and re-reading	<i>How can comprehension monitoring behaviors be modelled to confirm understanding or resolve any difficulties?</i>	All Levels
	- Evaluating predictions		
	- Questioning		
	- Visualization		
	Necessary inferences	<i>How can I explicitly demonstrate how necessary inferences that skilled readers make implicitly facilitate the development of a textbase?</i>	Textbase
	Elaborative inferences	<i>How can I demonstrate how elaborative inferences enable readers to make connections between their background knowledge and the text?</i>	Situation Model
After Reading	Summaries, Conclusions and Extensions	<i>How can I help students reinforce the main ideas and consolidate it with their background knowledge?</i>	Textbase and Situation Model

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Other specific approaches such as Concept Mapping and Experience-Text-Relationship (ETR) each have features that make explicit the development of a textbase and situation model. In concept mapping, instructors and students can predict or record the text's main concepts and their associated ideas. These concepts are linked to form a graphic representation of the relationships in the text (Carrell et al., 1989; Teo, Shaw, Chen & Wang, 2016). This technique produces a visual representation of the connections that the student should make while reading and forming their textbase; it also enables the teacher to introduce new vocabulary to support students' reading and to assess prior knowledge to see if more support is warranted. In the ETR method, emphasis is placed on activating relevant background knowledge by engaging in discussion on students' personal experience, then the text is introduced, and explicit connections are made between the two. This approach serves to model students' development of a situation model. These teaching approaches that support the development of the textbase and situation

model result in significant improvements in reading comprehension performance (Carrell et al., 1989; Liu, Chen, & Chang, 2010). The development of a situation model enables students to synthesize and evaluate text content in relation to their previous knowledge.

Engaging in a reciprocal teaching approach wherein teachers and students engage in a dialog about when and how to use strategies (i.e., summarizing, self-questioning, clarifying, and predicting) has also been shown to be effective for SLLs (McKeown & Gentilucci, 2007; Padrón; 1992). Padrón (1992) found that middle school students who received reciprocal instruction in these skills outperformed students who did not receive this intervention on summarizing and self-questioning behaviours. Ideally, the ability to discuss effective strategy use results in self-regulated readers who can maximize their understanding of a text and ultimately evaluate content based on their own experience.

Importantly, students must receive sufficient support to know when each strategy is appropriate so that they can self-regulate their strategy use as needed. Key here is helping the student select strategies that are appropriate in different contexts. Note that it is a bit problematic to label someone a poor comprehender or a skilled comprehender, since comprehension is predicated on both readers and on text difficulty. McKeown and Gentilucci (2007) found only students with intermediate language knowledge exhibited some evidence of reading comprehension improvement when required to pause at pre-determined points during reading and respond to questions. Students with minimal L2 knowledge had insufficient knowledge to answer comprehension questions and skilled readers were unnecessarily asked to focus on content they already understood. However, it may be the case that reading strategies that students are unable to use with more difficult texts may be available to the reader with easier texts (Droop & Verhoeven, 1998). Ideally, teachers can introduce strategies and slowly remove supports by moving from modeling to guided practice to independent reading. The reader then has the tools to determine which strategies are going to be most effective for a given text. However, support may need to be reinstated as text difficulty increases.

## CONCLUSION

In summary, several factors impact whether reading comprehension will be successful for SLLs. Although we recognize the importance that improving language knowledge has on reading comprehension ability, here we advocate for the equal importance of supporting readers' ability to use strategies to construct meaning from print. Reading strategies can alleviate the cognitive load placed on working memory thereby allowing more reading comprehension success. Importantly for teachers is to understand how they can use strategy instruction to help SLL readers generate a mental representation of the text. Equally important is for teachers to make explicit these skills so their students can also articulate how a mental model is formed. Ideally, engaging in these effective strategy instruction practices can support both language development and reading success for all.

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