

Theoretical Analysis, Classroom Practice, Opinion Essays

Metacognition and Language Learning: Creating Effective K–12 Learners

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Abstract

In British Columbia's K–12 schools, five years of funded English Language Learning support is frequently not enough to help English language learners fully develop their English language proficiency. This critical analysis examines the literature on metacognition and language learning to find practical metacognitive instructional features to equip students who are learning English as an additional language with the awareness and the strategies they need to effectively further develop their academic language. By analyzing and synthesizing the literature, it is clear that several models of metacognition have been developed. Yet, there is still a need for a fuller model to be developed, thus helping educators better understand how metacognitive instruction can be implemented. Furthermore, little research can be found on metacognitive instruction with K–12 language learners. Therefore, theme analysis for effective features of metacognitive instruction with post-secondary language learners was used to uncover the most useful characteristics which might prove promising for K–12 students in British Columbia. The result is the identification of four features of effective metacognitive instruction that could be used in conjunction with a proposed fuller model of metacognition in language learning.

Introduction

It generally takes a language learner six months to two years to develop their Basic Interpersonal Communication Skills (BICS) or social language, and then it takes at least another five years, often more, to build their Cognitive Academic Language Proficiency (CALP) or academic language and structures (e.g. Cummins & Early, 2015). In British Columbia's (B.C.) public schools, the provincial government provides funding for auxiliary English Language Learning (ELL) services to qualifying students for up to five years (British Columbia Ministry of Education, 2018). Therefore, ELL support frequently ends before students finish developing their CALP. For those who have a strong aptitude for language learning and/or access to additional support this is not a significant issue. For other students who struggle with language learning and lack access to support beyond the classroom, it can mean years of academic challenges and reduced educational opportunities.

There is strong evidence that metacognitive instruction can improve language learning performance (e.g. Raoofi, Chan, Mukundan & Rashid, 2013). Furthermore, the use of metacognitive strategies for language learning “can lead to more profound learning and improved performance, especially among learners who are struggling” (Anderson, 2002, p. 3). Although research on the role of metacognition in language learning spans four decades (e.g. Flavell, 1979; Goh, 2019), there are gaps in the literature that need to be addressed. First, a fuller model of the role of metacognition in language learning needs to be developed to help educators better understand it. Secondly, research on metacognitive instruction with K–12 ELL students is

sparse and needs more attention. As a result, this inquiry reviews the literature on the topic and proposes a fuller metacognition model based on the work of several prominent scholars. It also identifies four metacognitive instructional features that research suggests would be effective with K–12 ELL students in B.C.

Complications with CALP and ELL

Cummins was the first to use the term cognitive academic language proficiency (CALP), using it to refer to “the dimension of language proficiency which is strongly related to overall cognitive and academic skills” (1979, p.2). CALP is the intersection between language proficiency with cognitive and memory skills, and it is a “major determinant of educational progress” (Cummins, 1980, p. 178). Many of the ELL students in B.C.’s K–12 public schools start their language learning in the early primary grades. Some of these students stop using their first language by their intermediate years, and those who continue using it at home may not have opportunities to develop their CALP in it (Roessingh & Elgie, 2009). Because CALP proficiencies in both first and additional languages have been found to stem from the same underlying dimension, younger learners whose CALP is not well developed in their first language will take longer to build their additional language CALP (Cummins, 1979; 1980). Thus, many early-entry ELLs will take longer than five years to develop their CALP in English to a level as high as is required for academic success and the opportunities provided by that success. Since the number of ELL students in B.C. schools that qualify for language learning support has been increasing for decades (British Columbia Teachers’ Federation, 2019), this is an issue that is pertinent for a growing number of students in the province.

Although the BICS/CALP framework is subject to criticism, it provides consistent and familiar terminology among scholars and practitioners. Critics of this theory have purported that the distinction between the two measures has “created an artificial and arbitrarily delineated dichotomy” (Rolstad & MacSwan, 2008, p. 63). Auckerman (2007) explained that this distinction may not be useful for young ELLs because it may cause assumptions that they are not ready to learn. Flores (2020) argued that this type of framework can cause educators to view students from some communities as linguistically deficient. Other critics also view this framework as a deficit theory (Rolstad & MacSwan, 2008). It is not the intention of this inquiry to view ELLs as deficient, but rather understand how they can be empowered to have the same educational success and opportunities as those who demonstrate strong academic language proficiency. Not acknowledging the learning needs of ELLs could result in those needs being overlooked.

Some of the alternative terms put forward for avoiding deficit implications underscore just how valuable metacognition can be for ELLs and their asset of knowing two or more languages. For example, Auckerman (2007) suggested using the term recontextualization, which refers to using what children already know to build their language knowledge. Indeed, when a student knows two or more languages, metacognition can help make them aware of their understanding of these languages and allow them to capitalize on it. Flores (2020) proposed the term language architecture as an alternative framework that encourages appreciation that language learners “are able to manipulate language for specific purposes” (p. 25). This term also corresponds well with the use of metacognition in language learning as it highlights the need for

students to work with their knowledge consciously. However, CALP and academic language are the terms that educators are most familiar with in practice. The BICS/CALP framework also allows educators to assess their students for where they are in developing their language proficiency. Using this framework for assessment is a significant component of understanding how ELL support can empower students.

Regardless of terminology, ELL students must learn the necessary skills to become effective language learners throughout their educational journey so that they can access academic opportunities that they may desire. By understanding the role that metacognition plays in a higher level of language proficiency, like CALP, educators might determine how metacognitive instruction could help these learners exercise some personal agency in the further development of their additional language proficiency.

The Link Between Metacognition and Language Proficiency

Metacognition, or the ability to think about one's thinking, plays an essential role in language learning (Anderson, 2002; Flavell, 1979). The literature on metacognition suggests that it helps learners take control of their learning by allowing them to make conscious decisions to maximize their learning opportunities. There are three types of evidence that metacognition plays a critical role in the development of academic language proficiency. One type of evidence is research that explores the characteristics of "good language learners," or learners that demonstrate a particular aptitude for learning new languages. This research finds these learners demonstrate strong metacognitive knowledge and use of metacognitive strategies (Alghamdi, 2016; Hong-Nam & Leavell, 2007; Nazri, Yunus & Nazri, 2016; Rubin, 1975; Wang, Spencer & Xing, 2009). The second type of evidence is the literature that explores what strategies are used by learners with different levels of language proficiency. Several studies in this area demonstrate that high levels of language proficiency, which is part of CALP, are associated with greater use of metacognitive awareness and strategies as well as more variety in their use (Al-Alwan, Asassfeh & Al-Shboul, 2013; Li, 2007; Mutar, 2018). The third type of evidence can be found in studies that demonstrate correlations between language skills and use of metacognitive strategies. These studies provide evidence that the use of metacognitive strategies is strongly and positively correlated with the language skills of CALP (Phakiti, 2003; Purpa, 1998; Setiyadi, Mahpul, Sukirlan & Rahman, 2016, Teng & Chan, 2008; Vandergrift, 1997). Table 1 on the next page highlights the findings of these three types of research.

Some drawbacks to this argument should be considered. Correlations need to be viewed with some caution since a correlation does not imply causation. Another factor contributing to higher levels of language skills and the use of metacognitive strategies could exist. One more important note to make is that most of the studies noted above were done with university-aged students. Some of this research may not translate precisely to K–12 learners. Only the four studies indicated in *italics* in Table 1 were done with students at the middle and high school levels. Nevertheless, taken as a whole, this body of research provides strong evidence that metacognition plays a critical role in the development of academic language proficiency.

Table 1

Three Types of Evidence for the Influence of Metacognition on CALP

Studies that Examine the Characteristics of Good Language Learners	Studies that Examine the Strategies used by Highly Proficient Language Learners	Studies that Examine the Use of Metacognitive Strategies correlated with Language Skills
<p>Good language learners:</p> <ul style="list-style-type: none"> • Monitor their speech and that of others (Rubin, 1975) • Learn from their mistakes (Rubin, 1975) • Have metacognitive beliefs of confidence in their language learning ability (Wang, et al., 2009) • Frequently use language learning strategies, especially metacognitive strategies (Nazri, et al., 2016) • Prefer metacognitive strategies (Hong-Nam & Leavell, 2007) • Demonstrate more self-management (Alghamdi, 2016) 	<p>Provide evidence that:</p> <ul style="list-style-type: none"> • Proficiency in English as a second language (ESL) is associated with the metacognitive strategies of prioritizing learning, creating practice opportunities, directing attention, and self-evaluating (Li, 2007) • <i>There is a significant correlation between listening comprehension and metacognitive awareness that was largely explained by the problem-solving and planning/evaluation components of metacognitive strategies (Al-Alwan, et al., 2013)</i> • <i>Students with high levels of language proficiency use a greater variety of strategies including metacognitive strategies (Mutar, 2018)</i> 	<p>Use of metacognitive strategies correlates with:</p> <ul style="list-style-type: none"> • <i>More successful listening in a second language (Vandergrift, 1997)</i> • English as a foreign language (EFL) reading achievement (Phakiti, 2003) • <i>Language test performance (Purpa, 1998)</i> • Better EFL listening performance (Teng & Chan, 2008) • Better overall language performance (Setiyadi, et al., 2016)

*Findings in *italics* were discovered with middle and high school students.

Inquiry Methods

This inquiry uses a pragmatic lens to examine the literature on metacognition, its role in language learning, and how to develop it, with the purpose of adapting instruction delivered to ELL students to promote their development of metacognition. In this manner, ELL students can continue developing their CALP even if further support is not available, and if it suits their personal goals. Therefore, the questions explored for this purpose are:

- What role does metacognition play in language learning?
- What does the literature have to say about metacognitive instruction?
- How can this knowledge help educators develop the metacognition of ELLs in B.C. schools?

The literature included in this inquiry project was collected by searching the ERIC database and the University of Calgary's Primo library system for peer-reviewed research. The search terms used included: metacognition, metacognitive strategies, metacognitive awareness, and metacognitive instruction along with English as a second language, ESL, English as a foreign language, EFL, English language learners, ELL, cognitive academic language proficiency, and CALP.

Twenty-seven relevant studies were found and used. Critical analysis and synthesis were then used to integrate the different streams of research found. Torraco (2005) has explained that synthesis should be done with critical analysis because "new knowledge about previous research is created through critical analysis; and synthesis builds on this to create new perspectives on the topic as a whole" (p. 363). This critical analysis and synthesis was done according to the research question it addresses. It was then synthesized by comparing, contrasting, and critiquing previous models and formulating a more inclusive model. Finally, findings were analyzed by coding and clustering them around themes.

What Role Does Metacognition Play in Language Learning?

Analysis

Four decades ago, Flavell (1979) explained that metacognition is "knowledge and cognition about cognitive phenomena" (p. 906). He was the first to link metacognition to the significant role that it plays in language. Flavell described metacognition as consisting of three components whose combined function is to monitor cognition and cognitive functioning, both of which are imperative to the development of language skills. These components are metacognitive knowledge, experiences, and strategies.

The first component, metacognitive knowledge, is stored knowledge about how people think while completing cognitive tasks. This component can be further broken down into three categories: person, task, and strategy. Person knowledge refers to knowledge about one's self and others' thinking abilities. Task knowledge pertains to what is involved in completing a task, and strategy knowledge includes what strategies might help accomplish a learning goal (Flavell, 1979). Later Wenden (1998) added the concept of domain knowledge which is knowledge of subject matter, and Chamot (2005) used the term world knowledge as a broader more encompassing term.

The second component, metacognitive experiences, refers to moments when a learner is in a cognitive process and aware of the sort of progress they are making. These experiences invoke strategies related to goals and actions that monitor the cognitive processes. These metacognitive experiences lead learners to the third component, metacognitive strategies. These

are the strategies consciously used to understand and process cognitive information. Flavell (1979) believed that these strategies were for both language learning and use.

Nearly two decades later, interest in metacognition and language learning began to bloom, and several scholars focused solely on the component of metacognitive strategies by defining and explaining what they were and how they related to one another in the context of language learning (Anderson, 2002; Chamot, 2005; Vandergrift, 1997; Wang et al., 2009). Coding and theme analysis were used to determine these metacognitive strategies and are shown in Table 2. One scholar that went beyond this sole focus on strategies was Wenden (1998).

Table 2

Themes Found for Metacognitive Strategies

Literature on Metacognitive Strategies	Themes Identified
Wang et al. (2009)	<ul style="list-style-type: none"> ▪ Monitoring ▪ Perseverance/Problem Solving ▪ Goal Setting/Planning
Anderson (2002)	<ul style="list-style-type: none"> ▪ Planning ▪ Problem Solving ▪ Monitoring ▪ Evaluation
Vandergrift (1997)	<ul style="list-style-type: none"> ▪ Planning ▪ Monitoring ▪ Problem Identification ▪ Evaluation
Chamot (2005)	<ul style="list-style-type: none"> ▪ Planning ▪ Monitoring ▪ Problem Solving ▪ Evaluation

The purpose of Wenden's (1998) literature review was to build on Flavell's (1979) model and show how metacognitive knowledge influences the strategies used. Through this deconstruction, Wenden also illustrated how the use of strategies can build metacognitive knowledge. Also, Wenden (1998) illuminated how the reciprocal relationship between metacognitive knowledge and strategies is mediated through metacognitive experiences. These experiences lead to decisions about what to do about learning, and this monitoring encourages the expansion of metacognitive knowledge.

Synthesis

More recently, Goh (2019) has promoted the use of a model of metacognition based on the ones created by Flavell (1979) and Wenden (1998). This promotion is due to the issue of more current frameworks focusing just on metacognitive strategies and overlooking the pre-eminence of

metacognitive knowledge in the broader construct of metacognition. However, the older models used by Flavell (1979) and Wenden (1998) are limited in the identified processes involved in using metacognitive strategies. Thus, Goh (2019) argued for a broader framework that focuses on both knowledge and strategies so that it can be used by educators and researchers consistently. This is the purpose of the model illustrated and proposed here, see Figure 1. It is based on the information presented in this section.

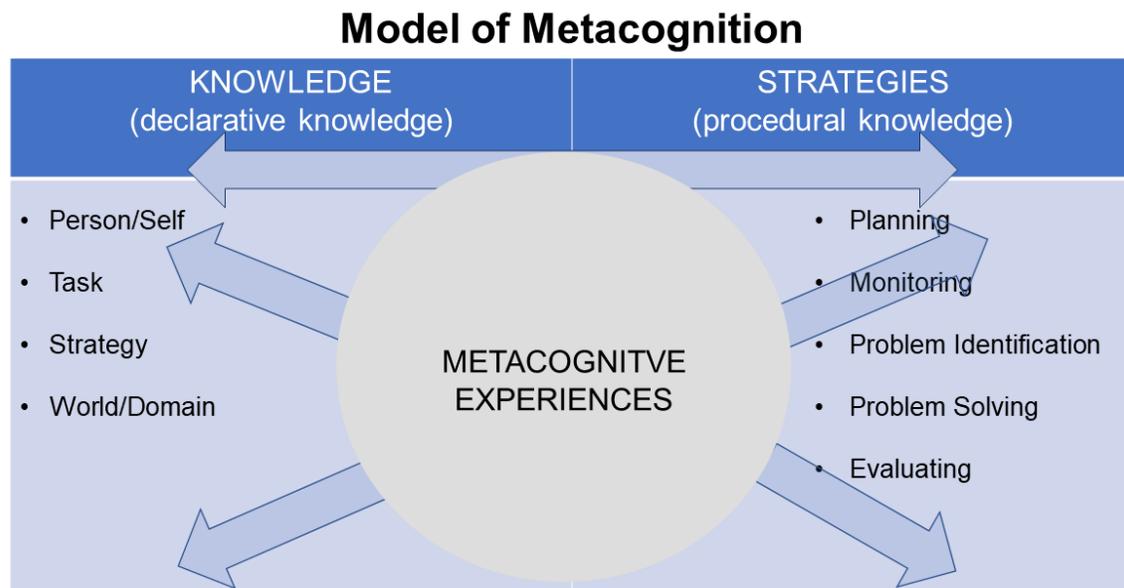


Figure 1. Proposed model of metacognition.

This model illustrates the reciprocal relationship of metacognitive knowledge and strategies (Chamot, 2005; Wenden, 1998), includes expanded components of each (Anderson, 2002; Vandergrift, 1997), and places metacognitive experiences in the centre to demonstrate how these experiences build both knowledge and strategies (Flavell, 1979; Wenden, 1998). This proposed model of cognition could serve as a conceptual framework for deepening teacher understanding of metacognition in language learning, which is one of the useful features of metacognitive instruction that was found through the next inquiry question.

What Does the Literature Have to Say About Metacognitive Instruction?

Critical Analysis

Research on metacognitive instruction is complex. In a comprehensive study that examined empirical data from several studies, Raofi et al. (2013) found mixed evidence that metacognitive interventions improve metacognitive awareness and strategy use. Just over half of these studies found positive results for this conclusion. However, all the studies investigating whether metacognitive instruction (MI) could improve language learning performance did indeed find this result. In addition, several studies demonstrated that strategy-focused MI helps learners become more self-regulated and effective in their language learning (Raofi et al., 2013).

Perhaps metacognition is more challenging to evaluate than language performance. It seems relevant to ask what is more pertinent, that MI develops metacognition according to particular evaluation methods or that it improves language learning? Since the purpose of this analysis is to support ELLs in becoming more effective language learners so that they can play a role in developing their CALP, it seems logical to conclude that since there is a great deal of evidence that MI improves language learning performance, then it is worthwhile to examine what constitutes effective MI.

Much of the research done on MI for improved language learning has been done with university-aged students in an EFL context. Research with K–12 ELLs is sparse, but there are some relevant studies. McKeown and Gentilucci (2007) argued that their findings suggest that when it comes to reading, a threshold level of competency needs to be reached before a metacognitive strategy like the Think-Aloud Strategy will be helpful. This finding is significant in that it implies that it would be more logical to use MI with students once they have developed threshold levels of competency in language and academics. Therefore, focusing on MI after the primary (K-3) years and after the development of BICS might be prudent.

Goh and Taib's (2006) study with 11 and 12-year-old ESL students in Singapore found that all ten of the students developed their metacognition of task and strategic awareness for listening as well as confidence in their personal ability to complete listening tasks. The MI in this study included traditional listening exercises, reflections on listening experiences, and teacher-facilitated discussions focussed on metacognitive knowledge about listening. Unfortunately, it was a rather small-scale study. In a similar vein, but done on a much larger scale, Vandergrift (2002) used reflection on the listening process to develop metacognitive knowledge to improve listening performance with 420 French as a second language learners in Grades 4–6 and found positive results. Here the learning activities were followed with class discussions to prompt reflection on what happened during these tasks and how it was helpful. Based on these three studies, it could be summarized that reflections during group discussions and after well-crafted activities are more effective than reporting reflections during a task (Goh & Taib, 2006; McKeown & Gentilucci, 2007; Vandergrift, 2002).

Synthesis

With decades of research in the area of metacognition and language learning, it is hard to ignore the large quantity of work out there by prominent scholars who have delved deeply into this topic through literature reviews as well as studies done on MI with university students. Several themes can be found in this extended body of research. Table 3 demonstrates the theme analysis done with the coding of this research. By far the most prevalent themes were explicit instruction of metacognitive strategies (Anderson, 2002; Bozorgian, 2014; Chamot, 2005; Cubukcu, 2008; Pintrich, 2002; Raoufi et al., 2013), reflection and other awareness-raising activities, as was mentioned in the above studies (Goh, 1997; Goh & Taib, 2006; Pintrich, 2002; Vandergrift, 2002; Wenden, 1998), integrating and embedding MI into content (Goh, 2019; Pintrich, 2002; Sato & Loewen, 2018), and teachers' understanding of metacognition and MI (Anderson, 2002; Goh, 2019; Wenden, 1998). These factors should play a pivotal role in answering the next question of this inquiry.

Table 3

Themes Found in Research on Metacognitive Instruction (MI)

Study Findings and Literature Review Recommendations (in italics)	Themes Identified
Corrective feedback accompanied with integrated MI that explained the usefulness of activities to students and used prolonged training was better at promoting L2 development than corrective feedback alone (Sato and Loewen, 2018).	<ul style="list-style-type: none"> ▪ Integrated into Content ▪ Awareness-Raising ▪ Prolonged Instruction
Teaching the metacognitive strategies of planning, monitoring, and evaluation through the pedagogical cycle improved listening skills (Bozorgian, 2014).	<ul style="list-style-type: none"> ▪ Explicit Strategy Instruction
Using systematic direct instruction for metacognitive reading strategies found significant improvements for both reading comprehension and vocabulary (Cubukcu, 2008).	<ul style="list-style-type: none"> ▪ Direct/Explicit Strategy Instruction
Through the use of listening diaries many students demonstrated strong awareness of the three aspects of listening (Goh, 1997).	<ul style="list-style-type: none"> ▪ Reflection/Listening Diary
<i>Pintrich (2002) recommended that metacognitive knowledge 1) needs to be taught explicitly, 2) MI is embedded into content lessons, 3) metacognition should be explicitly labelled when it comes up, 4) MI be made part of everyday classroom discussions, 5) metacognitive strategies are modelled for students.</i>	<ul style="list-style-type: none"> ▪ Explicit Instruction ▪ Integrated/Embedded into Content ▪ Awareness-Raising Activities ▪ Classroom Discussions/Reflection ▪ Model Strategies/Explicit Strategy Instruction
<i>Wenden's (1998) recommendations for strategy instruction: Teachers should 1) inform learners of the purpose of the strategy being taught 2) explain what the strategy is used for 3) help learners understand what tasks a strategy can be used for 4) advance their understanding of their learners' metacognition, 5) encourage the use of awareness-raising activities that elicit a learners' metacognition, get them to articulate this awareness, challenge them with alternative views, and have them reflect on what has been learned. 6) understand the importance that instruction helps students learn how to learn.</i>	<ul style="list-style-type: none"> ▪ Explicit/Direct Strategy Instruction ▪ Teachers' Understanding (of student metacognition) ▪ Awareness-Raising Activities ▪ Reflection Activities ▪ Teacher Understanding (importance of)
<i>Anderson (2002) recommended educators should: 1) be explicit about the goal of lessons and guide learners to set their own goals 2) explicitly teach learning strategies 3) have learners stop and ask themselves if they are using the strategy as they should 4) help them see the variety of strategies they could use for a task 5) ask them to reflect on each component of strategy use.</i>	<ul style="list-style-type: none"> ▪ Explicit Strategy Instruction ▪ Explicit Purpose ▪ Application Activities ▪ Teacher Understanding (of metacognition for guidance)
<i>Chamot's (2005) review of literature on LSI summarizes that explicit instruction of learning strategies is more effective than implicit instruction, and it fosters metacognition</i>	<ul style="list-style-type: none"> ▪ Explicit Strategy Instruction
<i>Goh (2019) argued for embedding strategy learning and metacognitive knowledge development in everyday language learning tasks. Additionally, Goh explained the importance of teachers' conviction of the effectiveness of MI and how it can be integrated into their teaching.</i>	<ul style="list-style-type: none"> ▪ Embedded into Content ▪ Teacher Understanding (importance of)

How Can This Knowledge Help Educators Develop the Metacognition of ELLs in B.C. K–12 Schools?

Discussion and Implications

Goh (2019) pointed out that to avoid the argument that strategy instruction might take too much time away from content teaching, educators should “embed strategy learning and metacognitive knowledge development in everyday language learning tasks” (p. 274). Embedding and integrating MI into content is an essential factor for the context of B.C. public schools. Since most ELL students in B.C. are taught using content-based instruction in mainstream classrooms, it would be challenging to take time away from the curriculum to focus on developing metacognition. Even when ELL support is provided through small group pull-out, it is still meant to focus on the language learning goals determined for students and support their grade level curriculum. Additionally, embedding MI into content promotes connectivity between the process and using it to learn more effectively (Azevedo, 2020). Explicit strategy instruction is one way to integrate MI into the content.

The call for the teaching of metacognitive strategies and making it explicit is overwhelming: “Research reveals that explicit strategy instruction is an effective way to enhance learners’ awareness about the learning strategies” (Raoofi, 2013, p. 36). Chamot (2005) explained it is “more effective than simply asking students to use one or more strategies” (p. 123). It seems plausible that explicit strategy instruction would foster metacognition in students by making them more aware of the strategies they can and do use, thus expanding their metacognitive experiences and further developing their metacognitive knowledge. The metacognitive strategies that should be taught are listed in the proposed model above (Figure 1) and were derived from the themes found in the literature (Table 2). This explicit strategy instruction is consistent with another theme that was found: reflection and awareness-raising activities.

A common theme among the awareness raising-activities brought up in the literature is that they involve reflection. These activities included listening diaries (Goh, 1997), the Think-Aloud strategy (McKeown & Gentilucci, 2007), and class discussions (Goh & Taib, 2006; Pintrich, 2002; Vandergrift, 2002; Wenden, 1998). The Think-Aloud strategy produced mediocre results, and it requires a great deal of time for one-on-one conferences. Diary entries regarding personal reflections on strategy use would be more reasonable to use, but they do not allow for the constructive and collaborative building of ideas like classroom discussions do. Classroom discussions are easy to fit into the day and therefore ensure time for content learning. Since some additional language learners are more reluctant to share ideas orally, brief journal entries or small group sharing before whole-class discussions might be helpful for these students. This strategy was also a noted feature found in the small body of research done with similarly aged students (Goh & Taib, 2006; Vandergrift, 2002).

Teachers may not use strategy instruction if they are not convinced of its effectiveness or understand how it can be integrated into their teaching (Goh, 2019). Additionally, metacognitive instruction requires that teachers guide learners through the process of using those strategies (Anderson, 2002), and craft metacognitive experiences for them (Flavell, 1979) to expand their

knowledge and strategies (Wenden, 1998). For this purpose, all teachers need to understand the role that metacognition plays in language learning, and this role of metacognition is where the results of this inquiry, and the fuller proposed and illustrated model of metacognition can guide both classroom and support teachers.

Limitations

One must also consider the affective barriers that can interfere with additional language learning. Using metacognition to deal with these issues, such as regulating emotions, motivation, and the social processes falls under the subject of self-regulation. This literature review has not examined the role of self-regulated learning (SRL) in language learning. Azevedo (2020) highlighted the need “to avoid the common interchangeable use between metacognition and self-regulated learning” (p. 92) because distinctions between the two are needed to advance an understanding of each topic. In B.C.’s public schools, the topic of self-regulation is currently quite popular. For example, a google search of “self-regulated learning,” “workshops,” and “B.C.,” reveals numerous professional resources, and an M.Ed. program is even offered through a B.C. university. However, a similar search for “metacognition,” “workshops,” and “B.C.,” reveals that resources in this area are not as available. Yet, there is a critical need for metacognitive training for teachers since they cannot be expected to teach metacognition if they do not understand it (Azevedo, 2020). The purpose of this inquiry was to delve into the distinctive benefits and features of metacognition and the teaching and learning of metacognition. This intent was not meant to detract from the value of promoting SRL.

Conclusion

This inquiry has pointed out the benefits of metacognition which can help teachers in helping their students become more effective additional language learners. With the guidance of their teachers, ELL students can become more powerful agents in their own effective language learning journey. Research has confirmed the significance of metacognition in CALP development, which plays a significant role in educational accomplishments. It has also been shown that effective MI should involve explicit strategy instruction after the primary (K–3) years and be integrated into content. It should use plenty of awareness-raising activities and collaborative reflection after those activities, as well as include a more sophisticated understanding of metacognition and MI by the teachers who work with language learners. Because metacognition consists of three components: metacognitive knowledge, strategies, and experiences, the fuller metacognition model proposed here should be used for developing this understanding. Based on the findings and conclusions of this inquiry, learning activities can be developed that can form the basis of MI as part of a holistic teaching practice. This development could lead to a case study or action research project on how the four features that this inquiry found to be useful could be practically implemented into teaching practices with ELL students who are developing their higher levels of language proficiency.

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