

**HOW INSTRUCTION SUPPORTIVE OF SELF-REGULATED LEARNING MIGHT  
FOSTER SELF-EFFICACY FOR STUDENTS WITH AND WITHOUT LEARNING  
DISABILITIES DURING LITERACY TASKS**

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

The Faculty of Graduate Studies

(Special Education)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

July 2011

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## **Abstract**

While self-efficacy (SE) and self-regulated learning (SRL) are key processes that are related to successful literacy performance, these are two areas where students often struggle, particularly students with learning disabilities (LD). Fortunately, research has identified instructional features that can be embedded in classrooms to support SRL. This study built from that research to investigate whether those SRL-supportive instructional features might also support students' SE while working on literacy tasks in different kinds of classroom placements (inclusive, support, or pull-out). An instrumental qualitative case study design was used to examine the SE of seven intermediate students at different achievement levels, including three students with learning disabilities. Results revealed: (a) similarities across teachers working in different kinds of placements in their use of SRL-supportive instructional features, with some features being implemented with greater frequency and consistency, (b) relationships between environmental conditions and SE, such as the provision of choices, but also (c) the ways in which SE perceptions were mediated by students' perceptions of environmental conditions. Overall, cross-case analyses highlighted the complex, dynamic, and situated nature of SE, and identified ways in which environmental and personal factors interacted in students' SE attributions. In closing the thesis, these results are considered in the context of previous research, and theoretical, methodological, and practical limitations, contributions and implications are outlined.

## **Preface**

This study received ethical approval from the University of British Columbia Behavioural Research Ethics Board (Certificate #: H09-0310).

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## **Acknowledgements**

I owe my deepest gratitude to my thesis supervisor, Dr. Deborah Butler, whose encouragement and support made this work possible. Dr. Butler gave me the confidence and consistent reinforcement to pursue my research interests while providing invaluable guidance with her extensive knowledge and expertise. I am very appreciative of the time she devoted to reading many, many drafts and for always providing such timely feedback!

I would also like to acknowledge the unrelenting patience that my husband, Clarke, has shown throughout this journey.

## **Chapter One**

### **Introduction**

Students with learning disabilities (LD) can experience extensive academic difficulties, particularly in literacy tasks involving reading (Gersten, Fuchs, Williams, & Baker, 2001; Kavale, Holdnack, & Mostert, 2005) and writing (Garcia & Fidalgo, 2008; Klassen & Lynch, 2007). Key to successful literacy performance is engagement in self-regulated learning (SRL), which is a skill area with which students with LD tend to struggle (Boekaerts, 1999; Bondanza, Kelly, & Treewater, 1998; Zimmerman & Risemberg, 1997). As well, essential to SRL is students' self-efficacy (SE) (Garcia-Sanchez & Fidalgo-Redondo, 2006; Klassen, 2010; Pajares, 2002; Schunk & Zimmerman, 2003), another challenging area for students with LD (Hampton & Mason, 2003; Klassen & Lynch, 2007; Lackaye, Margalit, Ziv & Ziman, 2006; Tabassam & Grainger, 2002). Therefore, this study examined how SE played a role in SRL during literacy tasks for early intermediate students in Grades 4 and 5 at different achievement levels, including those with LD. Students with LD were highlighted because, although research has identified that they are capable of SRL (e.g., Bodrova & Leong, 2008; Elias & Berk, 2002), limited research has focused specifically on contextual factors impacting the SRL and SE of students with LD at this age level. At the same time, inclusion in this study of students at different achievement levels created an opportunity to study SE and SRL for students who brought varying strengths, skills, and learning histories into the classroom context.

In order to support the literacy achievement of students with LD, a great deal of research has investigated instructional features that support SRL (e.g., Perry & Drummond, 2002; Perry, Phillips, & Dowler, 2004; Perry et al., 2002) and qualities of placements that facilitate literacy success (e.g., Bouffard & Couture, 2003; Fore, Hagan-Burke, Burke, Boon, & Smith, 2008; Turner, 1995). First, research has identified instructional features that provide opportunities to support students' SRL during literacy tasks, including designing tasks with complexity, choice,

and non-threatening assessments and teachers' provision of instrumental support (Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004; Perry & VandeKamp, 2000; Perry et al., 2002). Thus, in the context of this study, attention focused on how these SRL-supportive instructional features might be associated with students' SRL and SE within literacy tasks. For this investigation, tasks were considered complex if they spanned multiple lessons, building on students' cumulative knowledge and skills from previous lessons, attending to multiple goals (e.g., reading and writing), and/or requiring students to use multiple types of strategic processes. Also considered were the kinds of choices teachers provided, in materials, learning partners, group work roles, final products, where students could work, and how they could complete a task. SRL-supportive, non-threatening evaluation practices were observed in the form of student self-assessment that prompted students to focus on their ongoing and end product progress. Finally, instrumental support was examined in terms of how teachers provided modeling and scaffolding of knowledge, resource use and strategies. While much research has examined how these types of instructional features can support SRL, the impact of these SRL-supportive instructional features on SE has received less attention; therefore this study investigated this potential relationship.

Second, this study examined how three different types of classroom structures, or "placements" might have afforded or constrained opportunities for teachers to implement SRL-supportive instructional features. The types of placements examined were those that are typical in school contexts for supporting students with LD: (a) inclusive placements, where all students are integrated into a common setting regardless of ability levels and identified disabilities, (b) support placements, where students work amongst peers with LD, and (c) pull-out placements, where small groups of students are removed from their inclusive classes for periods of the day. More specifically, this work considered how certain qualities that typically vary across these types of placements may have afforded or constrained opportunities to support students' SRL

and SE. Attention here focused particularly on the instructional focus taken up in classrooms (on curriculum, learning processes or both), the teacher-to-student ratio, and the quality of peer relationships.

In sum, this study explored: (a) how teachers were implementing SRL-supportive instructional features (complexity, choice, non-threatening assessment, and instrumental support) in their classrooms, and if qualities of placements (instructional focus, teacher-to-student ratio, and peer relations) afforded or constrained how these features were enacted, (b) how SRL-supportive instructional features related to the SE of intermediate students during literacy tasks, and (c) overall, how contexts wherein students were working (SRL-supportive instructional features; qualities of placements) were associated with students' SRL and SE during literacy tasks. In order to address these research foci, a qualitative case study was used to examine the SRL and SE of intermediate students at different achievement levels, including those with LD, as they were engaged in literacy tasks in different placements and classrooms with SRL-supportive instructional features.

### **Promoting Self-Regulation by Students with LD**

Of great concern and debate has been how to provide the most effective instruction and placement to support the academic success of students with LD (e.g., Antoniou & Souvignier, 2007; Butler, Schnellert, & Cartier, 2008; Deshler et al., 2001; Gersten et al., 2001). The importance of focusing on this specific population of students comes from the high incidence of students with LD in schools and the extensive academic difficulties they can experience. In the 2009/2010 school year, almost 18,000 students were identified with LD in the British Columbia public school system (British Columbia Ministry of Education, 2009). These students can experience difficulties with key academic skills such reading, writing, and mathematics. Research on the long-term implications of these struggles identifies students with LD as at risk for school failure (Mason, Meadan, Hedin, & Corso, 2006), depression (Maag & Reid, 2006),

and school dropout (Deshler et al., 2001). Thus, this study considered how educational programs could structure instruction and placements in ways that might meet the needs of these students.

Literacy is the one of the most common areas of difficulty for students with LD (Garcia & Fidalgo, 2008; Gersten et al., 2001; Kavale et al., 2005). Looking at the reading component of literacy, students with LD tend to struggle with phonological processing (Torgesen, Wagner, & Rashotte, 1997; Vellutino et al., 1996; Wong, 1996) and higher-level reading comprehension and learning strategies (Butler, 1998a; Gersten et al., 2001; Schunk, 2004; Schunk & Zimmerman, 2003; Wong, Harris, Graham, & Butler, 2003). The focus of research on younger students with LD has most often been on phonological processing whereas studies on older students have more often concentrated on these higher-level elements related to SRL. This study filled a gap in the literature by focusing attention on SRL in reading for elementary-level students. As well, in regard to the writing aspect of literacy, students with LD can struggle with multiple aspects of the writing process (Butler, Elaschuk, & Poole, 2000; Mason, Harris, & Graham, 2011), including difficulties identifying, choosing, and implementing writing strategies throughout the writing process (Butler, 1998b, 1999; Wong, Wong, & Blenkinsop, 1989). The identification of difficulties with SRL in both reading and writing led this research to focus on SRL in the context of both types of literacy tasks. As a result, this study examined SRL-supportive instructional features and qualities of placements that might support literacy performance for students with LD.

Successful learners engage in SRL (Butler & Winne, 1995; Butler, Cartier, Schnellert, & Gagnon, 2006; Boekaerts, 1999; Schunk & Zimmerman, 2007; Zimmerman, 2000). SRL is a dynamic, situated, and complex learning process (see Figure 1; Butler & Cartier, 2005). As students approach literacy activities, their engagement is mediated by the environment and what they bring to the task (Hadwin, Winne, Stockley, Nesbit, & Woszczyna, 2001; Wolters & Pintrich, 1998). Students begin the SRL process by interpreting tasks and setting personal

objectives. In order to reach these objectives, they employ both cognitive and self-regulating strategies to plan, monitor, adjust, and assess their progress (Butler & Cartier, 2005). Therefore, key to supporting students' success is assisting them to develop more self-regulated approaches to reading and writing. However, research has found that students with LD experience difficulties with SRL (Garcia-Sanchez & Fidalgo-Redondo, 2006; Miranda, Villaescusa, & Vidal-Abarca, 1997). They tend to struggle with task interpretation (Butler & Winne, 1995) and planning, selecting (Butler, 1998a; Tunmer & Chapman, 1996), applying, monitoring (Butler, 1998a; Gersten et al., 2001; Schunk, 2004; Wong et al., 2003), adjusting, and self-assessing effective strategies (Butler & Winne, 1995). Thus, this study focused on how instructional features and qualities of placements might support the SRL of students with LD during literacy tasks.

SE plays an essential role in SRL during literacy tasks (Garcia-Sanchez & Fidalgo-Redondo, 2006; Klassen, 2010; Pajares, 2002; Schunk & Zimmerman, 2003). SE refers to students' beliefs about their capabilities to learn or perform behaviours at designated levels (Bandura, 1986, 1997). Researchers in SRL emphasize how engagement in learning is a function of the personal beliefs that students bring to contexts, such as the key motivational variable of SE (e.g., Pintrich & De Groot, 1990; Schunk & Zimmerman, 2003). However, in addition to struggling with SRL, students with LD also tend to have either low (Hampton & Mason, 2003; Lackaye et al., 2006; Tabassam & Grainger, 2002) or unrealistically high SE (Klassen, 2002, 2008). In this study, Bandura's (1986, 1997) social cognitive model was drawn from to consider how SE plays a key role in SRL during literacy tasks, and to investigate how qualities of placements and instruction might impact not only SRL processes, but also students' construction of SE during literacy tasks.



## **Instructional Contexts that Support SRL and SE**

This study explored the impact of SRL-supportive instructional features and qualities of placements on the SRL and SE of intermediate students at different achievement levels, including those with LD, during literacy tasks. Again, the focus was specifically on studying how students' self-regulated approaches to literacy tasks, and SE in particular, were shaped by contexts in which students were learning. For the purposes of this study, educational contexts were looked at on two levels.

At the first level, classroom contexts were investigated in terms of the ways in which SRL-supportive instructional features may have impacted students' SE. A large body of research has identified instructional features that provide opportunities to support students' SRL (e.g., Boekaerts, 1997; Eshel & Kohavi, 2003; Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004; Schunk & Zimmerman, 2007). For example, Perry and her colleagues characterized SRL-supportive classrooms as including tasks with complexity, choices and non-threatening assessments and with teachers' provision of support that is instrumental to SRL including modeling and scaffolding (Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004; Perry & VandeKamp, 2000). That said, although SE and SRL have been shown to be reciprocally influential, less attention has been paid directly to examining how instructional features that support SRL might also be related to SE for literacy tasks. As a result, one main objective of this study was to investigate how SRL-supportive instructional features influenced students' SE.

At a second level, the question of how placements might afford or constrain opportunities for classroom teachers to implement instructional features to foster SRL was addressed. An ongoing research debate has addressed whether inclusive or support placements are more ideal for building a range of academic (e.g., Bouffard & Couture, 2003; Fore et al., 2008) and social-emotional skills (e.g., Schunk & Zimmerman, 2007; Whitley, 2008; Wiener & Tardif, 2004). But it could be argued that it is not the type of placement per se, but rather the SRL-supportive

instructional features provided within a particular placement that makes the difference. The extent to which a given setting provides opportunities for SRL-supportive instructional features to occur might be pivotal to fostering students' SRL and literacy development, whether settings are inclusive or not. But it is also possible that there are qualities of inclusive as opposed to support placements that afford or constrain opportunities to foster SRL, such as the teacher-to-student ratio, the instructional focus (on curriculum, learning processes, or both), or the quality of peer relations. It is important to reinforce that, although it is tempting when examining different placements to conclude superiority of one over the other, the purpose of this study was to examine how implementing SRL-supportive instructional features within different kinds of placements might be afforded or constrained. More specifically, this study focused attention on the ways in which teachers situated SRL-supportive instructional features in different kinds of academic placements, and how those instructional features might have been related to students' SE during literacy tasks in those settings.

### **Design Overview**

In sum, this study investigated the SRL and SE of intermediate students at different achievement levels, including those with LD, as they worked on literacy tasks in different placements (inclusive, support, or pull-out) where teachers were implementing SRL-supportive instructional features. Using a qualitative case study methodology, this study explored seven students' SRL and SE in the context of their classrooms. This enabled investigation of the following research questions:

- (a) How were teachers implementing SRL-supportive instructional features (complexity, choice, non-threatening assessment, and instrumental support) in their classrooms, and did qualities of placements (instructional focus, teacher-to-student ratio, and peer relations) afford or constrain how these features were enacted?

- (b) How were SRL-supportive instructional features related to the SE of intermediate students during literacy tasks?
- (c) Overall, how were the contexts wherein students were working (SRL-supportive instructional features; qualities of placements) associated with students' SRL and SE during literacy tasks?

In order to address these research questions, a qualitative case study method was used to observe the SRL and SE of intermediate students at different levels of achievement as they worked through literacy tasks in inclusive, support, and pull-out classroom placements.

The importance of this research is multi-faceted. Practically speaking, this work was designed to enhance understanding about how instructional features shown to be supportive of SRL might also support students' SE. As well, a key aim was to provide insight into how certain qualities of placements might afford or constrain teachers' ability to implement SRL-supportive instructional features, and how those qualities also might directly influence students' SE. In addition, this study sought to advance theory by providing insight into how individual learning is embedded and shaped within multiple aspects of context (SRL-supportive instructional features; qualities of placements) during literacy tasks. On another level, it sought to enrich understanding of the ways in which SE emerges with SRL in relation to particular kinds of SRL-supportive instructional features. Ultimately the importance of this work was in helping to define how SRL-supportive instructional features and qualities of placements might best support the SRL and SE of intermediate students with LD during literacy tasks.

## **Chapter Two**

### **Theoretical Framework**

The theoretical framework for this study was based on a social cognitive perspective, where human functioning is considered the result of reciprocal interactions between personal factors, behaviours, and environmental conditions (Bandura, 1993). This work was also grounded in literature focused on: (a) the literacy difficulties that students with LD can face, particularly in the areas of SRL and SE, and (b) contexts that might support SRL and SE, considered in relation to the instructional features provided to support students' SRL and potentially SE, and the qualities of placements that might have afforded or constrained teachers' ability to enact SRL-supportive instructional features. In this chapter, the relevant literature in each of these areas is addressed in turn.

### **Literacy, SRL, and SE for Students with LD**

Students with LD were the focus of this study due to their tendency to experience difficulties with basic literacy skills including reading and writing. This section begins by summarizing the difficulties that students with LD tend to experience with reading and writing. Next, the important role that SRL and SE play in reading and writing is described. Subsequently, the vital connection between SRL and SE are identified, as are the difficulties that students with LD tend to have with SE.

### **Difficulties of Students with LD in Reading and Writing**

Reading is the most prevalent area of difficulty for students with LD (Gersten et al., 2001; Kavale et al., 2005). Research on the reading struggles of students with LD has focused extensively on two areas: phonological processing and strategies for reading comprehension and learning. The concentration of studies on younger students has often been on strategies for promoting phonological processing, where research has explored and confirmed the role of phonological processing problems underlying young students' with LD difficulties in word

reading (e.g., Torgesen et al., 1997; Wong, 1996; Vellutino et al., 1996). Research on reading for older students with LD reports that they tend to use ineffective comprehension strategies to accomplish tasks (Butler, 1998a; Gersten et al., 2001; Tunmer & Chapman, 1996). They also can exhibit ineffective learning strategies such as failing to actively monitor comprehension by rereading (Butler, 1998a; Butler & Winne, 1995; Gersten et al., 2001; Schunk, 2004; Schunk & Zimmerman, 2003; Wong et al., 2003). Thus, research is sorely needed on how SRL-supportive instructional features and qualities of placements might support the reading achievement of students with LD, with particular attention to higher order processes for younger students with LD.

In addition to reading, the complex nature of the writing process makes it a challenging task to master, especially for students with LD (Garcia & Fidalgo, 2008). Research on the writing difficulties of students with LD suggests that they can struggle in many aspects of the writing process (Butler et al., 2000). This can include difficulties with idea generation, planning, organization, and revising (Mason et al., 2011). In addition, students with LD can struggle with one or more components of SRL. For example, students with LD can have difficulty analyzing task requirements in order to assess writing task demands (Butler, 1999). As well, they can struggle when determining criteria to gauge successful performance (Butler, 1999) and when identifying, choosing, and implementing writing strategies throughout the writing process (Butler, 1998b, 1999; Wong et al., 1989). Moreover, students with LD tend to lack effective metacognitive knowledge about writing (Butler, 1998b, 1999; Wong et al., 1989).

Given the challenges that students with LD experience in writing, Cutler and Graham (2008) suggest that current writing practices are not sufficient. They recommend that writing instruction be extended each day, integrate technology, and reflect greater balance between teaching skills, writing, and learning strategies. As well, Cutler and Graham suggest that teachers should receive more professional development in writing, develop home and school relationships

that foster students' writing, and place greater emphasis on motivating students and monitoring their progress. In sum, given the pervasive difficulties in reading and writing experienced by students with LD, coupled with recommendations for improved instruction, further research, such as the present study, into how classroom contexts can support self-regulated reading and writing performance for students with LD is required.

### **SRL and SE in Reading and Writing**

SRL is a characteristic of both effective readers (Boekaerts, 1999; Bondanza et al., 1998) and successful writers (Butler, 1999a; Zimmerman & Risemberg, 1997). Self-regulation or self-regulated learning (SRL) refers to students' metacognitive, motivational, and behavioural engagement in the learning process (Zimmerman, 1989). It is a dynamic and complex learning process that captures students' learning in context (Butler & Cartier, 2005).

In this study, a social cognitive model of SRL was used as a framework to consider students' engagement in literacy tasks (see Figure 1). This SRL model is based on the work of Butler and Cartier (2005), which, although grounded in a socioconstructivist perspective, is aligned with a social cognitive framework (e.g., Bandura, 1986; Zimmerman, 1989) in its emphasis on the ways in which students build knowledge as individuals within a specific context. When students are presented with a literacy activity, their participation is shaped by their environment (subject area, peer interactions, instruction, evaluation practices, etc.) and what they bring to the literacy task (prior knowledge about the topic, strengths, weaknesses, interests, conceptions about literacy and a given literacy task, literacy SE beliefs, capability to moderate the current learning environment, etc.). These factors influence students as they interpret tasks, by analyzing task requirements, determining task value, and establishing motivation (see Figure 2), and set personal objectives. In order to reach these personal objectives, students employ cognitive strategies such as summarizing or identifying main ideas (when reading), or brainstorming and organizing ideas (when writing). During this process, students ideally engage

in a dynamic self-regulatory cycle where they plan, monitor, adjust, and assess their progress towards their set personal objectives (Butler & Cartier, 2005). This cycle provides students with feedback on their literacy performance in order to regulate their current and future engagement (Butler & Winne, 1995). The degree of success that students gain from their self-assessment impacts their perceptions of SE for future literacy tasks. Therefore, vital to supporting students' success is assisting them to develop an SRL approach to literacy tasks. This study focused on the instructional features and qualities of placement that support the SRL of students with LD during literacy tasks.

In addition to struggling with literacy tasks, students with LD also tend to experience particular difficulties with SRL (Garcia-Sanchez & Fidalgo-Redondo, 2006; Miranda et al., 1997; Paris & Oka, 1989). When they approach literacy tasks, students with LD may bring their past literacy struggles and low SE to the task, which can undermine their engagement or persistence. As they interpret tasks, students with LD often experience difficulties identifying task requirements (Butler, 1998a). When these students engage in planning to accomplish personal objectives, they tend to select strategies that are ineffective for accomplishing tasks at hand (Butler, 1998a; Tunmer & Chapman, 1996). As well, their selection of strategies may be limited due to difficulties developing and transferring cognitive strategies from one context to the next (Kamann & Butler, 1996; Wong, 1994). Once they implement strategies, students with LD tend to be less efficient in their application and monitoring (Butler, 1998a; Gersten et al., 2001; Schunk, 2004; Wong et al., 2003). Due to the tendency of students with LD to have difficulties throughout the SRL process, this study explored qualities of placements and instructional features that provide opportunities to support SRL during literacy tasks for students with LD.

Not only are SRL and SE key influences on students' reading and writing success (Schunk & Zimmerman, 2007) but they are also reciprocally connected (Garcia-Sanchez &

Fidalgo-Redondo, 2006; Klassen, 2010; Pajares, 2002; Pintrich & De Groot, 1990; Schunk, 2003; Schunk & Zimmerman, 1994, 2003; Zimmerman, 1989; Zimmerman, Bandura, & Martinez-Pons, 1992). This is due to the fact that, critical to the use of self-regulatory processes is students' SE for their capabilities to self-regulate (Usher & Pajares, 2008). In turn, students who self-regulate tend to have a higher SE for learning (Zimmerman et al., 1992). As well, research has found that SE for SRL is an influential factor in academic success (e.g., Caprara et al., 2008). The following discussion theoretically situates how SE might interact with SRL and describes how the role of SE is conceptualized within the SRL framework.

### **Linking SRL and SE**

Theoretically, from Bandura's socio-cognitive perspective, SE beliefs are personal factors that students bring with them to the learning context (Bandura, 1993). These beliefs are bi-directionally related to students' SRL behaviours and the context in which they are engaged (Bandura, 1993). In other words, students' SE beliefs both impact and are impacted by their SRL behaviours and the learning context. In addition, this model suggests that students are likely to bring SE beliefs to a given task in a given context (e.g., based on a prior history with similar work) that mediate their performance (e.g., task persistence), but that SE beliefs are also likely to shift dynamically as context-embedded cycles of self-regulation play out.

In this study, the interaction of context, SE, and SRL were considered through the framework of the SRL model described above (see Figure 3). The research examined how SE is both influenced by and influences: the broader learning context, what students bring to a task, their task interpretation, the level of challenge selected and nature of goals, and finally use of cognitive and self-regulatory strategies (planning, monitoring, adjusting, and self-assessing). More specifically, the theoretical framework drawn on here suggested that, as students approach literacy tasks, context, SE, and SRL behaviours are likely to reciprocally interact (Schunk, 2003). For example, if a student is presented with a reading passage that contains unfamiliar vocabulary



and experiences difficulties with comprehension of the text, his or her SE for reading could weaken. This low SE could then negatively impact the learning context if the student avoided the task and created a disruptive classroom environment (Schunk, 2003).

Within a given context, the SE beliefs that students bring with them about literacy may impact their task interpretation and subsequent goal setting (Butler & Winne, 1995). If students have low reading SE, they could interpret literacy task requirements as too difficult, determine limited task value, and generate low motivation to pursue the task. Students may use those task interpretations to guide the setting of their personal objectives, which might also be directly impacted by SE in regard to the level of challenge and the nature of goals that they set (Bandura, 1993; Schunk, 2003; Zimmerman et al., 1992). In terms of challenge, research has found that the greater the self-efficacy, the greater the challenge students are willing to assume (Wigfield, Guthrie, Tonks, & Perencevich, 2004). In the context of literacy, this would imply that higher SE for literacy might result in the selection of more challenging reading, learning or writing goals. The importance of this comes from Schunk (1989) who highlighted the potential of difficult goals to provide a greater sense of SE because they offer students more information about their learning capabilities. In addition to impacting the level of challenge in goals, SE beliefs may also affect the nature of goals that students set. Students' perceptions of the task may interact with their SE to determine the type of goals they establish (Butler & Cartier, 2005). If they have low SE and perceive the task as too challenging they may set performance goals (e.g., to work quickly) rather than learning goals (i.e., to learn about the subject) (Butler, 1997). In sum, SE can bi-directionally influence students' task interpretation and goal setting.

SE may also impact students' implementation and regulation of cognitive strategies. More specifically, the level of SE that students possess for enacting different cognitive strategies successfully, such as finding main ideas, summarizing, or looking at titles, has been found to influence the quality and quantity of strategies they employ (Walker, 2003). For example, high

SE for only one or two cognitive strategies might result in the use of only those strategies, regardless of their adequacy to accomplish students' goals.

SE is also likely to play an influential role as students self-regulate their use of cognitive strategies through planning, monitoring, adjusting, and self-assessing. During planning, the amount of effort that students allocate is mediated by their SE for the task (Butler, 1998a; Schunk, 1991, 2003; Zimmerman et al., 1992). As students monitor and adjust cognitive strategies, their SE may modify persistence when faced with difficulties (Bandura, 1986; Kizilgunes, Tekkaya, & Sungur, 2009; Schunk, 1991, 2003; Walker, 2003). For example, students with low SE for reading may give up when faced with difficulties decoding or comprehending new information (Schunk, 2003). Additionally, the feedback generated as students monitor their progress may alter their feelings of efficacy (Schunk, 2003). Finally, SE beliefs may impact students as they assess their progress towards their goals, both during and at the end of their performance (Butler, 1997). If students perceive success during literacy tasks, their SE beliefs for literacy may grow. In turn, these new SE beliefs may influence subsequent engagement in literacy tasks (Butler, 1997). In sum, the bidirectional influence of SE and SRL is comprehensive. As a result, this study used the SRL model to guide observation of students' SE during phases of SRL as well as to consider the influence of SRL-supportive instructional features and qualities of placement on SRL and SE during literacy tasks.

An additional motivation for focusing on both SRL and SE came from not only their mutual interdependence but also the tendency for students with LD to struggle with both SRL, as described above, and to have low SE (Hampton & Mason, 2003; Klassen & Lynch, 2007; Lackaye et al., 2006; Linnenbrink & Pintrich, 2003; Tabassam & Grainger, 2002). Students with LD report lower academic SE than their non-LD peers (Hampton & Mason, 2003; Lackaye et al., 2006; Tabassam & Grainger, 2002). Hampton and Mason (2003) postulate that students with LD have lower SE as a result of deficient exposure to sources for developing positive SE including:

fewer successful academic experiences, less access to competent peer models with LD, and insufficient support from teachers. Therefore, considering these difficulties, this study examined how SRL-supportive instructional features might provide resources for developing positive SE. For example, the provision of instrumental support, a SRL-supportive instructional feature, might positively influence students' task accomplishment, thereby potentially enhancing students' SE for completing the task.

### **Instructional Contexts that Support SRL and SE**

To recap, this study investigated instructional features and qualities of placements to promote SRL and SE during literacy tasks by intermediate students at different achievement levels, including those with LD. The more specific focus was on studying how students' self-regulated approaches to literacy tasks, and SE in particular, were shaped by the contexts in which students were learning. In order to examine these focus areas, two levels of educational contexts were observed: (a) SRL-supportive instructional features, and (b) qualities of placements.

#### **SRL-Supportive Instructional Features**

At the first level, contexts were examined in terms of how the instructional features provided had potential to support SRL. A large body of research has examined and identified particular instructional features that provide opportunities to support students' SRL (e.g., Boekaerts, 1997; Eshel & Kohavi, 2003; Harris & Graham, 1999; Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004; Perry & VandeKamp, 2000; Perry et al., 2002; Sawyer, Graham, & Harris, 1992; Schunk & Zimmerman, 2007). Perry and her colleagues conducted extensive research on SRL and the potential of young children to self-regulate. From their work they identified certain SRL-supportive instructional features that are appropriate for all ages, including young children. These included engaging students in tasks with complexity, choices, and non-threatening assessments and providing instrumental support.

Beginning with complexity, complex tasks involve cognitively demanding activities that provide opportunities to support students' SRL (Perry, 1998; Perry & Drummond, 2002; Perry, Nordby, & VandeKamp, 2003; Perry et al., 2004; Turner, 1995). In the context of literacy tasks, complex activities attend to multiple goals, include large chunks of meaning, expand over extended periods of time, facilitate students' implementation of cognitive and metacognitive processes, and enable creation of diverse products (Perry et al., 2004). These tasks provide students with opportunities to adapt and use a range of strategies (Turner, 1995) while requiring them to be actively engaged in decision making. For example, in contrast to simple tasks, such as reading and answering multiple choice questions, students who are engaged in complex activities, such as reading multiple texts to generate information for a project, have to actively plan which cognitive strategies they will utilize to accomplish their goals. As well, in order to complete the task, they must self-regulate these strategies by monitoring, adjusting and self-assessing.

In the context of this study, three types of complexity were considered when characterizing instructional practices in classrooms. First, tasks were categorized as complex in skills if they spanned multiple lessons, built on students' cumulative knowledge and skills and required students to apply and integrate that knowledge in each new lesson. Second, tasks were considered complex in goals if they required students to attend to multiple goals such as consulting a variety of sources of materials, drawing out important information, and writing a report. Third, tasks were identified as complex in strategies if they required students to implement multiple types of strategic processes such as planning and selecting strategies to accomplish the task. In sum, this study looked at the ways in which complexity in skills, goals, and strategies were provided in classrooms in ways that may have supported SRL and SE.

In addition to complexity, tasks designed with choices have potential to afford opportunities to foster students' SRL (Boekaerts, 1997; Eshel & Kohavi, 2003; Perry, 1998:

Perry & Drummond, 2002; Perry & Winne, 2006). In regard to literacy tasks, choices can be provided in a variety of different ways. For example, students might be given choices about texts, work partners, where they work, or how they might approach the task. Some choices enable students to control the degree of challenge they take on, thereby potentially increasing their commitment and interest in the task (Perry & Drummond, 2002). Choices also require students to make deliberate decisions in order to complete tasks (Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004). In turn this requires students to make cognitive and metacognitive choices while planning, monitoring, adjusting, and self-assessing. For example, providing choices about how students approach tasks generates opportunities for students to plan which strategies they will implement to meet their goals. As well, choices about texts may encourage students to regulate their comprehension and select alternative texts if they need to. Offering choices facilitates diverse opportunities for students to self-regulate their learning. As a result, this study observed the ways in which choices afforded opportunities to facilitate students' SRL and SE.

Non-threatening assessment practices are another instructional feature that teachers can embed into literacy tasks to provide opportunities to support students' SRL (Perry & Drummond, 2002). SRL-supportive, non-threatening evaluation practices "encourage students to focus on personal progress and view errors as opportunities to learn" (Perry et al., 2004, p.1856). Consistent with Perry and her colleagues' work, in this study non-threatening assessment practices were observed in the form of student self-assessment. For the purposes of this study the term assessment encompasses both ongoing assessment and end product evaluation of students' progress. While self-assessment in itself is part of the SRL model (Butler & Cartier, 2005), it also facilitates other aspects of self-regulation. More specifically, self-assessment requires students to both actively reflect on their work and self-regulate their progress. Embedding self-assessment into both the process and product of literacy tasks requires students to monitor the

effectiveness of their strategies in relation to personal objectives and/or class standards throughout the learning process and at the conclusion. By monitoring their progress, students may become more aware of ineffective strategies and make adjustments to reach personal objectives (Paris & Paris, 2001). At the end, students self-assess to reflect upon their strategies and the self-regulation of those strategies in comparison to their personal objectives. Therefore incorporating self-assessment into literacy tasks facilitates comprehensive opportunities to support students' SRL. As a result, this study observed the relationship between self-assessment, as an instructional feature, on the SRL and SE of intermediate students.

Instrumental support is another instructional feature with promise to support SRL and SE (Harris & Graham, 1999; Meyer & Turner, 2002; Perry, 1998; Perry & Drummond, 2002; Perry et al., 2003; Sawyer et al., 1992; Turner, 1995). This type of support uses explicit instruction, modeling and/or scaffolding to ensure that students have the domain specific knowledge and strategic processes necessary to accomplish tasks independently (Perry & Drummond, 2002; Perry, Hutchinson, & Thauberger, 2007). For example, models who articulate self-regulating behaviours, such as planning or monitoring strategy use, can influence students to internalize their abilities to complete the same actions (Schunk & Zimmerman, 2007). As well, both teachers and peers can model their experiences of challenges and problem solving strategies to cope with difficulties, which helps students who are struggling attribute success and failure to strategic actions (Schunk, 1989; Walker, 2003). That said, it is important to note that the perceived similarity between the observer and model is essential for students to believe they can accomplish the same tasks (Garcia-Sanchez & Fidalgo-Redondo, 2006; Schunk & Zimmerman, 2007). As a result, peer models are the most effective because of their similarity to one another and the fact that certain students, including those with LD, may doubt their ability to perform at the teachers' level (Schunk, 1989, 2003).

In addition to modeling, scaffolding is another form of instrumental support that can provide opportunities to foster students' SRL (Harris & Graham, 1999; Meyer & Turner, 2002; Perry et al., 2003; Turner, 1995). Scaffolding refers to an instructional practice where teachers support students' learning while creating opportunities for them to become successful independently (Meyer & Turner, 2002). Teachers can provide instrumental support in the form of scaffolding throughout literacy tasks to encourage SRL. For example, teachers can provide support to ensure students interpret literacy tasks accurately by asking leading questions where they are asked to provide the answer independently such as, "What are you asked to do?" As well, teachers can provide scaffolding to prompt students to monitor their progress towards their goals or cue their attention to the relationship between their strategy use and outcomes (Butler, 1997). Scaffolding can also be provided to facilitate students' strategic take-up of SRL-supportive instructional features, such as choices (Perry et al., 2002). For example, the presentation of choice in materials can be supported with instrumental scaffolding to encourage students to consider how to select reading materials that are at an appropriate level of challenge to match their ability. In this study, observations were made of how instrumental support including modeling and scaffolding were provided in classrooms in ways that promoted students' SRL and SE during literacy tasks.

It is important to note that the provision of opportunities to self-regulate does not directly influence students' engagement. Rather, Turner and Patrick (2008) and Butler and Cartier (2005) highlight that it is students' perceptions of the environment, and how they attend to, interpret and take advantage of provided supports, that shapes their learning. As a result, this study examined the interplay between SRL-supportive instructional features as enacted by teachers and students' perceptions of and engagements with them.

Despite the fact that SE and SRL are mutually influential and that practices supportive of SRL can be associated with practices recommended to support SE (e.g., using peer models), the

impact of the kinds of SRL-supportive instructional features described here on SE has not received a great deal of research attention. As discussed above, SE and SRL are theoretically linked. Therefore, SRL-supportive instructional features may positively impact SE as well. For example, as students are provided with opportunities to self-regulate, their potential to experience success and therefore raise their SE increases. More specifically, SRL-supportive instructional features that support self-assessment may affect SE if students can attribute their learning behaviours to outcomes thereby enhancing their SE beliefs about their capabilities to accomplish the task at hand. Literature is emerging that associates improvements in SE with providing choices (Guthrie et al., 2004; Walker, 2003), teacher support (Bandura, 1997; Berk, 2000; Klassen & Lynch, 2007; Schunk, 1989; Schunk & Zimmerman, 2003), self-assessment (Schunk, 2003; Walker, 2003), and modeling (Schunk 1989; Schunk & Zimmerman, 2007; Walker, 2003). Thus, by examining how SRL-supportive instructional features might simultaneously impact SRL and SE, this study provides an important extension to the current literature.

### **Qualities of Placements**

At the second level, how educational classroom placements might afford or restrict opportunities for teachers to implement SRL-supportive instructional features was also examined in this study. A great deal of research has examined strategy-focused instructional methods to support the academic success of students with LD (e.g., Antoniou & Souvignier, 2007; Butler et al., 1997; Deschler et al., 2001; Gersten et al., 2001; Sawyer et al., 1992). The progression in understanding of students with LD has resulted in diverse placement options and extensive research contrasting the outcomes of each (e.g., Beltempo & Achille, 1990; Elbaum, 2002; Madge, Affleck, & Lowenbraun, 1990; Schunk, 1991; Whitley, 2008; Vaughn, Elbaum, & Boardman, 2001). This research highlights the mixed results of studies examining academic, social, and emotional functioning in relation to placement. For example, Elbaum (2002)



discusses the conflicting empirical findings when investigating the relationship between placements and the self-concept of students with LD. As well, these findings emphasize the influential role context plays when considering the impact of placement on students' social, emotional, and academic functioning. For example, Whitley (2008) found that a class placement's effect on the self-concept of students with LD was mediated by students' social self-concept. This reinforces the need of this study to consider both what individuals bring to contexts (in Whitley's study, self-concept) and multiple aspects of contexts when exploring how students' SRL and SE are shaped by contexts in which they are learning

In terms of placements, three options are common for students with LD: inclusive classrooms, where they are integrated with peers of varying abilities; individualized or small group pull-out support, where students are removed from their inclusive classroom for certain periods of the day; and fulltime, support classrooms designed specifically for students with LD with a low student-to-teacher ratio. In this study, the focus was on these three common placements for intermediate students.

Past research on whether inclusive or support placements are more effective at building a range of skills, academic, social, and emotional, is extensive (e.g., Beltempo & Achille, 1990; Bouffard & Couture, 2003; Butler & Marinov-Glassman, 1994; Elbaum, 2002; Fore et al., 2008; Juvonen & Bear, 1992; Schunk, 1991; Whitley, 2008; Wiener & Tardif, 2004). However, rather than seeking to add to discussion about which type of placement is superior, the purpose of this study was to explore the ways in which different placements might afford, constrain, or shape teachers' implementation of SRL-supportive instructional features. This focus is inspired in part by Turner and Patrick (2008) who, in their analysis of development and change in motivation, examined affordances and constraints in classroom norms and interpersonal events.

The study presented here assumed the position that it may not be the type of placement per se that leads to different outcomes for students, but rather the SRL-supportive instructional

features in placements have the greater impact. That is, one possibility is that it is the extent to which any given setting provides opportunities for SRL-supportive instructional features to occur, regardless of the placement, which is the most influential. Even so, a second possibility is that there are particular qualities of different placements that afford or constrain opportunities to support SRL and SE. For example, the nature of an inclusive placement may enable a teacher to provide a greater variety of peer models or, in contrast, the diverse nature of students may limit teachers' time to use peer models. For the purposes of this study, three qualities of placements were selected as possible mediators of SRL-supportive instructional features: instructional focus, teacher-to-student ratio, and peer relations. It is important to note that these qualities of placement were selected to narrow observations, but other contextual factors that arose during observations were also taken into account.

For the purposes of this study, instructional focus refers to the nature of lesson content, either on specific curriculum content or learning skills, or an amalgamation of the two. To illustrate, a social studies lesson which targets curriculum content could take the form of direct instruction on the workings of the Canadian Government. In contrast, a learning skills lesson might focus on reading comprehension strategies such as finding main ideas. A combination of content and skills foci could be observed in a lesson where students explore textbook elements, such as titles and subtitles, in order to facilitate acquiring knowledge about the Government. Although inclusive settings typically have a greater drive to cover curriculum content than support settings, which tend to focus more on learning strategies, each placement can incorporate different instructional foci effectively. That said, the quality of instructional focus associated with different placements might afford or constrain SRL-supportive instructional features. For example, a focus on curriculum content may limit or encourage student choices in reading material, who they work with, or how they explain their understanding. As well, complex literacy tasks may be more likely to occur when the instructional focus is on curriculum content.

However, the drive to cover curriculum content could impede teachers' time to provide scaffolding or teach strategies during complex literacy tasks. As a result of these potential impacts, this study examined the ways in which instructional focus (i.e., skills, curriculum, or a combination) as enacted in different placements afforded or constrained teachers' ability to embed SRL-supportive instructional features into their classroom instruction.

The teacher-to-student ratio in different placements was also likely to differ. In support placements, the number of students is typically reduced thereby decreasing the teacher-to-student ratio. In contrast, an inclusive placement commonly consists of a greater number of students in each class with one teacher. This ratio may have an impact on the quality and quantity of SRL-supportive instructional features enacted. For example, the teacher-to-student ratio might influence the amount of time that teachers have to provide individual scaffolding to their students, which might be particularly essential for students who are struggling or who have a LD. It may also modify teachers' use of small groups with student leaders thereby affecting students' exposure to peer models. The ways in which teacher-to-student ratios afforded or constrained teachers' use of SRL-supportive instructional features was observed in relation to the SRL and SE of students.

In addition to instructional focus and teacher-to-student ratio, the peer relations in each placement have potential to afford or constrain teachers' enactment of SRL-supportive instructional features. This assertion arose from Bandura, Barbaranelli, Caprara, and Pastorelli's (1996) sociocognitive perspective that intellectual development cannot be isolated from the social relations within the learning context and the subsequent interpersonal effects. Peer relations in this context refer to students' relationships and interactions with other students in the classroom. The peer relations in different placements may afford or constrain the quality and quantity of certain SRL-supportive instructional features. For example, when provided with choices, students with LD in an inclusive classroom may be more aware of their learning

differences in comparison to their peers and therefore select goals and strategies based on the motivation of fitting in. In contrast, in a support placement, students may experience a shared acceptance of academic differences and therefore select goals and strategies with the motivation of independent learning. As another example, it may be possible that, in a support placement, students may be exposed to peer models with greater similarity to their own skills than in an inclusive placement or that, in support placements, students with LD may not have exposure to effective models. On the other hand, a greater variety and frequency of peer models could be available in an inclusive placement. In sum, given the strong potential for peer relations to shape SRL-supportive instructional features, students' perceptions of peer relations were observed in relation to the SRL and SE during literacy tasks.

In addition to looking at these three qualities of placements in relation to how they might have constrained or afforded opportunities to enact instructional features supportive of SRL, this study also considered that these qualities may have a direct impact on students' SE. For example, the teacher-to-student ratio may impact the degree of support for independence the students receive from their teacher, which may affect how successful they feel they can be. On one hand, a student may feel he or she requires a high level of support, and the availability of their teacher and a setting with a low teacher-to-student ratio may enable greater teacher availability thereby facilitating their SE. On the other hand, a student may interpret a high level of teacher support in a classroom with a small number of students as reflective of their teacher's lack of confidence in their ability which may then transfer to their own feelings of SE, and relying heavily on teachers for assistance in those contexts may reinforce a sense of external dependence on others. Looking at instructional focus, emphasis on learning skills, curriculum content or both simultaneously may also impact students' SE for tasks. For example, a student may have greater SE when focusing on learning a reading comprehension strategy (even in the context of reading text), rather than dividing attention simultaneously between both learning the

strategy and learning content in tandem. Conversely, it may be that SE is raised when students associate successful use of a strategy they are learning with content mastery (i.e., when skills and content instruction are integrated). Finally, it may be the case that certain peer relations support or undermine SE. For example, even if a student brings a high SE for a task to a learning context, a negative comment from a peer may change that student's perception about his or her ability to be successful. On the other hand, the presence of certain contextual factors may protect students' SE against negative peer comments or actions that might otherwise diminish their SE. In sum, there are numerous possibilities when considering the potential impact of qualities of placements on students' SE. This is why this study set out to advance understanding about how students' SE and SRL might shape and be shaped within contexts in relation to SRL-supportive instructional features, qualities of placements and interactions between them.

### **Research Questions**

In conclusion, this study investigated the SRL and SE of intermediate students at different achievement levels, including those with LD, as they completed literacy tasks in inclusive, support, and pull-out placements where teachers aimed to implement SRL-supportive instructional features. Three research questions were investigated in this qualitative study.

- (a) How were teachers implementing SRL-supportive instructional features (complexity, choice, non-threatening assessment, and instrumental support) in their classrooms, and did qualities of placements (instructional focus, teacher-to-student ratio, and peer relations) afford or constrain how these features were enacted?
- (b) How were SRL-supportive instructional features related to the SE of intermediate students during literacy tasks?
- (c) Overall, how were the contexts wherein students were working (SRL-supportive instructional features; qualities of placements) associated with students' SRL and SE during literacy tasks?

## **Chapter Three**

### **Methodology**

This study was designed to investigate the following questions: (a) how were teachers implementing SRL-supportive instructional features (complexity, choice, non-threatening assessment, and instrumental support) in their classrooms, and did qualities of placements (instructional focus, teacher-to-student ratio, and peer relations) afford or constrain how these features were enacted? (b) how were SRL-supportive instructional features related to the SE of intermediate students during literacy tasks? and (c) overall, how were the contexts wherein students were working (SRL-supportive instructional features; qualities of placements) associated with students' SRL and SE during literacy tasks? To address these research questions, a qualitative, instrumental case study design was used. Seven students were selected with different levels of achievement, including three students with LD. Two of the students with LD were placed in support classrooms; one attended an inclusive class but also received pull-out support. Of the four non-LD students, three were supported within inclusive classrooms only, while one also received support in a pull-out classroom. Data were collected with the goal of generating descriptive portraits of reciprocal interactions between personal factors (students' backgrounds, perceptions, and intentions) and environmental conditions (SRL-supportive instructional features and qualities of placements) during literacy engagement. This approach allowed for examining the SRL and SE of seven intermediate students as they participated in literacy tasks enacted in inclusive, support, or pull-out classroom placements with instructional features designed to provide support for SRL.

### **Research Design**

In this research, an instrumental, qualitative case study design was used to explore students' engagement in literacy practices as situated in context. Case studies are a comprehensive research design that is ideal for answering *how* questions about complex

phenomena within contexts (Yin, 2003). As a result, qualitative case studies were chosen as the most advantageous design to address this study's research questions. In this study, each student constitutes a single "case." The case study design employed in this research is defined as instrumental because the method focused on informing understanding about a phenomenon (namely, how SE was situated in context), rather than on better understanding particular cases (e.g., specific teachers or students) (Stake, 1995). More specifically, comparing multiple cases of students' literacy performance within context enabled investigation into SRL-supportive instructional features, qualities of contexts, and students' SE and SRL during literacy tasks. Conducting qualitative case studies supported investigating individuals' SRL in its natural context, provided an opportunity for in-depth investigation of the complexities of SRL and SE, and allowed for collection of various kinds of data in ways that enabled triangulation of findings.

Firstly, SRL is a situated learning process that reflects adaptive responding to the dynamic demands in a particular learning environment (Butler & Cartier, 2005) therefore it was essential that this investigation of SRL be conducted in its natural setting (Meyer & Turner, 2002). Case studies enabled students' engagement in SRL to be observed in the classroom settings where it emerged. This naturalistic setting was required in order to answer this study's research questions, which focused on exploring associations between contextual factors, SRL, and SE.

Secondly, case studies excel at facilitating understanding of complex issues (Dooley, 2002). As SRL is a complex learning process (Boekaerts & Corno, 2005; Butler & Cartier, 2005), case studies supported the in-depth investigation required to document complex relationships between SRL-supportive instructional features, qualities of placement, SRL, and SE. For example, a case study approach accounted for the presence of SRL-supportive instructional features, how students perceived those instructional features, and how their SRL and SE could be related to individual-context interactions.

Thirdly, case study research lends itself well to a variety of data collection methods, a requirement for triangulation of data. It was especially important to gather information from different sources for, as Brenna (1995) asserts, a range of methods is required when studying young children. Multiple sources of data were also imperative to understand students' perceptions, intentions and actions. In this study, interviews provided insight into students' perceptions and intentions while observations, traces, and running records documented what students actually did in addition to what they reported doing (Perry & Winne, 2006; Perry et al., 2002) and provided a situated account of contextual features and events. This comprehensive insight into students' thoughts and actions was essential to examining how SRL-supportive instructional features influenced SE and how the contexts where students were working might be associated with their SRL and SE during literacy tasks.

### **Study Procedures**

This study was carried out in three phases (see Table 1). The first phase involved identifying classrooms that reflected different kinds of placements wherein teachers were seeking to support SRL, and then observing those classroom settings in order to understand how teachers were implementing SRL-supportive instructional features. In phase two, student participants were identified and parental consent and student assent were acquired. The third phase encompassed three activities used to gather data about students' learning as situated in classrooms: (a) a student pre-meeting, (b) observations of students in classrooms, and (c) a post-meeting with each student. The remainder of this section describes each of these phases in detail.

In the first phase, the Head of the School was consulted to identify and contact those teachers who taught children in grades 4 and 5 (in classrooms or in pull-out settings). A total of eleven teachers were provided with a letter of recruitment (see Appendix A) and instructions to contact the investigator if they were interested in participating. Of those teachers, seven expressed some interest but only four asked to participate. Those teachers were given informed



consent forms (see Appendix B) which they signed and returned to the investigator. It is important to note that these particular four teachers were actively involved in professional development opportunities. As a result, it was not surprising to the investigator that these particular teachers were the ones who volunteered to participate.

Next, the four teachers who provided consent were observed in their classrooms using a teacher observation instrument (see Appendix C). Teachers were observed two times for 30 to 60 minutes in order to generate an understanding of how they implemented SRL-supportive instructional features in context. As literacy tasks can occur throughout different academic assignments and subjects, teachers were consulted in advance to determine which learning activities would be observed throughout the school day. For example, literacy tasks could occur during a science lesson where students were reading from textbooks, during a language arts class where students were conducting research, or during an art lesson where students were reading and writing about art history. As a result, observation times were established according to the potential of lessons to include literacy tasks. During these observations, a teacher observation instrument was used to focus observations and record evidence about how teachers were enacting SRL-supportive instructional features in their classrooms. Throughout these observations, each teacher implemented instructional features designed to support SRL in their classrooms. As a result, all four teachers were selected to be participants in this study.

In phase two, purposive sampling was used to target student participants who met the selection criteria. In order to do this, each participating teacher selected between five and ten students from her classroom and gave them informed consent letters to be sent home to their parents/guardians (see Appendix D). Assent letters were also available to teachers so that they could be read together with students (see Appendix E). These letters were collected by each student's teacher who then passed them on to the investigator. Of the targeted students, 16 returned both signed consent and assent forms. At this point, teachers were approached for

information concerning students' academic achievement, age, gender, and placement. From the pool of students who assented and had parental/guardian consent, seven students were ultimately selected based on variation in academic achievement, age, gender, and placement.

The rationale for selection was based on the following factors. Firstly, the selection of seven students allowed for a concentrated in-depth comparison across cases. It is important to note that given the amount of time left in the term when recruitment was finished, selecting seven students provided a manageable number to ensure a sufficient number of observations of each student. Secondly, having students in different classes within each type of placement provided multiple contexts where SRL-supportive instructional features and qualities of placements could be observed. Thirdly, focusing on intermediate students provided an opportunity to fill the research gap on knowledge of SRL and SE during literacy tasks for this age group. Fourthly, the use of purposive sampling to select students at different levels of achievement provided diversity in what individual students brought to their learning context that could be considered during analysis. Fifthly, the variation within age and gender allowed for a sample that was more reflective of the intermediate student population. Finally, the selection of students from different placements allowed for examination of how different classroom placements may have afforded or constrained SRL-supportive instructional features. As well, selecting some students who participated in both pull-out and inclusive classes provided an opportunity to track the same student across different placements, thereby allowing for study of interactions between students' backgrounds and features of different contexts.

In regard to using purposive sampling to select students at different achievement levels, including those with LD, specific criteria were used. Firstly, low and average to high achieving students were identified based on teacher reports of students' reading and writing performance. Teachers consistently referenced students' performance on their last unaided writing assessment and informal reading comprehension measures to gauge students' academic performance.

Secondly, for the purposes of this study, those students who were identified with LD fit the following criteria: (a) they were diagnosed with a language-based LD by a Registered Psychologist on a psycho-educational assessment, and (b) they met the criteria for LD according to the British Columbia Ministry of Education. It was necessary that evidence was available from norm-referenced assessments that indicated weaknesses in cognitive processing, average or above average cognitive ability, and persistent learning difficulties, evidenced by documentation of systematic attempts to address the student's difficulty through instructional approaches and their subsequent ongoing difficulties (British Columbia Ministry of Education, 2009). This last assertion regarding persistent learning disabilities is reflective of current research on LD diagnosis (Fletcher, Francis, Morris, & Lyon, 2005). These criteria were used to account for the variability in diagnosis across the field of LD. In addition to providing academic achievement information, teacher participants also relayed information from students' psycho-educational assessments to determine if they were considered having a LD for the purposes of this study.

In phase three, students took part in a pre-meeting, prior to classroom observations. During this meeting, they participated in a 10 to 15 minute interview in their classrooms at a time that did not interfere with their regular classroom work. This interview provided an opportunity for the investigator to establish rapport and gain insight into students' SE and perceptions of literacy tasks. To begin developing rapport, the interviewer introduced herself and explained the purpose of the study, describing that the research was designed to learn about literacy tasks and what teachers can do to help students increase their confidence for completing them. In order to examine students' perceptions of, and SE for, literacy tasks, students were interviewed using a student interview protocol (see Appendix F). As well, a self-efficacy measure (see Appendix G) was used to gauge students' SE in the context of a literacy task involving reading a passage and creating a written response. In addition, students were introduced to a self-efficacy probe (see Appendix H) that they would be using during observations. Taken together, these measures were

designed to uncover students' beliefs prior to observations and helped in situating and interpreting students' behaviour. For example, the information that a student disliked reading helped when associating behaviours, such as lack of persistence when faced with difficulties, with perceptions of SE. In sum, the goals of using the interview, SE measure, and SE probes at this stage of data collection were to establish a working relationship with participants and orient the interviewer to students' SE and literacy perceptions.

Following pre-meetings, three to five observations of 30 to 60 minutes were conducted of each student participant in each of his or her placement class(es). A student observation instrument (see Appendix I) was used to guide observations and gather information about both students' SE and SRL behaviours and contextual factors (SRL-supportive instructional features and qualities of placements). During observations, the self-efficacy probe was also used to gauge students' SE in relation to tasks they were working on. As well, work samples were collected, if possible, to both gain insight into students' tasks performance and trace students' SRL and SE behaviours such as planning, adjusting strategies, or persistence when faced with challenges. For example, one student exhibited planning in her work by drawing sketches prior to creating a final drawing. Finally, during observations, students were informally interviewed to ascertain their perspectives and interpretations (about tasks, about their SE, about contexts) as opportunities arose. Collectively, the data gathered during these observation periods facilitated the construction of descriptive portraits for each case of the students' SE and their responses to tasks as situated in context.

Finally, when observations were completed for a given student, each student participated in a post-meeting, again, during a time that did not interfere with regular classroom work. These meetings served two purposes, namely to provide an opportunity to ask students about their SE using SE probes and to clarify intentions behind observed SE and SRL behaviours. Using a student interview protocol, questions were formulated to investigate students' SE for literacy

tasks and to clarify emerging themes or residual questions. For example, the investigator raised an instance where one student implemented different strategies each time he was given a prompt by his teacher to refer to the time left to complete a task. Interviews in this case assisted in understanding the student's intentions in relation to his actions. Secondly, the investigator re-administered SE probes to gather evidence of students' SE for literacy at that time. These final data combined to contribute to an understanding of students' responses to tasks and supported creation of descriptive portraits of students' SE during literacy engagement.

### **School and Classroom Contexts**

An independent school in the lower mainland of British Columbia was selected for this study. It was selected because it has the following characteristics: it encompassed inclusive, support, and pull-out classroom placements, had teachers that implemented instruction designed to provide opportunities to support SRL, and had a population of students at different achievement levels including those with LD. The presence of these attributes allowed for the selection of students learning in different placements where teachers were structuring instruction to support SRL, thereby enabling investigation of the research questions.

In this school context, inclusive placements were characterized by classrooms that encompassed up to 21 students with one teacher and included students with and without LD. From those classrooms, students who struggled academically were removed for portions of the school day to work on their writing skills in small-group, pull-out placements with a special education teacher. In contrast, support placements were classrooms designed specifically for students with LD that included only 10 students, a special education teacher, and a remedial tutor. Students spent their entire day in these classrooms. The ability to investigate students' learning within inclusive, pull-out, and support placement classrooms in the selected school context enabled examination of how SRL-supportive instructional features were afforded or constrained in different placements.

## **Teacher Participants**

Four teachers, who taught in four different classrooms, were selected to participate in this study (see Tables 2 and 3). Iris was a grade 5 teacher in an inclusive classroom that included two participants (Brock and Sara). Leanne supported the same two students in a grade 5, pull-out setting. Inger's grade four inclusive classroom included three participants (Oceana, Matthew, and Cooper). In contrast to Brock and Sara, these three students were not observed in a pull-out placement. Sasha was the teacher of a grade 4/5 support classroom that included two participating students (Arlene and Nalat). In the remainder of this section, a brief description of the background of each teacher is provided.

### **Iris <sup>1</sup>**

A female teacher in her early forties, Iris had over 15 years of teaching experience, the bulk of which had been in elementary music. This was her second year teaching a grade 5 inclusive class. Prior to starting her teaching career, Iris completed her Bachelor of Arts in Music and a minor in Education. Eleven years later she began graduate studies in Leadership and Administration and, although she had completed all of her required coursework, she continued to have her thesis work pending.

### **Inger**

Inger was a female teacher in her early thirties who was completing her tenth teaching year. She taught in the primary grades for the first nine years and had just made the transition to Grade 4 at the start of the school year. Inger starting working as a teaching assistant after completing a general Arts degree and, after two years, went back to school for her Bachelor of Education degree. She then returned to the same school to begin teaching Grade 2. Over the last few years she completed her Masters Degree in Education with a focus in literacy instruction.

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<sup>1</sup> All teacher and student names are pseudonyms

## **Sasha**

Sasha was a new teacher in her early thirties. After graduating from university with a degree in Outdoor Recreation, she was an instructor at an outdoor camp for just over ten years. After returning to school for a degree in Education, and working at this school for several years as a teaching assistant, she began teaching the support class halfway through the second term to cover a leave.

## **Leanne**

Leanne was in her early forties and had been teaching at this school for almost 15 years. Just as Inger did, she began working as a teacher assistant, went back to school for her Education degree, and returned to the school as a teacher. Leanne taught in the primary grades until five years prior to the study, when she began to teach pull-out classes.

## **Student Participants**

An overview of the seven student participants is provided in Table 4. As described earlier (see also Table 3), Sara and Brock were selected from Inger's inclusive class (both of whom attended Leanne's pull-out class as well); Cooper, Matthew, and Oceana came from Iris' inclusive class; and Arlene and Nalat were chosen from Sasha's support class. Students with LD included Sara (from Inger's inclusive class) and both Arlene and Nalat (from Sasha's support class). In the remainder of this section, brief introductions are provided for each of the seven participating students.

## **Sara**

Sara was an eleven-year old girl who attended Iris' inclusive grade 5 class and Leanne's pull-out class. A psycho-educational assessment diagnosed Sara with a learning disability in the area of reading and written output in September 2009. This diagnosis met the criteria for the British Columbia Ministry of Education requirements for LD. Although Iris reported that Sara possessed strong compensatory strategies for coping with her learning disability Sara continued

to experience difficulties with her written expression and reading. For example, she was not meeting grade level expectations across all writing areas (i.e., meaning, style, form, and conventions) according to her second term unaided writing assessment. As well, her most recent in-class reading assessment indicated that both her reading comprehension and fluency were approximately two years below her age level. Sara had attended pull-out class placements in Grades 1, 2, and 4 and Iris relayed that her past teachers indicated that she had struggled with not only her academic progress, but that she also had low self-confidence for reading and writing.

Sara lived with her parents and had one older brother who lived away from home pursuing post-secondary studies. Iris commented that her parents reported no difficulties with her at home and that she was generally a happy child who had many close friendships. Sara's parents did struggle to help her with her homework and therefore they employed a tutor three times a week to provide homework assistance. In terms of extracurricular activities, Sara was involved in competitive swimming and dance, both two times per week at the time of this study.

### **Brock**

Brock was an eleven-year old boy in Iris' inclusive grade 5 class who also attended Leanne's pull-out support classes. Although he struggled with his academic achievement, he did not have a psycho-educational assessment at the time of this study. Brock had attended pull-out classes since Grade 1 to address his academic struggles. Iris indicated that he experienced difficulties with both reading and writing. In particular his reading comprehension of grade level texts was weak and his second term unaided writing assessment indicated that he was minimally meeting grade level expectations across all areas of writing (i.e., for meaning, style, form, and conventions).

Brock lived with his parents and two younger sisters, who both attended the school as well. Iris reported that while his parents were receptive to hearing about Brock's academic difficulties, they felt they did not need to have an assessment completed "just to get the label."



They were happy that he received in-school support and provided a tutor for him twice a week. Brock was actively involved in hockey in the first and second school terms, attending practices before school two days per week and two nights per week, with games usually occurring on the weekends. During the third term, he was busy with some hockey training but also a significant amount of soccer. These practices occurred after school and on weekends. As a result, although his parents were supportive of Iris' requests that his tutoring be increased to help him with his basic skills, they did not feel that, with his busy after school life, that it was a priority at the time of this study.

### **Cooper**

Cooper was a ten-year old boy who attended Inger's grade 4 inclusive class. For the past two years, he had attended a challenge writing class for students with high writing achievement where he left his classroom once a week for an hour for extension writing lessons. Due to the changing student population and achievement levels of students, he was not chosen to participate in the class during the year of this study. That said, Inger reported that he had high academic achievement in both reading and writing. She described his writing as "clear and articulate." Based on his second term unaided assessment, his writing was judged to be meeting expectations in style, form, and conventions, and fully meeting expectations in expressing meaning. As well, Inger reported that his reading comprehension was "meeting and sometimes exceeding grade level expectations."

Cooper lived at home with both of his parents and his older and younger sister. When meeting with Inger, Cooper's parents reported that they were very pleased with his academic performance and felt that he was very mature. Inger concurred, indicating to the investigator that Cooper was very well behaved in class. Outside of school, Inger reported that, just like Brock, Cooper had a busy home life with hockey and soccer. Cooper also played baseball throughout the third term and was on a swim team throughout the year.

## **Matthew**

Matthew was a quiet ten-year old boy attending Inger's inclusive grade 4 class. His academic achievement was low, but he did not attend a pull-out placement during this school year to due space restrictions. Inger reported that, according to past teachers, Matthew had struggled with his academic progress since Grade 2 and had attended pull-out support for the two years prior. As well, Inger specified that he had difficulties with his reading and writing, indicating that he "often works with peers to help with his reading," and that his writing was "often simplistic, lacking depth." Matthew minimally met expectations in all areas of his writing on his second term unaided writing assessment and Inger reported that his reading was most likely in the minimally meeting area as well. She also commented that he was a social boy who was "friendly and cheerful" and who possessed a "good attitude and puts forth a great deal of effort."

Matthew was the oldest of four siblings and lived at home with both parents. Inger relayed that, during parent meetings, Matthew's parents often referenced how mature he was, taking responsibility for his younger siblings on a regular basis. That said, they were concerned about his social interactions with peers of his own age, for he often played more immature games with his peers. In regard to his academic struggles, Matthew's parents were aware of his difficulties and employed a tutor three times a week to support his academic work. In order to accommodate for a busy home life, Matthew was involved in one sport at a time, which, at the time of this study, was soccer practice two times per week.

## **Oceana**

Oceana was a high achieving ten-year old girl in Inger's grade 4 inclusive class. Inger reported that Oceana was strong in all areas of academics. Her writing skills were described as "very creative," and she was meeting expectations across all writing areas according to her second term unaided writing assessment. As well, Inger reported that Oceana was an avid reader who had no difficulty comprehending grade level texts. That said, Inger did not consider her

reading to be as strong as her writing, as Oceana often chose “easy books” for her independent reading.

Oceana and her younger brother lived with at home with both of their parents. Inger reported that Oceana’s mother was generally pleased with Oceana’s progress but felt that she was not working to the best of her ability at the time of this study. Outside of school, Oceana was heavily involved in dance, attending training sessions up to four times per week

### **Arlene**

Arlene was a 10-year old girl in Grade 4 who was enrolled in Sasha’s support class. She had a full psycho-educational assessment which diagnosed a reading disability and written output disorder. As well, she met the British Columbia Ministry of Education criteria for a learning disability. Her teacher reported that she was a “bright, energetic student” who struggled to convey her strong oral ideas in print, not meeting expectations across all areas of writing on her second term unaided writing assessment. As well, her reading level was estimated to be one year below her chronological age. This was her first year in the support placement, which started in Grade 4. Since Grade 1, Arlene had received Learning Support assistance at school between two and three times per week. During these years, she also worked with a tutor at home, again two to three times per week. As recommended by Sasha, Arlene ceased tutoring when she entered the support placement at the start of the school year.

Arlene lived at home with her older sister and her two parents. Sasha reported that Arlene’s parents were very well aware of her academic difficulties and therefore focused on other successful activities at home. For extracurricular activities, Arlene participated in dance, art, and drama classes, each once per week.

### **Nalat**

Nalat was an eleven-year old girl, in Grade 4, attending Sasha’s support class with Arlene. Her psycho-educational assessment indicated the presence of a language-based learning

disability specifically in the area of reading. Her diagnosis met the British Columbia Ministry of Education requirements for a learning disability. Sasha reported that Nalat was a quiet, sweet student who had difficulties with her spelling, reading fluency and comprehension, and written expression. She was not meeting expectations in any areas in writing, as exemplified in her second term unaided assessment. Nalat struggled to read and comprehend grade level text. While she had received learning support in school since Grade 1, she did not participate in outside tutoring. Consistent with Arlene, this was Nalat's first year in the support placement.

Nalat lived at home with her parents, older brother, and younger sister. Sasha indicated that Nalat's mother expressed pleasure in her progress and found Nalat to be more relaxed at home than in prior years when she was in inclusive placement classes. Nalat was involved in the school skipping club but no other extra-curricular activities.

### **Data Collection**

As overviewed earlier, multiple data collection measures were implemented to form a holistic perspective of students' SRL and SE within tasks that were embedded in context (see Figure 4). To gather data about those contexts, running records and guiding conceptual categories were used to document SRL-supportive instructional features and qualities of placements during observations. Data concerning students' responses to tasks, including students' task interpretations, SE and SRL behaviours, and literacy performances were collected using interviews, observations with running records and conceptual categories, and student work samples. Finally, insight into students' SE beliefs was sought out using interviews and SE probes. This overall approach to collecting data was generated using a modified version of Zimmerman's (2008) microanalytic methodology where students' SE for reading and literacy performance was explored before, during, and after their engagement in literacy tasks. The advantage of this approach stemmed from the ability to gather data regarding students' SE

throughout their engagement in literacy tasks, supporting interpretation about connections and relationships between SE beliefs and contextual factors.

Table 5 outlines this study's data collection methods as they unfolded before, during, and after student engagement in literacy tasks to gather information about students' SE in response to literacy tasks situated in context. Measures were intentionally designed to be brief to retain the engagement of students at this age. For example, the self-efficacy measure consisted of five questions which concentrated on reading and preparing a written response, rather than looking at a broader range of literacy tasks that would require a larger set of questions. While these questions were brief, they were broad enough to provide insight into students' perceptions of their SE.

## **Measures**

**Teacher observation instrument (see Appendix C).** This tool was used in phase one observations of teachers, with the purpose of gaining an understanding of how teachers enacted SRL-supportive instructional features in their classrooms. Adapted from Perry's (1998) work, the teacher observation instrument was divided into three sections, including a section for demographics, a running record, and conceptual categories to record and organize data. Firstly, the demographics section consisted of information about the teacher, class, school, date, and time of the observation, and the activity observed. Secondly, the running record was composed of descriptions of classroom events and behaviours. Thirdly, conceptual categories were defined that acted as a framework to focus observations and coding during data analysis (Perry et al., 2003). In this section, particular attention was focused on teachers' use of SRL-supportive instructional features enacted in the context of literacy tasks. More specifically, the investigator attended to the presence, absence, and nature of complexity, choices, instrumental support, and non-threatening assessment practices implemented throughout observed lessons. For example,

teachers' provision of choices was described according to the type of choice and the context in which it was presented to students.

During phase one observations of teachers, the investigator was positioned in a location providing a clear view of the teacher and students without being intrusive to the classroom activities. As instruction unfolded, events were recorded along with verbatim speech whenever possible. After each observation, the running record was re-read adding any details not recorded during the observation. Focusing on the categories for SRL-supportive instructional features, the running record was then re-read a second time, noting any examples that fit into these categories. Using these instances of SRL-supportive instructional features, each category was assessed with a 0, 1, or 2 rating, reflecting the quality of each instructional feature (Perry & VandeKamp, 2000). For example, the quality of each choice was indicated using a "0" for no choices provided, a rating of "1" for choices provided with constraints, and a "2" rating for choices without constraints (Perry & VandeKamp, 2000). As well, in-depth descriptions of each SRL-supportive instructional feature were added.

**Student interview protocols (see Appendix F).** Interviews with students throughout the study were semi-structured in nature. First, in pre-meetings with students during phase three, the focus of initial interviews was on students' perceptions of, and SE for, literacy tasks. Examples of questions included, "How do you feel about reading?" and "If I asked you to read this (sample literacy activity), how would you feel about it?" Second, during observations, brief questions explored students' perceptions of, and SE for, a given literacy task and their perceptions of the context. At the end of each observation, students were also asked to explain their rationale for ratings on the SE probes, describe what they were being asked to do, and provide their feelings on SRL-supportive instructional features or qualities of placements that were observed. As well, this interview provided an opportunity to clarify student intentions behind observed SE or SRL behaviours. For example, during one observation a student flipped through his book prior to

beginning an activity, possibly indicating some evidence of planning. During the interview, he was asked about this behaviour and he indicated that he was checking his binder to ensure he had all of the required materials, therefore indicating that he was planning. Finally, during post-meetings, after all observations were complete, a final interview was conducted. Interview questions at this stage were designed to clarify emerging themes or residual questions that the investigator had about students' literacy engagement. For example, if instrumental support was present, students were asked questions such as, "When you asked your teacher for help when you were reading, she asked you to brainstorm reading strategies. Tell me about that. Does that help you? Why or why not?"

**Self-efficacy measure (see Appendix G).** This measure, adapted from Butler (1998b) and Butler and Cartier (2005), oriented students' attention to literacy tasks, and then focused in on their SE in reading a passage and writing a response. It was used in pre-meetings, during initial student interviews, with the goal of gaining insight into what perceptions students brought with them to the context. Students rated their confidence, on a scale from one to five, in their ability to successfully read a passage and write a response as described in five statements. These statements teased apart specific literacy skills into: reading for understanding, learning, remembering, summarizing and explaining their comprehension to others orally or in writing. This measure provided insight into the SE perceptions students brought with them to tasks, which was important to understanding how initial SE may have been implicated in their literacy engagement.

In order to contextualize the questions on this measure, one grade 4 and one grade 5-level passage was selected where students were asked if they could read the text and write a response. The texts were supplied by two of the teachers (at Grade 4 and 5 respectively), and all teachers confirmed that participating students were familiar with the texts

**Self-efficacy probes (see Appendix H).** In phase three, students were first introduced to this measure during their pre-meetings, prior to using it during observations and again in their post-meetings. These SE probes tapped into students' perceptions of SE. More specifically, the probes included two questions investigating students' SE for literacy tasks, one focused on SE for the type of literacy task in general; the other on SE as embedded in context of the specific literacy task. The general literacy question asked students to think about the type of literacy task and rate how often they could complete it successfully, from never to always. The specific literacy question asked students to think about the literacy task in front of them and rate their confidence in completing it successfully, from not at all confident to very confident. Building from Bandura's (2006) guide for constructing SE scales, for both questions students gave responses on a scale from one to five in order to provide a clear midpoint at three.

The importance of teasing SE apart into "general" SE and "task specific" SE comes from the theoretical perspective framing this study. Consistent with the social cognitive perspective, SE is likely to be variable depending on factors embedded in the context of the particular task. As a result it is essential to inquire about not only students' "general" SE or how they think about themselves as capable in the type of literacy tasks, but also their "specific" SE at a given moment in time when faced with a particular task, on a particular topic, within a particular setting.

**Student observation instrument (see Appendix I).** This measure was used during phase three, student observations, with the purpose of gathering information about students' SE and SRL in the context of observed qualities of placements and SRL-supportive instructional features. This instrument was an expanded version of the one used in phase two, with the same overall structure. That is, this version also included three sections, for demographics, a running record of observations, and conceptual categories, as well as a 0-2 rating scheme. However, the conceptual categories section of this instrument was expanded to include: (a) both SRL-supportive instructional features and qualities of placements, and (b) students' SRL and SE



verbal and non-verbal behaviours. The rationale for recording both verbal and non-verbal behaviours was derived from the assertion that students' SE is linked to their effort, performance, selection of goals, and persistence when faced with difficulties (Zimmerman et al., 1992). Therefore, students' behaviour in response to their perceptions of contextual factors may reflect SE beliefs. As well, their behaviours or verbalizations may indicate that they are using certain SRL processes. For example, when a student comments aloud that a reading strategy is not working, this suggests that he/she is implementing and monitoring strategies. It is important to note that in this study observations afforded identifying behaviours, not necessarily intentions. Thus, to complement observations, student interviews were drawn on to ascertain the meaning of behaviours. For example, if a student stopped reading halfway through a passage, interviews were used to clarify why. It may have been that the student perceived the task as too challenging so she gave up, or that she thought the task was to read only half of the passage.

Together the information gathered from the SE measure (what students brought to a context), the SE probes (how students thought about themselves in relation to the type of task and specific task and context), and the student observation instrument (focused on accounting for SE and SRL behaviours in relation to instructional features and qualities of placements), enabled building a rich description of each students' SE within and across classrooms.

### **Data Analysis**

Because the theoretical model drawn on in this study suggests that SE is embedded within context, a comprehensive contextual perspective was used to analyze students' SE as it unfolded during tasks. Data collection and analysis occurred in tandem throughout the study. At the end of each of the three to five observation periods for a given student, a descriptive portrait was generated of that students' literacy engagement (including SRL and SE) as situated in context. The first step was to review all data collected in that observation to ensure completeness and accuracy. Any gaps in information, such as missing work samples, were noted for future

collection. At this point the 0-2 rating scheme used during teacher and student observations was replaced by more extensive descriptions of each SRL-supportive instructional feature. Next, using a recursive process of analysis and interpretation, visual representations of contextual features and students' response to tasks and SE were created (see Figure 4). As Miles and Huberman (1994) describe, displays in this visual format present information systematically to identify relationships and patterns. In this study, these portraits provided a framework to examine the interaction of multiple aspects of contexts in relation to students' SRL and SE. Information about the context (SRL-supportive instructional features; qualities of placements), students' responses to tasks, and their SE was plotted within each descriptive portrait. As well, drawing on the work of Merriam (2009) and Miles and Huberman (1994), themes that emerged from the data were coded and plotted on each portrait as memos. These memos guided future data collection episodes (i.e., to assess hypothetical relationships that emerged in relation to the research questions). This process of analyzing, interpreting, and plotting information in descriptive portraits with coded themes and memos was repeated at the end of each student observation (i.e., of a literacy learning episode) to create multiple descriptive portraits for each student case.

In addition to data analysis that occurred in conjunction with data collection, intensive analysis took place once descriptive portraits of learning episodes were developed for each student first, then across all participants. The creation of multiple descriptive portraits for each student provided parallel snapshots of students' SE embedded in context. These portraits and memos were then cross-examined to analyze patterns, connections, and relationships between SRL-supportive instructional features, qualities of placements, SRL, and SE that appeared across episodes for a given student in same and different placements, students in the same class, and students in different classes with the same placement. Graphic displays and electronic databases were used to organize and compare themes in relation to research questions. In sum, data analysis occurred in tandem with data collection to generate descriptive portraits with memos

and intensive interpretation took place at the conclusion of data collection where data from multiple portraits were cross-examined to investigate the research questions.

### **Ethical Considerations**

The investigator applied for and was granted permission from her institution's Behavioural Research Ethics Board before beginning this research. Ethical considerations that were taken into account included confidentiality and anonymity, voluntary recruitment, informed consent, and potential harm. To ensure confidentiality and anonymity, all data are housed in a locked filing cabinet, pseudonyms were used for participants, and only general, non-identifying description of participants, the school, and region are provided. As well, voluntary recruitment strategies were used to identify student and teacher participants and informed consent was obtained from all participants. Finally, potential harm was limited when interviewing and observing students by exercising great care to avoid interference with their engagement in learning or classroom activities, and by ensuring that students who might have been struggling with reading or writing, or who had been identified as having an LD were in no way singled out. As well, due to the fact that young students, especially those with LD, can experience challenges in reading, questions regarding their feelings about their literacy performance were asked with sensitivity, and students were always given a choice as to whether or not to answer questions. These measures ensured that participants in this research were treated ethically.

## **Chapter Four**

### **Results**

The goal of this research was to facilitate greater understanding of the ways in which multiple aspects of context might impact students' SE and SRL during literacy tasks. Three main research questions were addressed when considering this study's participants learning in classrooms: (a) how were teachers implementing SRL-supportive instructional features, and did qualities of placements afford or constrain how these features were enacted? (b) how were instructional features designed to support students' SRL also related to students' SE? and (c) overall, how were the contexts where students were working (SRL-supportive instructional features; qualities of placements) associated with students' SRL and SE? In order to answer these research questions, an instrumental, qualitative case study of seven students at different achievement levels was used. Data were collected from multiple sources to generate descriptive portraits of students' SE and SRL during literacy tasks.

The following analysis is broken down into three parts. First, the school context and each instructional environment are described. Second, using information gathered from the descriptive portraits, an in-depth account of each student's engagement in literacy tasks is provided. Finally, each research question is addressed based on cross-case and cross-environment analyses, using tables to provide visual references for patterns.

#### **School and Instructional Environments**

This study was conducted in an independent school in a wealthy suburb of western Canada that charged tuition for students' enrollment. That said, while many of the school's students did come from families with high socio-economic status, the overall population in the school consisted of a mix of students from families with high, middle, and low socio-economic backgrounds. Many students had two working parents, were given tuition grants, or had individuals outside of the immediate family, such as a grandparent, to pay for their tuition.

Socioeconomic data were not collected for participants in this study as they were not related to the research questions this study was addressing. While a formal analysis of the cultural demographics was not available, the investigator noted that the neighborhood and school population generally reflected a mix of students with Euro-Canadian and Asian backgrounds. The teacher and student participants in this study represented this cultural diversity.

At the time of this study, the investigator also worked as a teacher in the school, but did not supervise or work directly with any of the participating teachers or student participants. The school included a population of approximately 1200 students and 230 teaching and administrative staff. Programs started in pre-kindergarten and ran through to Grade 12. Class sizes were generally smaller than those found in the public system, with a maximum class size of 22 students to one teacher. The school's focus revolved around athletics, academics, arts, and service, with emphasis placed on university preparation. The curriculum was modified to go beyond the BC Ministry expectations to include more advanced material across all subject areas. The school prided itself on a very high university acceptance rate for graduating students. At the same time, the school included a significant cohort of students with learning difficulties, and provided a large learning resources department and support programs for students with LD.

In the remainder of this section, each teacher's classroom is described. For each classroom, the description begins with an overview of the physical space, atmosphere, student dynamics, and teaching style. Then descriptions of literacy tasks, SRL-supportive instructional features, and placement qualities are presented, first from phase one initial observations, then from across the observations conducted during phase three of the study. Finally, one rich description of an observation is presented to provide a more nuanced picture of each teacher's classroom.

## **Iris' Classroom**

In Iris' inclusive classroom, students at different achievement levels worked together with Iris on the core subjects of Language Arts, Mathematics, Science, Social Studies, and Art. They received instruction from specialist teachers in Physical Education, Music, and Technology Integration. Students who were struggling with their writing skills in Language Arts could attend a pull-out class twice a week to help remediate their basic writing skills.

Iris' class was spacious, well lit and organized. Twenty student desks were arranged in groups of two or three in the middle of the room, centered in front of an interactive whiteboard. On the right side of the room, beside the entry door from the hallway, was a long table with attached stools for students for group work. A couch, carpet and the teacher's desk were located on the left side of the room, beside a set of floor to ceiling windows that spanned the exterior wall. At the back of the room was a technology station that housed 4 student computers, a CD player, and audio book center. On the walls, three bulletin boards lined the room, displaying main ideas for major curricular themes.

Students in Iris' classroom could be described as boisterous but well-behaved. Students attended to Iris' instructions and, although they tended to get off- topic and call out frequently, they responded quickly to Iris' redirection. Several friendship "cliques" could be observed, although students did not appear to have difficulty working in mixed groups. For example, when given the choice, students would consistently choose similar partners or groups, but when assigned to particular groups, interacted well with all members.

Iris' teaching style and rapport with students was dynamic and full of expression. She was often observed engaging students throughout her lessons with exaggerated body language and different voice tones and volume. She integrated diverse activities during content lessons, such as showing videos, playing and creating music, having students present to the class, or

explain their understanding to a partner. As a result, Iris created a warm and lively atmosphere in her classroom and her students appeared to have a close connection with her.

**Phase one observations.** During phase one of the study, two observations of 30 minutes in length were conducted in Iris's classroom over a one-week period. The first observation was of Iris teaching Social Studies. In this lesson, Iris was teaching about Natural Resources and had students practicing the skills of finding main ideas and comparing information. She had students watch a video and take notes of main ideas, read from the textbook and take notes, then compare the notes from both sources for similarities and differences. In the second observation, Iris was teaching the connection between Poetry, Alliteration, and Advertising during a language arts lesson. She had students listen to a musical piece and identify alliteration. Next, Iris had students read several poems and again identify alliterations. Iris showed several examples of how alliteration is used in advertising and assigned students the task of generating their own advertisements using alliteration.

Throughout these two lessons the following SRL-supportive instructional features were noted (see Table 6). First, complexity in both skills and goals were observed as lessons were part of larger units that spanned over a number of classes requiring students to build and draw upon their knowledge of literary devices and writing skills, and attending to multiple goals including integrating alliteration into writing for the purpose of advertising. For example, Iris first prompted students to “remember how we learned to create alliterations ...,” then had students share their ideas. She followed this by explaining, “We are going to see how advertisers use alliterations....” Second, Iris provided students with choices in the role that they assumed when working in groups. As well, choices in materials were provided in the persuasive writing lesson when a variety of poems were available for students to select from. In addition, choice in product was present in both lessons as students were given options in what they created to demonstrate their understanding. Finally, instrumental scaffolding was provided during both lessons as Iris

directed students' questions back to them to find the answers, with her support. For example, in response to one question about the advertising task, Iris explained that the student should "look at the outline on the board and the examples," which the student did to successfully answer her own question.

Although not coded formally during phase one observations, the opportunity was taken to observe qualities of placements and make notes within running records. In Iris' classroom (as in others), the teacher-to-student ratio, instructional focus, and peer relations were observed. First, the teacher-to-student ratio in Iris's classroom was relatively high (compared to support or pull-out settings) at a ratio of one teacher to 19 students. Second, Iris's instructional foci were on both curriculum and learning during the Socials Studies lesson as students exercised the learning skills of finding main ideas and comparing in the context of the curriculum on Natural Resources. In the language arts lesson, the focus was solely on learning as students concentrated on applying the literary device of alliteration to the real world context of advertising. Third, in terms of peer relations, students were given opportunities to work both independently and in groups during both lessons. They were observed to engage in both on- and off- topic discussions, which Iris allowed to some degree, until it became counterproductive or distracting to others. Although Iris set groups during both lessons, students did not appear to mind working with different peers and, generally speaking, all group members contributed to discussions.

**Phase three observations.** An overview of the literacy tasks, SRL-supportive instructional features, and qualities of placements that occurred during observations of Iris' class is presented in Table 7. During six observations of Iris's class over three weeks, two tasks were observed. The first Reading Response task (see observations 1 and 2) spanned across two observed lessons (one where the investigator was focused on Brock, and the other on Sara), and entailed students selecting independent reading material, reading and then writing a reflection in their reading logs. The second task occurred in Social Studies and spanned four lessons (see



observations 3 to 6). Students read information booklets about Natural Resources, took notes using different sources of information, and worked in small groups to prepare a presentation for the class.

In regard to SRL-supportive instructional features, forms of complexity, choice, and scaffolding were observed throughout Iris's lessons. More specifically, complexity in skills was present for both tasks as they each drew on skills focused on throughout that year to build on knowledge from cumulative lessons. As well, the social studies task was complex as it attended to multiple goals, requiring students to read for comprehension, write notes, gather information from different sources, find main ideas, and organize material for an oral presentation. In terms of choices, Iris gave students choices in materials during the Reading Response task and in the last two social studies lessons. The degree of choice differed between the Reading Response task, where students had free choice, and where Iris explained, "You can choose anything you want to read," and the social studies task, where students were restricted to material related to their particular topic. Students were presented with two other forms of choice in the social studies task: choice in process in how they went about completing the task, and choice in the role that they assumed in their group. Choice in process also occurred in the Reading Response task as students could select their own method to complete the task, such as reading first and then writing or stopping throughout their reading to write reflections. Finally, in regard to scaffolding, instrumental scaffolding occurred in the last two social studies lessons. For example, when students asked where to find information, Iris prompted them to generate their own strategies, asking a student, "Where can you look for that information?" Procedural scaffolding was observed throughout the first social studies lesson where Iris answered several questions with direct answers or instructions of what to do next. Although scaffolding of either type was not observed to be used to directly facilitate students' taking advantage of SRL-supportive

instructional features (e.g., to take the best advantage of choices), scaffolding was used to answer students' questions, moderate discussions, and prompt students to use cognitive strategies.

Next, three qualities of placements were observed: teacher-to-student ratio, instructional focus, and peer relations. The teacher-to-student ratio was relatively high in Iris's classroom, ranging from one teacher to between 16 and 20 students. In terms of instructional focus, the reading task was concentrated solely on the learning skills of reading and writing whereas the social studies task focused on both learning skills and curricular content. More specifically, the social studies task required students to use their reading, writing, and note-taking skills in the context of learning about Canada's Natural Resources. Finally, looking at the peer relations that occurred during these six lessons, students worked independently in the Reading Response task and therefore did not interact with peers. In contrast, students worked both independently and in groups during the social studies task, providing multiple opportunities to observe students' peer interactions. Generally speaking, students worked well together but did require some redirection to maintain focus on tasks. As well, frequent disagreements were noted that often centered on the content and competing methods for completing a task. It is interesting to highlight that these disputes occurred when choices in roles and processes were present. It could be argued that the provision of choices led students to both disagree and resolve how to complete tasks. When students were working in groups, Iris divided her time between working at her desk and travelling between groups, observing and providing assistance when required.

**In-depth example.** To provide an in-depth view of Iris' classroom, the fourth observation will be described in detail. During this observation the investigator was focused on Sara while she was working on the social studies task (see Table 7). This ongoing, complex task required students to use the skills of reading comprehension, consolidating information from multiple sources, identifying main ideas, writing notes, and organizing a presentation in the context of learning about Natural Resources. Iris explained to the investigator that this was the

third lesson on this task. In the first lesson, she had introduced this task and students had begun working in groups to gather information from brochures. In the next class, students again reviewed the task prior to working in groups. In this lesson, Iris hoped that most groups would finish drawing main ideas from their brochures as she wanted them to expand on their knowledge by gathering information from a choice of materials in the following lessons.

The investigator entered the classroom as 18 of Iris's students were transitioning from their Math class. During this time, students were exchanging binders and textbooks in their lockers, getting settled at their desks with their materials and chatting with one another. Iris was writing textbook page numbers on the board and instructing students to get out their social studies materials. Once most students were sitting in their desks, Iris made several requests for them to quiet down. After she had all students' attention, she asked for volunteers to explain what they were working on last class. Three students raised their hands while several others flipped open their binders. Iris chose a boy at the back of the class who had his hand raised. He explained proficiently and confidently that they were learning about Natural Resources and making presentations in groups. Iris complimented him for his memory and continued on to repeat the goal of the task, "...to learn about your Natural Resource and then teach the rest of the class ...". She then reminded students of the specifics of the overall task: to read the booklet and make notes of main ideas to present to the class. After that she explained what students who had completed should do next, including "reading the outline on the board and ensuring that they had covered all topics". Following that, Iris instructed students as to where they would work in their groups, reminding them to ask if they had any questions.

At this point, the students gathered their materials and moved at different paces to form groups of five students around the room. During this time, Iris answered a question regarding memorizing presentations at the front of the classroom. After a few minutes, Iris reminded students to get focused on their task and began circulating the room, checking in with groups.

Students were observed working both independently and as a group. Throughout this time most students were on task, with occasional off-topic discussions. Sara and Brock worked together in one group and had several disagreements regarding how to proceed to complete their task. When Iris approached this group, she observed the disagreement for several minutes before providing support to resolve the conflict. Iris did not specify what roles students should take within the group or what process they should use to complete the task, rather she helped mediate their discussion. For example, after one student attempted to offer his ideas on several occasions, each time getting cut off by others, Iris asked the group to stop talking for a minute in order to let him express his opinion.

Over the next 20 minutes, Iris continued walking around the room, assisting groups and working at her desk when students did not appear to require her assistance. Three times throughout this work period, Iris gave verbal prompts to groups of students to either refocus their attention onto the task or to use “indoor voices” so they would not distract others. Students were observed to consult each other with questions and continued to engage in positive, on- and off-task discussions throughout this time. One exception was noted when Brock made a critical comment to Sara about her reading speed and she reacted by exhibiting withdrawn body language such as sinking lower in her seat. This was the only negative peer interaction observed throughout this lesson.

At the end of the work period, Iris informed students to pack up their materials with the reminder to put pages into their binders correctly. She then assisted two students who were having difficulties with their binders.

### **Inger’s Classroom**

The set-up of Inger’s inclusive program was the same as Iris’ in that students at different achievement levels worked on Language Arts, Mathematics, Science, Social Studies, and Art with Inger and received instruction by specialist teachers in Physical Education, Music, and

Technology Integration. As was the case with Iris' inclusive class, students who struggled with writing could attend a pull-out class twice a week to help remediate those skills.

Inger's grade 4 inclusive classroom closely resembled Iris', including the same physical layout of groups of two to three desks, an interactive whiteboard at the front of the room, carpet and teacher desk on the left beside the windows, and a long table beside the entry door. The only difference was that Inger had created a warmer atmosphere suitable for younger students with the addition of more posters, art displays, and pillows on the carpet.

Inger was observed to have a strict, caring, and engaging rapport with her class. The student expectations Inger set were very high and she would frequently request that students redo tasks to "reflect their potential." She had a loud, clear voice that she often used to quickly gain and hold her students' attention. On the other hand, when required, she could quickly soften her tone to respond to her students' needs. Oceana reported that amongst the students Inger was considered a "favourite teacher," who students from previous years often visited during their lunch hour. In regard to her lessons, multisensory activities and explicit connections to the real world were observed to be strong foundations behind her teaching method. For example, in a unit on persuasive language, students sampled chocolate and use rich vocabulary words to describe each type using their senses. Inger then connected this lesson with persuasive language used in advertising. During these types of activities, her students were often observed to be highly engaged in lessons.

Inger reported that of the 19 students in her class, a large majority were average to high achievers, with only four students who were struggling in certain academic areas. As well, she indicated that the general population of the class tended to be quiet and focused easily on their work. In addition, Inger commented that students with a history of disruptive behaviour in prior years were significantly calmer in her class than in past years. Although several close friendships could be observed in the classroom, students worked well with all members of the class. Inger

reported that the majority of her students had been in the same classes for several years and got along very well.

**Phase one observations.** Two observations of 40 minutes in length were conducted of Inger's classroom over a one-week period. In the first observation Inger assigned a complex language arts task. Students had been learning about using voice to elicit feelings and were learning how to apply voice to persuasive writing. Their task, after reading stories with strong voice, was to write a persuasive letter from the perspective of an inanimate object using voice to elicit a particular feeling. During the second observation, of a social studies lesson, Inger had students continue working on an historical figures trading cards project. In this project, Inger assigned the task of selecting five people and creating a card for each person with their picture on the front and specific information about them on the back. This was a work period where Inger first reviewed the project and then gave the students 35 minutes to work on their own with her support.

A variety of SRL-supportive instructional features were observed throughout these two lessons. First, complexity in skills occurred in both lessons as students were working on tasks over an extended period of time building on prior knowledge and skills. For example, Inger prompted students to "remember what we have learned about voice ... what do I mean by voice ..." prior to introducing the lesson on persuasive writing. Second, five types of choices were observed including choice of where students could work, who students could work with, the materials they could select from, the final product they created, and the process they used to reach their goal. For example, during the social studies task, Inger gave students a wide range of materials to use when researching their historical figures including the internet, peers, and classroom and library books. Third, in terms of instrumental support, student modeling occurred during Social Studies when a student presented his work to the class as an example. As well, both instrumental and procedural scaffolding were provided by Inger as she gave students direct

answers to questions and asked them to use strategies to answer their own inquiries. In particular, Inger provided instrumental scaffolding to support students selecting content as a result of choice in process in how they generated material for their trading cards. Fourth, self-assessment was included in the social studies task as students were provided with a checklist of information they needed to find about each historical figure. Inger asked students to use this checklist “to figure out if you are finished” rather than relying on her approval, prior to them moving to the next task.

Looking at the qualities of placements, the teacher-to-student ratio was relatively high in Inger’s class at a ratio of one teacher to 18 students. Next, looking at the instructional focus, the language arts lesson was concentrated on the learning skills of persuasive writing with effective voice and the social studies lesson focused on the learning skills of research in the context of curriculum content (i.e., about historical figures related to Explorers). Finally, in regard to peer relations, students were given the opportunity to work independently, as a group, and in partners throughout both observations. For both lessons, students were observed to work productively with one another, rarely engaging in off-topic discussions before Inger refocused them. As well, they frequently shared their work and ideas with one another and asked for and received constructive feedback. On one occasion, a student critiqued a peer’s work in a negative manner and Inger intervened to reinforce the importance of tone when giving feedback. Both students appeared to be receptive and continued to work together in a positive manner for the remainder of the lesson.

**Phase three observations.** An overview of the literacy tasks, SRL-supportive instructional features, and qualities of placements that occurred during Inger’s observations is presented in Table 8. Because three of the seven student participants resided in Inger’s class, the greatest number of observations, thirteen, was conducted in her classroom. These observations took place during language arts, social studies, and science classes over a five-week period.

During the five language arts lessons, two tasks were observed. During two lessons, students worked on a Vocabulary task (see observations 1 and 2) where they read about word choice in persuasive writing, sampled different chocolates, and completed a chart of strong vocabulary words to describe each chocolate. The second language arts task was also focused on Persuasive Writing (see observations 9 to 11), where, as a class, students read about and discussed persuasive tone and then independently wrote a persuasive paragraph with the purpose of convincing their parents of something. In Social Studies, observations of seven lessons were conducted as students worked on two different tasks. During six of the lessons, students worked on a Review task (see observations 3 to 8) where they were given the option of working independently or with a partner to read from their textbooks and other sources of information to answer practice questions for a test. In the other social studies lesson (see observation 13), students were working on a Summary task where they had to read a section of the textbook and fill in the main ideas on a summary page that Inger provided. The final observation occurred during a science lesson (see observation 12) where students worked independently on laptops on the task of creating blogs to display their understanding of the weather. This was a self-directed task where students were allowed to draw from multiple sources of information to develop their understanding of weather and use a multi-media format to display their knowledge to others.

Looking at the types of SRL-supportive instructional features that occurred during these lessons, different forms of complexity, choice, and instrumental support were present. Complexity in skills was observed throughout each lesson as tasks always spanned multiple lessons that built on prior knowledge and skills. As well, complexity in goals and strategies were noted once when students created Science Blogs. This task was considered complex because it encompassed multiple goals including consolidating information from different sources, generating a written or visual demonstration of their knowledge, and using technology skills to



portray information. As a result, students had to use a variety of strategies throughout each step in order to successfully complete the task.

In regard to choices, choices in materials, process, roles, products, who to work with, and where to work were observed throughout these 13 lessons. First, choice about processes occurred in seven out of thirteen lessons, when students were given options in how they went about completing their task such as how they found answers to their review questions. Second, choice of material was present during six lessons, as students selected information from different sources to complete their task. For example, when completing the Science Blog task, students could gather information from their textbook, notes, or the internet. Third, choice in the role that students took in group work was observed in two lessons, each time when formal group work was assigned. Fourth, choice in product was present when students were working on their Science Blogs as they had free choice in what information they included and what the final product looked like. As well, this type of choice occurred in the three lessons on the Persuasive Writing task when students could select what they wanted to write about. Five, choice in who students could work with and where they could work occurred in seven lessons, during the six lessons on the Review task and the one lesson on the Summary task. During these tasks students were not assigned to specific groups or partners, rather they could work with whomever they chose and they could select where they wanted to work in the classroom.

In regard to instrumental support, student modeling occurred during the two observations when students were working on the Vocabulary task. In both of these cases, Inger highlighted a student's work and had the student explain to the class what he had done and why. The other form of instrumental support, scaffolding, occurred in both forms (instrumental and procedural) during the Review task. An example of instrumental scaffolding occurred when Inger had students answer their own questions about where to find information by creating a brainstorm of sources of information as a class. Scaffolding in this form supported the provision of choices in

materials and choice in process by highlighting the different options they could choose from in order to complete the task. In contrast, procedural scaffolding occurred when Inger answered a student's question regarding finding an answer by directly pointing out the place in the textbook.

In addition to forms of complexity, choice, and instrumental support, non-threatening assessment in the form of student self-assessment was observed in three lessons as students worked on the Persuasive Writing task. For this task, Inger had students use a writing self-assessment checklist that included items such as using introductory, supporting, and concluding sentences and proof reading work.

When looking at the three qualities of placements, certain similarities with Iris's inclusive classroom were noted. Inger's teacher-to-student ratio was also relatively high, ranging from one teacher to between 18 to 20 students. As well, the same instructional focus of all language arts lessons on learning, and all social studies lessons on both learning and curriculum was found during the observations of Inger's classroom. In addition, the instructional focus of Inger's science class was also concentrated on both learning and curriculum. During this lesson, students exercised multiple learning skills, including consolidating information from multiple sources and expressing their understanding in writing, in the context of learning about the Weather. In sum, the instructional focus of the 13 lessons varied between a sole learning focus to a concentration on both learning and curriculum, but never on curriculum alone.

When looking at the students' peer relations during these lessons, opportunities for students to work independently were present in each observation, just as they were in Iris' classroom. As well, in 8 of the 13 lessons, students also had a chance to work as partners or in groups. Regardless of whether they were supposed to be working independently or with others, students had discussions with one another in 12 of the 13 lessons. Only in one lesson, during the third lesson working on the Persuasive Writing task (see observation 11), did students work without interacting with each other. In the remaining lessons, students engaged in on- and off-

topic discussions, shared their work with each other, and helped one another. For example, while working on the Science Blog task, Oceana shared her work with a peer then demonstrated how she created a cloud bubble. When students were assigned organized groups, such as when they were working on the Vocabulary task, they had several disputes about their pace (e.g., telling each other to hurry or up slow down). As well, when students had the option of working with partners or groups, such as when they were working on the review task, students consistently took advantage of the opportunity to work together, comparing their work and helping one another.

**In-depth example.** To provide insight into Inger’s classroom, a description of one social studies lesson is provided. During this observation, the investigator was focused on Oceana during the sixth lesson on the Review task (see observation 7). This task required students to use their reading comprehension skills to answer practice questions for a social studies test. Prior to this lesson, students had one introductory lesson, followed by five working periods where students built on their knowledge to answer review questions. At the time of this observation, students were in the final stages of completing the task, with only two more lessons until the test date.

The investigator entered the classroom as Inger’s 20 students were settling into their desks after putting away their language arts binders in their lockers. Inger was working on the computer at the front of the classroom, opening an interactive whiteboard presentation for the students. Once Inger had the presentation opened on the whiteboard, she turned to the class and asked them for their attention. Those students who were not at their desks quickly moved back to them and sat down. Inger announced that they would be working on their social studies review questions as they had over the last few classes. She then directed their attention to the whiteboard that contained a list of topics that they needed to cover for the test. Inger read those aloud, adding that this was a “reminder of what you need to study.” Moving onto the next slide, Inger

reviewed the expectations for students' answers on their review packages, for example, writing in full sentences, and consulting the marks beside each question and checking to ensure that their answer contained enough points to get those marks. Inger asked the class if there were any questions, and when there were none moved onto a discussion of why it is important to review before a test. Multiple students raised their hands and Inger chose several students, including those without their hands raised, to contribute their ideas. As students articulated their ideas, Inger created a list on the board. These ideas included: to help students remember, to clarify understanding, to go over the material again, and to make study notes. Inger complimented students on their ideas, reminding them that they could work independently or with partners anywhere in the room, could complete the answers in "whatever order you want," and could use multiple sources of information, including the computers. At this point, Inger prompted students to ask any questions. When, none were asked she sent students off to work.

The class then quickly opened up their binders, getting out their review pages, and spent a few minutes organizing themselves with their peers, finding materials or logging onto the computers. While most students prepared themselves and started on the task after approximately 2-3 minutes, several took almost 5 minutes to start working. Inger traveled around the room after a few minutes, helping or giving prompts to those who were not yet started on their work. Over the next 25 minutes students worked steadily, frequently working with partners for most of the time but occasionally moving to their desks to work independently. Inger moved among students for the first ten minutes, checking in to see how they were progressing and providing assistance when needed. When asked questions, she provided instrumental scaffolding rather than telling students the answers. For example, in response to a question that Cooper asked about where to find information for a question, Inger had Cooper brainstorm different sources of information, asking him, "Where else can you find information?" Then she led him to consider which of those sources might have the information and why. Cooper suggested looking in the textbook. Inger

cued him to recall if he had read the textbook already and if he noticed that information. He responded that he had “read the information but didn’t see it” so maybe he should use Google to search for information about that particular question.

After the first ten minutes, Inger returned to her desk where students would come up and ask questions. For the remainder of the work period Inger had a steady stream of one or two students lined up to ask her questions or check their work. At the end of the work period, Inger requested students’ attention, complimented them on their hard work and noted that she saw good progress in completing the task. She then instructed students to put their review question booklet in their binders and put them back into their lockers.

### **Sasha’s Classroom**

Sasha’s spilt grade 4/5 support class included 10 students who were diagnosed with language-based learning disabilities and experienced extensive academic difficulties in inclusive classrooms. The class included four girls in Grade 5 and six students in Grade 4, three boys and three girls.

Sasha’s class could be described as bright and cheery. Ten student desks were positioned independently in three rows of three or four which were located between the middle and front of the room and were centered in front of an interactive whiteboard and one large regular whiteboard. Ten student computers were located at the side of the room under large south-facing windows. Sasha’s desk was placed near the front under these windows as well. On the other side of the room was a set of large cupboards for storage space, a sink and counter, and the entrance door in from the hallway. At the back of the room was a carpeted area with two large chairs, a round table with four chairs for group work, and a fish tank for hatching salmon. Wall space was limited to the back of the room, where two large bulletin boards were decorated with skill-based posters with reminders about editing, the writing process, high frequency word spellings, etc..

Overall this room was approximately half of the size of inclusive classrooms in the school, but included 10 students rather than 20.

As is not uncommon within a classroom with ten students with LD and other strengths, weaknesses, and disabilities, the level of independent work was low. Students were often observed calling out, wandering around the room, and chatting with each other. Overall, students appeared to feel very comfortable in the room, as they were often smiling and eager to start on new tasks. Sasha reported that four students had been in the same small class together for the previous two years, while six were new to the program during the year of the study. Sasha commented that, although their interactions with each other were generally friendly and boisterous, they frequently misread social cues, got into disagreements, and had minor conflicts in the classroom. As a result, a weekly community meeting time was established to discuss social skills and strategies for dealing with conflict.

Sasha appeared to have a calm, collected nature with her students. She managed to minimize disruptions throughout her busy day, managing two separate grades and the individual needs of each of her students. She rarely raised her voice, relying on clapping signals to gain students' attention and often playing classical music during independent work time. Her students appeared to feel very comfortable with her, often staying in at recess to help and never hesitating to ask questions. The observed level of classroom management required by Sasha to keep her students on task was quite high. She often spent a great deal of time settling them down to complete a task and managing their behaviours to enable other students to work. For example, after providing a task with oral and visual instructions and modeling, students were instructed to start working while Sasha circulated to each of them to check in. They were given explicit instructions to wait until she came to them to ask any questions. Most students required additional prompting to clarify the task and Sasha had to remind four different students to hold their questions until she came to them.

**Phase one observations.** Two observations of 30 and 50 minutes in length were conducted of Sasha's classroom over two days. In the first observation, Sasha was teaching a science lesson on the human body, specifically the auditory system. During this lesson, Sasha projected a page of the science textbook onto the interactive whiteboard and had students come up to the board to highlight main ideas. Then she asked her students to work in partners on the same task using a photocopy of the next three pages in the text. Once students were finished, they compared information they had highlighted. At the end of the lesson, Sasha guided the students to use their notes to create a diagram of the ear and to label it with the information from their notes. The second observation occurred during a language arts lesson on providing supporting details during persuasive writing. Sasha read a persuasive letter with the class and had students identify the supporting details the author used to make points. Then Sasha had students work through several examples and had students present what they found for each. Next, Sasha assigned the task of writing a persuasive letter using supporting details.

In regard to SRL-supportive instructional features, complexity, choices, and instrumental support were present during both observations. First, both tasks were complex in skills as they drew on skills focused on throughout the year to build on knowledge from prior lessons. Second, choices in where student worked and who they worked with occurred in each lesson. As well, choice in what students created as their final product was present when students were working on their persuasive letters, as they had choices about who to write to and what to argue. Third, looking at instrumental support, student modeling of the task occurred during both lessons and teacher modeling was present in the science lesson. As well, instrumental and procedural scaffolding were provided by Sasha throughout both lessons as she gave students consistent support in terms of providing direct answers as well as prompting them to generate answers to their own questions. Scaffolding to support other SRL-supportive instructional features was not observed in these lessons.

Looking at the qualities of placements, Sasha's support class differed from Iris' and Inger's inclusive classes in terms of the teacher-to-student ratio. Sasha had a relatively low ratio of one teacher to between four and six students. In terms of instructional focus, the task in Sasha's science lesson concentrated on finding main ideas from textbooks in the context of learning the science curriculum. In her language arts lesson, the focus of the task was solely on the learning skill of persuasive writing with supporting details. Finally, in regard to peer relations, Sasha provided extensive opportunities for students to work in partners or groups of their choosing throughout both lessons. As well, students could choose to work independently, which several students chose to do at certain times. When they were interacting with one another, students engaged in both on- and off-topic discussion, which required Sasha's persistent monitoring and intervention. Their interactions were consistently positive as they provided one another with support and feedback. Similar to one interaction in Inger's classroom, a reminder about tone when giving feedback had to be provided by Sasha at one point. Overall, the students in Sasha's classroom interacted frequently and in a positive supportive manner throughout these observations.

**Phase three observations.** An overview of the literacy tasks, SRL-supportive instructional features, and qualities of placements that occurred during Sasha's observations is presented in Table 9.

Six observations were conducted in Sasha's classroom over a three-week period during four language arts and two social studies lessons. During three of the language arts lessons, students worked on a Metaphor task (see observations 1 to 3), discussing and reading about six traits of writing (ideas, sentence fluency, organization, word choice, voice, and conventions) and creating a metaphor for each trait in the form of a poster with writing and/or drawing. In the other language arts lesson (see observation 6), students worked on an Historical Figure task, which involved researching and creating a speech about an historical figure to present to their



class. This was an ongoing task that students worked on over a course of three weeks. The first social studies lesson observed (see observation 4) involved the task of having the class read and discuss content in the textbook about Explorers. The second observation of a social studies lesson, the Notes task (see observation 5), focused on having students create their own notes from the textbook. Students worked as a group to read the textbook, identify main ideas, and then summarize these ideas into their own words in their notes.

Looking at the SRL-supportive instructional features that occurred during observations, complexity, choice, instrumental support, and non-threatening assessment were present throughout these lessons. Complexity in skills occurred in each lesson as tasks built on and connected prior information and skills from past lessons. For example, when Sasha was providing instructions for the Metaphor task she asked students to “think about the writing traits we have been working on ... now remember what we have learned about connecting ideas....” In addition, complexity in goals was observed in the three language arts lessons on the Metaphor task as students attended to the goals of integrating multiple sources of information and generating metaphors to represent their understanding of each writing trait.

In terms of choices, choices in materials, process, product, where students could work, and their role in groups were observed throughout Sasha’s lessons. First, choice in materials was present once when students were working on the Historical Figure task. During this lesson, students were given options of where to find information such as in library books, books in the classroom, or on the internet. Second, choice in process and product were observed in the four lessons, three during work on the Metaphor task and once when students were working on the Historical Figure task. In these lessons, students had the choice to both complete the task in their own manner and create a product of their own choosing. Third, students were given a choice of where they could work during two of the lessons on the Metaphor task. When given the opportunity to work where they chose, many students selected to move to various locations

around the room. Fourth, students had the choice of what role they assumed when they worked in a group on the Notes task. Sasha did not dictate that there would be one reader, one person taking notes, etc. rather students had to figure out what role they wanted to take, if any role at all. In response to this choice, two students took the lead to take turns reading the textbook, one student wrote down the information, and the other two contributed their ideas on what they thought the main ideas were.

In regard to instrumental support, both instrumental and procedural scaffolding were present during these lessons. Instrumental scaffolding was observed several times during one lesson on the Metaphor task as Sasha responded to students' questions. For example, when asked about the spelling of several words, Sasha asked students to recall a certain spelling pattern that they had learned and then had them apply these patterns to each unknown spelling. As well, procedural scaffolding occurred during the Textbook task as students asked questions about the content and Sasha responded with direct answers.

In addition to complexity, choices, and instrumental support, self-assessment was also observed. While researching their Historical Figure, students were cued several times to "look at the checklist to make sure you have finished/covered everything." Once they felt that they had completed each one, students were instructed to give themselves a mark out of three for each and an overall effort grade.

In contrast to the relatively high teacher-to-student ratios in Inger's and Iris' inclusive classrooms, the teacher-to-student ratio in Sasha's classroom was low, ranging from four to six students to one teacher. The instructional focus of Sasha's lesson varied between a sole focus on learning skills during the four language arts lessons to a concentration on both skills and curriculum in the two social studies lessons. During the language arts lessons, students used their reading and writing skills to accomplish their tasks. In contrast, in the social studies lessons, students exercised the learning skills of reading for main ideas and, in the second lesson, writing

notes in their own words in the context of learning social studies curriculum content. In regard to peer relations, students in Sasha's classroom were assigned independent tasks in all four language arts lessons and group work in their two social studies lessons. Despite the independent nature of their language arts lessons, students engaged in on- and off-topic discussions while they were working. Sasha allowed off-topic discussions as long as they were quiet and did not disrupt their work such as when they were colouring their metaphor drawings. During their work on the Metaphor task in one lesson, students helped one another and compared their work. In another, they shared what they had completed with one another. In both of these lessons, students were very complimentary of each other's work, for example saying what a good job the other had done on their drawing. During the Historical Figure task, students shared their work with one another, again with positive, encouraging remarks. For example, in response to a fact about a person, a student commented, "That is really cool, you should put that in [your speech]." In contrast, students made negative comments about each others' ideas when they were working on the Textbook task. For example, when a student asked a question, another peer critically proclaimed that Sasha had already answered that question. The same pattern was noted in the second social studies lesson when students were creating notes, as students had disputes about which points were main ideas.

**In-depth example.** To provide insight into Sasha's classroom, one language arts observation, where the investigator focused on Nalat (see observation 3), will be described in detail below. This was the fourth lesson focused on the Metaphor task. Sasha reported that, in the first lesson for this task, she had students conduct an in-depth review of each writing trait and then had them examine samples of metaphors. She also introduced the complex task of reading about the traits from different text sources and generating metaphors to represent each trait. The second and third lessons built on this knowledge as students reviewed metaphors and each trait, read about a trait of their choice, and worked on creating a metaphor for each. During

observations of these lessons, students drew on both their reading and writing skills as they created metaphors for each trait. In following observations, Sasha continued to build on students' understanding by providing them with instrumental scaffolding to describe, in their own words, metaphors and each trait. Sasha indicated that the next two lessons would repeat a similar pattern and then students would be asked to share their posters with the class in the following lesson.

During observation four, the investigator entered the classroom as four students were sitting at their desks listening to Sasha's oral recap of the six writing traits. During her brief explanation, Sasha directed students' attention to the writing traits display on the back bulletin board. She then instructed students that she would be asking them to explain what each writing trait was to the class in a few minutes. Students were asked to take a minute to think about a few they could define. Several students fidgeted in their desks, either playing with pencils or switching their body position in their chairs. Sasha gave a few nonverbal cues to students to settle down by placing her hand on their desk. After approximately one minute had passed, Sasha asked for volunteers to describe the first writing trait. Several students raised their hands and Sasha chose two different students to share their ideas, thanking them for their contributions and adding some clarification at the end. She then repeated this pattern for the remaining five writing traits. At the end of this discussion, Sasha asked for volunteers to explain what their current writing traits project was. Again, several students raised their hands and Sasha chose two to articulate that the task was to read about writing traits and create their own metaphor posters. Sasha then had one student explain what a metaphor was, again complimenting him on a clear example. At that point Sasha wrote a list of instructions on the whiteboard including: 1. Read; 2. Create a metaphor; 3. Include writing; and 4. Include drawing (optional). Before sending students off to start the task, Sasha reminded them that they could select any trait and metaphor, "as long as you can explain or describe the connection between the trait and the metaphor." As

well, she emphasized that they could choose how they went about completing the task, selecting all their metaphors first and then creating posters, or working through each trait one-by-one.

When given the go ahead to begin work, students began looking for their materials. Two students looked in their desks while another went to Sasha's desk looking for their work, and the last looked in a pile at the front of the room. After approximately three minutes, everyone had found their materials and was working at their desks. During the next 20 minutes, students engaged in on- and off-topic discussions, at times sharing their work with another. These interactions were very positive, as students often complimented each other on their drawings. For example, when one student mentioned that she was bad at drawing, her peer commented that she was really good at it. Sasha circulated amongst the four students for the first five minutes, ensuring that everyone was on task and having students explain the connection between their metaphors and writing traits. When asked questions, Sasha responded with instrumental scaffolding on several occasions, such as when Nalat asked for help spelling a word. Sasha prompted her to recall a spelling rule, stating "Remember the 1-1-1 doubling rule ... now think if it fits this word." Nalat subsequently successfully remembered the strategy in order to spell the word. Once students were working productively, albeit with some off-topic discussion as students were colouring, Sasha returned to her desk and students approached her with questions if they had any. Throughout this time, several students got up and walked around their room looking at others work or changing their chairs for stability balls. From her desk, Sasha monitored this movement and provided students with positive reinforcement for "working very hard." On three occasions she gave two off-task students verbal reminders to remain focused on the task at hand.

### **Leanne's Classroom**

Leanne's pull-out lessons were held in two different locations. One day per week, students worked in a small classroom that housed ten desks and little extra room. There were two

large whiteboards and overhead lighting with additional tall lamps. There were no windows in this room and the sound of the gym was quite loud. On the other day of the week, students worked in a different small classroom with 8 student desks. This classroom had a large window that faced into a quiet hallway. As well, one large whiteboard spanned the front of the room. The size of both of these rooms did not allow students to work at alternative spaces than their desks, which were placed close together. As a result of the close proximity of desks, students often became distracted by their peers' work or by Leanne providing other students with assistance.

Leanne reported that all of the students in this class had attended the school for a number of years, so they knew each other, despite the fact that they were drawn from four different inclusive classes. All of the students had attended different pull-out sessions for a least one year prior; three had attended since Grade 1. The gender break down of the 8-person class was equal, with a mix of four boys and four girls.

The students were observed to be friendly with each other during class time, often engaging in off-topic discussion when opportunities arose. That said, the boys and girls tended to avoid interaction, forming partners with same-gendered peers when given the opportunity to choose. During observations, they frequently assisted one another when permitted and were supportive of each other's efforts. When girls and boys were partnered or grouped together, the students did not share information as readily with one another, often working independently and only sharing when asked to by Leanne.

Leanne was observed to be strict but fair in her interactions with students throughout these observations. She gave them explicit instructions for activities and provided clear expectations for their behaviour. Prior to the first observation, she mentioned that she had enforced consequences in the form of a three-strike rule for these students because of past disruptive behaviour and off-topic discussions. During the observations she used her fingers to

indicate strikes to individuals who were not meeting the set expectations. For example, Leanne tapped an individual's desk and raised one finger indicting a strike when a student was engaged in an off-topic discussion during a lesson. The content of Leanne's lessons during these observations reflected a great deal of thorough planning and preparation. She included multisensory spelling activities that were tailored to each individual student and reported that she consulted with their homeroom teachers to identify areas of weakness in the classroom such as finding main ideas in textbooks.

**Phase one observations.** Two observations of 30 minutes in length were conducted of Leanne's classroom over two weeks. In the first observation, Leanne had students read from their ongoing group novel and write a response to reading based on the "Reading Power" of connecting. Students were to read at their own pace and then find either text-to-text, text-to-world, or text-to-self (their own experience) connection to write about. During the second observation, the focus was on the components of a paragraph. After brainstorming what they knew about paragraph structure, Leanne had students examine several paragraph samples to determine what role each sentence played. Students created a self-generated list of the components of a paragraph and then Leanne had them test their criteria on their choice of several additional examples. Once they had revised their criteria, Leanne assigned the task of creating their own paragraph that met their criteria.

In regard to SRL-supportive instructional features, forms of complexity, choice, and instrumental support were present throughout both lessons. First complexity in skills occurred as each lesson built upon and required integrating content and skills from prior lessons. Second, choice in materials was provided when Leanne explained to the students that they could "choose between" a selection of several paragraphs on which to test their criteria. As well, Leanne provided choices in product and process during both lessons. For example, when assigned the task of reading and writing a response, students could choose to read the entire passage or just a

section and then respond with their own unique connection to either their experience, another book they had read, or something else in the world. Third, student modeling occurred when students presented how they assessed paragraphs in relation to their criteria. As well, Leanne modeled how students could make several types of connections to their reading. Finally, during both lessons Leanne used instrumental and procedural scaffolding. For example, in relation to a question about the meaning of a word, she prompted the student to use the context to reveal the meaning by telling her to “read the whole sentence without the word ...”

Looking at the qualities of placements in Leanne’s pull-out class, the teacher-to-student ratio was relatively low during both observations at a ratio of 1 teacher to 8 students. As well, the instructional focus of both lessons was on learning skills such as making connections to books or understanding and applying paragraph structure. In terms of peer relations, students primarily worked independently, especially during the Reading Response lesson. That said, Leanne allowed them to participate in on-topic discussions such as when they were sharing their ideas for paragraph criteria. Students attempted to participate in off-topic discussions at times, but Leanne strongly discouraged this and quickly refocused students on their tasks. When Leanne did provide opportunities for student to work together, she frequently cued them with reminders to stay on-task and to speak quietly so as to not disturb others. While students worked together, they were observed to consistently help one another, compare their work, and share ideas in a positive manner.

**Phase three observations.** An overview of the literacy tasks, SRL-supportive instructional features, and qualities of placements that occurred during Leanne’s observations are presented in Table 10.

Six observations of Leanne’s classroom were conducted over a two and a half week period. As the focus of this class was to work on building students’ writing skills, all tasks included an element of writing. More specifically, two lessons focused on the task of finding



main ideas from texts. During this Main Ideas task (see observations 1 and 2), Leanne reminded students to use strategies such as reading small sections of text, looking at introduction and conclusion sentences, and identifying keywords. Three other lessons involved a Reading Response task (see observations 3 to 5) where students wrote responses to a novel that they were reading as a class. The focus of this task was again on pulling out main ideas such as important events and writing about them, but in the context of a novel versus a textbook. In the final lesson, students worked on a similar task that continued to focus on finding main ideas and writing a response from the novel, but this Paragraph Structure task (see observation 6) included explicit directions on topic, supporting and concluding sentences.

In regard to SRL-supportive instructional features that occurred during these lessons, complexity, choices, and scaffolding were observed. First, complexity in skills was present in all lessons as students worked on tasks that built on multiple skills extending from previous lessons. For example, Leanne reported that “identifying main ideas is a skill the kids have focused on throughout the year” and that they had been applying this skill to reading responses for novels over the course of the term.

In regard to choice, five types of choices were present throughout these lessons. As students worked on the Main Ideas task in two lessons, students were presented with: choices in materials, as students could select texts; choices in who to work with, as they could select one partner to be with in their group; and choice in the role that students assumed while working in groups. During these instances, Leanne did not assign particular roles such as reader and recorder to each student, rather she let students determine and assume roles that enabled them to complete the task. The fourth type of choice, in product, was present when students worked on the Response task and the Paragraph Structure task. The degree of choice differed in these lessons in that during the Response task students had free choice of what to write about. In contrast, in that Paragraph Structure task, students had to focus on the main ideas, but they were still given the

choice of which main idea to write about. The final type of choice, about processes, was present when students were working on the Paragraph Structure task, as Leanne provided explicit instructions that students could go about completing the task using whatever methods they liked.

In addition to complexity and choice, procedural scaffolding occurred as students were given direct answers to their questions during one lesson on Reading Response. As well, instrumental scaffolding was also observed during one lesson on Paragraph Structure. For example, Leanne prompted Brock to generate ideas of how to check his work rather than just telling him if he was correct.

When looking at qualities of placements, the teacher-to-student ratio in Leanne's pull-out class was relatively low with a range of one teacher to between seven and eight students. In regard to instructional focus, the tasks observed always concentrated solely on learning processes. As a result, the goal of these tasks was to teach specific skills rather than have students learn curriculum content. For example, students were learning strategies to identify main ideas in texts rather than learning specific curriculum content from the texts. Finally, in terms of peer relations, students in Leanne's class were generally asked to work independently. Although the intention was that students would work independently at their desks, they often interacted, engaging in off- topic discussion during one lesson, helping each other in another, and comparing their work during three lessons. As students helped each other or compared their work, they were consistently positive in their comments about one another's work or progress. For example, one student told another that he liked an idea and then asked if he could use it as well. During work on the Main Ideas task, students could choose one partner to work with and then Leanne matched up partners, resulting in groups of four that contained two males and two females. Although the students made good progress completing the task, they primarily just worked with the same-gender partner rather than as a group. On one occasion, one girl had to leave class early, and although the remaining female student, Sara, continued sitting with her

group, she did not share any ideas. When asked about this during her interview at the end, she indicated that she felt hesitant to participate with the two boys because she did not know what they were doing.

**In-depth example.** In this section an in-depth description is provided of one observation in Leanne's pull-out class. The focus of this observation was on Brock as he was working on the Paragraph Structure task (see observation 6), which required students to use their reading and writing skills to read a passage from their novel and write a response to one main idea using proper paragraph structure. Leanne indicated that both finding main ideas and writing reading responses were skills that had been focused on over the course of the term. As well, Leanne reported that proper paragraph structure had been introduced during the previous lesson where students highlighted different parts of paragraphs from multiple samples and generated a list of what each part represented. The task described below built on those skills as students were asked to apply proper paragraph structure to writing responses to main ideas.

The investigator entered the room as Leanne was transitioning her 7 students from a phonic spelling lesson to the Paragraph Structure task. She was instructing her students to flip through their binders to the reading section and to pull out their reading passage from last day. After Leanne assisted one student to find the appropriate page, she called attention to the front. Although several students wiggled in their desks, they all looked up to the front where Leanne was holding up a copy of the reading passage. She began by explaining that their task was to read the passage and write a response, just like they had been doing for the last few months. She added that there was a "new twist to this task," because they were going to review paragraph structure first and she wanted them to apply that structure to their writing. In order to do this, Leanne explained that she wanted them to remind her of proper paragraph structure first and asked them to raise their hands if they could remember what comes first. One student raised her hand and after giving a few moments to think, Leanne reminded the group that they worked on

this same list last day and to try to think about what was at the top of the board. After this, two more students raised their hands and Leanne chose one of them. The student hesitantly suggested that it was an introduction sentence. Leanne complimented him and moved onto the following two sections, supporting details and concluding sentence, repeating the same pattern of asking the class and having them tell her the answers. At the end, Leanne asked the class to think about their writing responses and explain what they were usually asked to do. One student explained that she found the main ideas and wrote about that, while another suggested that she found interesting ideas and wrote about those. Leanne asked the students to focus on main ideas and told the group that they could “choose any main idea you want to write about from the reading.” At this point, she stopped the class and wrote the following keywords in a list the board: main ideas, introduction sentence, supporting ideas, and concluding sentence. Leanne then told the group that they could complete the task however they wanted, explaining that “you might want to read the whole passage before thinking about what to write, or you might want to take notes while you are reading or just read sections, stopping to write at the end of each section.” She reinforced that they were to complete the task in a way that “makes sense to you.” Before sending students off to work, she asked if there were any questions and in response several students raised their hands. She instructed students with questions to wait for her to come around and talk to them and let the rest begin working.

Leanne then travelled around to the desks of students with questions, addressing each with instrumental scaffolding. For example, she suggested students could look at their notes on paragraph structure or “read the list on the board.” When Brock asked Leanne for help understanding a section of text, she cued him to articulate different comprehension strategies, asking him to “think about what you can do when you hit a spot you don’t understand.” With support, he came up with a few suggestions, such as looking words up in the dictionary and asking a friend, and then chose to read ahead for more information to try to make sense of the

passage. While she helped students with questions, other students began reading their passages. While they were working, Leanne travelled around to each student to answer any questions and check his or her understanding of the task.

After several minutes, three students had stopped reading and had begun writing. One student turned around to the peer behind him to show him a humorous sentence that he had written. The other student laughed quietly and then shared his writing topic. Leanne approached the pair after a few minutes and without her saying anything, they resumed their independent work. Over the course of the next ten minutes, Leanne answered a few more questions, again with instrumental scaffolding, instructing students to use the reading passage to check their own answers rather than her. As well, on several occasions students shared their work with one another. Leanne mentioned at one point that they were free to share their ideas and help one another as long as they were quiet and remained on-topic. This expectation was upheld as students were generally quiet and focused on their task. When they did share their ideas they used whispers and discussed their work and nothing else.

At the end of the lesson, Leanne complimented the group on their focus and asked for helpers to collect their binders. Several students, who had taken pages out of their binders, put them at the front before closing their binders. Leanne noticed this and called their attention to the fact that their papers would fall out and gave them instructions to, “take the time to put them in properly.” Those students complied, one requiring assistance to line up the punched holes with the rings, and lined up at the door.

### **Students’ Engagement in Literacy Tasks**

Butler and Cartier’s (2005) theory suggests that students’ engagement in literacy tasks is shaped not only by what they bring to the context (strengths, weaknesses, experiences, etc.) but also the learning context itself (i.e., tasks, SRL-supportive instructional features, and qualities of placements.) As a result, goals in this study were to gather information about students’

perceptions about, and SE for, literacy tasks, and to situate students' SE in context. As described earlier, data were gathered using multiple measures (i.e., interviews, observations, probes) and over time (i.e., pre-meeting, multiple observations, post-meeting). In this section, rich descriptions of each student's SE during literacy engagement are provided. Descriptions for each student begin with a report on what was learned from pre-meetings. Then descriptions of students' literacy engagement are constructed based on data gathered during observations and post-meetings. Finally, an in-depth account of one observation for each student is provided.

### **Sara**

As described earlier, Sara was an 11-year old girl who had been diagnosed with an LD. As was the case with Brock, observations of Sara were conducted in both Iris' inclusive class and in Leanne's pull-out class.

**Pre-meeting.** In her initial interview Sara indicated that she enjoyed reading "about half the time," preferring fiction and reading at home. She reported that she liked writing stories at home but was poor at writing at school, exclaiming, "I'm not that good at writing stuff, not at all!" On the Self-Efficacy Measure, Sara provided high ratings for all questions including those that addressed reading and writing skills. She expressed particular confidence for two reading comprehension items: understanding and remembering what she learned from reading. When discussing the task that was used to contextualize the Self-Efficacy Measure and the Self-Efficacy probe, Sara reported that she felt more confident about reading the text than writing a response to it. On these probes, Sara reported that she felt she could always complete these types of tasks successfully, and was very confident that she could successfully complete this specific task as well. She did add that she might get bored doing this task. Overall, she indicated that her SE for reading was stronger than her SE for writing, although she frequently tempered her confidence for reading responses with the statement "depending on how hard it is." In contrast to Sara's high confidence, her teacher, Iris, described Sara's academic achievement in reading

and writing as low, although the focus of her pull-out support was solely on writing at the time of this study.

**Observations and post-meeting.** In phase three, after her pre-meeting, Sara was observed three times in Iris' inclusive class (see Table 7) and three times in Leanne's pull-out class (see Table 10). Overviews of Sara's SE and SRL in relation to literacy tasks in these contexts are provided in Tables 11 and 12, respectively. To review, in order to gain insight into each students' SE, three measurement tools were used. The observation instrument was used throughout each observation and students responded to the SE probe and interview questions once during and at the end of each observation. Following all observations, students participated in a post-meeting including a final interview and responding to the SE probe.

Comparing data compiled in phase three provided insight into Sara's SE in relation to contextual factors. First, Sara's report of high SE during her pre-meeting did not transfer to tasks during observations. In the six observations conducted, Sara most frequently provided a 3/5 rating for both her general and task specific SE, indicating she was somewhat confident she could complete a given task successfully, or that she felt she could complete that type of task successfully about half of the time. There was one exception, where Sara provided higher ratings for both her general and task specific SE (5/5 and 4/5, respectively), when she was working on the Reading Response task in her inclusive class (see observation 1). During this task, Sara attributed her SE to the provision of choice of which text she could read, explaining, "If I get to choose the book then I can always read it really well." This comment suggested that choice of materials may have provided Sara with the ability to control the level of challenge by selecting a novel at her reading level, which enhanced her task specific SE.

When provided with the same Reading Response task in her pull-out class, but without the choice of materials, Sara reported her lowest task specific SE rating of 2/5 (see observation 6). She indicated that this was because of both her enjoyment and ability, explaining that, while

she liked reading a lot, she “was not that great at it.” It could be the case that, despite her enjoyment of the task, without choice in materials and therefore control over the level of challenge, her perceptions of self-efficacy were negatively impacted. When discussing her general SE rating of 3/5, she referenced the difficulty of tasks as pivotal, indicating that her confidence depended on how hard the reading was. When looking for other differences in contextual factors between these two observations, only placement itself and the teacher-to-student ratio varied, which Sara did not raise when explaining her SE in either observation. Thus, it appeared that the presence or absence of choice in materials influenced Sara’s ability to control the level of difficulty of a task, which in turn impacted on how confident she was in her ability to complete it successfully.

Second, Sara’s associating her SE to the difficulty level of the task was consistent throughout both her pre-meeting and observations. For example, during her pre-meeting, she qualified her relatively high SE rating with the statement “depending on how hard it is.” She also attributed her relatively lower SE to task difficulty in both lessons on the Socials Studies task in Iris’ inclusive class (see observations 2 and 3) and in the lessons on the Main Ideas task in Leanne’s pull-out class (see observations 4 and 5).

Third, in two lessons, Sara raised additional factors as attributing to her SE in addition to task difficulty. During Sara’s fourth observation when she was working on the Main Ideas task in Leanne’s pull-out class (see observation 4), she attributed her general and task specific SE ratings of 3/5 to task difficulty and her lack of skills to complete the task. The second incidence of attributing her SE to both task difficulty and another factor occurred during Sara’s second observation when she was working on the social studies task in Iris’ inclusive class (see observation 2). She explained that she provided general and task specific SE ratings of 3/5 because the task was hard, the classroom was too loud, and she would work better on her own. It is important to note that, during this lesson, Brock made a critical comment to Sara about her



reading speed, indicating that she had to read faster to stick with the group. In turn, Sara exhibited negative body language by blushing, sinking lower in her seat, and lowering her head. After the lesson, Sara was asked about this interaction and she responded that she was not pleased with Brock and that she liked to work alone, especially when reading, because sometimes it took her longer. In the context of this observation, Brock's comment may have played a part in Sara's low SE rating by highlighting aspects of her reading about which she was insecure.

Fourth, a pattern was noted in Sara's awareness of her environment and her reactions to peers' comments. For example, as described above, when working on the social studies task, Sara responded negatively to a critical comment and related her SE, in part, to preferring to work alone. As well, when she was working on the Reading Response task (observation 1) she raised that she would rather read at home to avoid distractions such as from peers. When discussing her preference for working independently or with partners during the final interview, Sara reported that she liked to work on her own and that she found it hard to read when others were making noise, indicating that she liked having her own space, without anyone watching her or interrupting. It would appear that Sara was sensitive to her environment, including her peer relations, and during one observation directly linked her SE, at least in part, to her environment.

Fifth, while Sara consistently used effective cognitive strategies throughout all observations, she only demonstrated use of self-regulating strategies in Iris' inclusive class. In Iris's class she was observed rereading, flipping through her materials, and turning her back towards peers who were talking. When asked about these behaviours after each observation, Sara clarified that she reread the passage because she did not understand it the first time; she was flipping through her book to get organized before she started work; and she turned in her seat so she would not be distracted by her friends talking. In contrast, no evidence of self-regulating strategies was found in Leanne's pull-out class. When asked about these types of strategies at the

end of each observation, Sara did not describe herself as deliberately using any self-regulating strategies. Although a similar pattern, of fewer self-regulating strategies during Leanne's pull-out class, was found during Brock's observations, no contextual factors or differences in tasks could be directly associated with this observed pattern.

**In-depth example.** To provide a rich description of Sara's SE and SRL in the context of literacy tasks, an account of one observation of Sara is provided in this section. This observation occurred as Sara was working on the Reading Response task in Iris' inclusive classroom (see observation 1). Counting students' entries in their reading logs, Iris reported that this was approximately the twenty-third time that she had asked the class to complete this task, adding that she tried to set aside "one lesson per week for this task." This task entailed students selecting an independent reading novel of their choice, reading, and writing a response to the novel. In this particular lesson, Iris wanted students to respond using the particular "Reading Power" of questioning, something they had done several times prior.

When the investigator entered Iris' classroom, Iris' 18 students were putting their math binders and textbooks away in their lockers and settling in at their desks, while Iris was at her desk, organizing a collection of papers. After most students had put away their materials and were seated at their desks, Iris moved to the front of the classroom and asked the remaining students to take a seat. Once all students were sitting, Iris explained that, for the next 45 minutes, they would be doing "independent reading and writing in their reading logs." She then asked the class what they were supposed to write in their reading logs. In response, several students raised their hands and Iris selected one student, who explained that students were supposed to use one of the "Reading Powers," pointing to the front of the room. Iris agreed that she was on the right track but then asked students to remember which "Reading Power" they had been focusing on for the last few weeks. One student piped up that it was "questioning." Iris agreed, reminding the student not to call out and continued with a brief explanation of questioning. Throughout this

time, Sara was wiggling in her seat, rubbing her eyes, and swinging her legs under her desk, but she continued to look at Iris as she was explaining the instructions. Iris then set students off to select their novels.

Sara immediately pulled out a novel from her desk and began flipping through the pages. After several minutes, she started reading from her novel, pointing to her book and moving her finger in sync with her eyes. She remained focused on her novel for a long period of time. While she occasionally shifted in her seat or played with her shoes under her desk, she continued to read despite these movements. During this time, Iris redirected students on three occasions to refocus their attention on their reading or writing, but Sara did not react to these potential distractions.

About 15 minutes into reading, the investigator crunched down beside her desk and asked her to indicate her general and task specific SE on the SE Probe. Without speaking Sara pointed to 5/5 for her general SE and 4/5 for her task specific SE. The investigator then left her to continue reading.

At the 35-minute mark, Iris instructed those students who had not yet started writing their reflections to begin, as they had 10 minutes left until lunch. Sara continued reading the remainder of her page, turned the corner of the page over, and got out her writing book from her desk. She then reopened her novel, flipped through several pages and started reading one section. Once she was finished, Sara got out her pencil from her desk and started recording ideas in her writing book. She continued writing for approximately 8 minutes, until Iris instructed students to put their writing books on her desk and their novels away. Sara stopped writing right away and followed Iris' instructions.

After the observation, Sara was engaged in a brief interview where she was first asked about her SE ratings on the SE probe. Sara indicated that she felt very confident that she could complete this type of task successfully because, "if I get to choose the book then I can always

read it really well.” In reference to her task specific SE, Sara explained that, while the reading part was great because she could choose a book that she liked, she was not as confident on the writing so she gave a 4/5 rating. These ratings were consistent with the high SE she expressed during the pre-meeting and her testament that her SE was stronger for reading than writing.

When asked in more detail about her task interpretation and the personal objectives that she set, Sara explained that the task was to read and her objective was to read and write about what she read. This description reflected the facts of what the task was, but did not delve into the purpose of using the “Reading Powers,” which was to encourage students to think about what they are reading.

Next, Sara was asked about observed SRL-supportive instructional features such as complexity in skills and choices of materials and process. In reference to inquires about how often she completed this type of task in this classroom, Sara explained that her class read their books a few times a week, wrote reflections each week, and had worked on “questioning” for a long time. She expressed a desire to do more reading, but she did not bring up her feelings or perceptions about the “questioning” or writing aspects of the task. When the investigator talked about choices, Sara immediately reiterated her pleasure in getting to choose which book she got to read. Despite prompts about choice in the process of how students go about reading and writing their responses, Sara did not pick up on this feature as a choice during this observation, stating rather that she always read first and then wrote her reflection.

The investigator then asked Sara about her perceptions of observed qualities of placements such as her interactions with peers. Sara raised that she would rather read at home because there were fewer distractions than in her classroom, but that she could usually “tune them out.” When asked about her feelings about working independently, Sara expressed a preference for reading on her own and not having to work in a group, explaining that working as a group can get noisy.

Finally, Sara was asked about her observed SE and SRL behaviours to determine if they reflected her intentions. In response to an inquiry about reading strategies, Sara explained that she always uses finger tracking to help her keep her place. She explained that her tutor had taught her this and that it helped her read faster. When asked about the observation that she looked in her book after getting out her writing materials, Sara quickly explained that she was re-reading a section so that she could find the part she wanted to write about. Further questioning about strategies did not elicit any more information that would indicate that Sara used other strategies beyond these two that were observed.

This example highlighted Sara's high SE when she was provided with choice in materials. As well, it demonstrated: her awareness of choice in materials; her perception that the task was complex in skills; and her lack of awareness that choice in process was present. In addition, the example illustrates Sara's use of strategies in the context of Iris' class, and her sensitivity to her environment, specifically her preference for working independently and at home to avoid distractions and noise.

## **Brock**

As previously described, Brock was an 11-year old boy with low reading and writing achievement who attended Iris's inclusive class and Leanne's pull-out class.

**Pre-meeting.** During the initial interview, Brock stated that he "really like reading mysteries, comedies, and sports stuff." He indicated that he read a little bit but did not have time to read much beyond school material. It was only during school when he got to choose novels and read material he enjoyed. That said, Brock reported that he did enjoy reading to learn new information in school. In contrast, when discussing writing, he explained, "I am very bad at explaining my ideas." He did not write for fun at home, only when he had to for school. Looking at the reading passage used to contextualize the Self-Efficacy Measure, Brock said he would be fine reading but was not sure about writing a response to it. Consistent with this report, Brock

indicated high, “very confident” ratings for all questions on the Self-Efficacy measure except in relation to the questions about summarizing what he learned into his own words. On that particular question, Brock indicated that he would rate himself between “not at all confident” and “somewhat confident.” Finally, on the initial Self-Efficacy Probe, Brock indicated that he felt he could complete this type of literacy task successfully just “about half the time.” For this particular task, Brock reported that he felt “somewhat confident” about successfully completing it. He again emphasized that the reading would be easy but he was not sure about writing about it. Overall, evidence from his pre-meeting suggested that Brock’s SE was high for reading but relatively low for writing. It is interesting that his teacher reported that Brock struggled in both reading and writing and that he attended pull-out classes for writing. She also perceived that his SE was high for reading but low for writing.

**Observations and post-meeting.** After his pre-meeting, in phase three, Brock was observed three times in Iris’ inclusive class (see Table 7) and three times in Leanne’s pull-out class (see Table 10). Overviews of Brock’s SE and SRL during literacy tasks in these contexts are provided in Tables 13 and 14, respectively.

Building from data compiled across phase three, in this section an integrated description of Brock’s SE and SRL in the context of literacy tasks is provided. First, Brock’s SE ratings for reading and writing ranged from 2/5 to 5/5 and, consistent with Sara, he most commonly related his SE to perceived task difficulty. In particular, when Brock perceived that a task was difficult, he provided relatively lower SE ratings and, conversely, when he perceived that a task was easy, he reported relatively higher SE ratings. Note here that the variability in Brock’s SE ratings observed across tasks and across classrooms reinforces the importance of recognizing how SE is situated in context.

Second, Brock provided his highest SE ratings during two lessons in Iris’ inclusive class, rating both his general and task specific SE at 5/5. This occurred while Brock was working on

one social studies task (see observation 3) and the Reading Response task (see observation 1). When working on the social studies task, Brock explained that he gave high general and task specific SE ratings because of his ability to complete it successfully. Consistent with his description of high SE for reading in his pre-meeting, in the context of the Reading Response task, Brock attributed his high general SE to his enjoyment in reading the novel. When discussing his task specific SE, Brock explained that he felt he could be successful because he “got to choose the book.” In his case, Brock’s ability to make choices over materials seemed to enable him to select a text that he would enjoy reading.

Along with Sara, Brock was presented with the same Reading Response task in Leanne’s pull-out class, but without choice in materials. While Sara was observed during one of these lessons, Brock was observed during two (see observations 4 and 5). Consistent with Sara’s SE ratings for this task, Brock’s SE ratings for this task were lower than in Iris’ classroom, where choice in materials had been provided. More specifically, in the first lesson on the Reading Response task, Brock rated his general SE and task specific SE at 4/5. He attributed these SE ratings to task difficulty, explaining that for this type of task his SE depended on how hard the reading was, and for this particular task, that the reading was not that hard. During the second lesson, he provided a general SE rating of 3/5, again attributing it to task difficulty in that it depended on the book because some were harder than others. He rated his task specific SE higher at 4/5, explaining that this was because he had read the book before and had enjoyed it. Just as it was with Sara’s SE in this task, it could be argued that the presence of choice in material had an impact on Brock’s SE. This would support the case that it is not always the placement per se, that makes the difference to students’ SE, but rather contextual factors, such as the presence or absence of certain SRL-supportive instructional features. In Brock’s case, it appeared that, despite the high SE perceptions he brought with him to reading, choice in

materials was linked to SE at least in part because it allowed him to control the difficulty and enjoyment value of materials.

Second, continuing to look at the Reading Response task that was similar across Iris' and Leanne's classrooms, differences in other contextual factors were explored. Brock did not refer to any other differences (e.g., in placement or in teacher-to-student ratio) when accounting for his SE between the two contexts. But his personal objective did differ between lessons in the two classes: in Iris's class he set performance goals to complete the task, and in Leanne's class he seemed to be more focused on learning. More specifically, in Iris' class, his descriptions of his goals concentrated on particular elements of the task that he wanted to finish, while in Leanne's class, during two out of three observations, his objectives were to think and show his understanding about reading. That said, Brock did use cognitive strategies in Iris' class (e.g., finger tracking or re-reading a page), while he did not appear to or report using any cognitive or self-regulating strategies to support his learning goals in the two observed lessons in Leanne's class. Thus, he appeared to be engaged in learning in both classes but did not articulate this when explaining his personal objectives in Iris' class. While no apparent differences in the context could be detected that could account for why these differences in personal objectives or strategy use occurred, it is possible that his approaches to literacy learning had an impact or were being impacted by, his SE for the tasks. In other words, his apparently greater use of strategies in Iris' classroom may have been linked to his higher SE in that context.

Third, during the two lessons on the social studies task in Iris' classroom (see observations 2 and 3), Brock indicated high SE of 5/5 for the second lesson (observation 3), as described above, but lower general and task specific SE of 3/5 for the first lesson (observation 2). When Brock's SE was lower, he attributed it to the difficulty of the task, explaining that he found it challenging to find the main ideas for each topic. In contrast, when Brock's SE was higher, he related it to his ability to successfully complete the task. In terms of SRL-supportive



instructional features, differences between these two lessons were that choice in material and instrumental scaffolding were available only in the second lesson, when Brock's SE was higher, while during the first lesson, where he reported lower SE, only procedural scaffolding was provided. However, Brock did not reference these differences when he was discussing his SE.

Interestingly, looking at Brock's strategy use during these two social studies lessons, he used significantly more cognitive strategies during the second lesson, when his SE was higher. This connection between his strategy use and SE was consistent with the trend observed during the Reading Response task in Iris' classroom (see observation 1), where Brock's strategy use was potentially linked to his higher SE. In the first social studies lesson, he only used the strategy of asking a peer for a definition. In contrast, on two occasions during the second lesson, Brock asked Iris questions and, in response to her instrumental scaffolding, he articulated lists of strategies and selected effective ones to implement. More specifically, when prompted with instrumental scaffolding from Iris, he articulated several different reading comprehension strategies such as rereading, finding information from different sources, looking up unknown words, and consulting peers. Again, when cued by Iris, Brock articulated multiple sources of information such as in the textbook, on the computer, and in the library and then chose one of these sources independently to answer his question. When discussing his SE rating, he attributed it to his ability, explaining that he was "good at finding information." It could also be argued that in this context, Iris's instrumental scaffolding for strategies prompted Brock to use more strategies, and recognize that he knew about them and was using them, which might have positively impacted his SE.

**In-depth example.** In order to provide insight into Brock's SE and SRL in the context of literacy tasks, one observation is described in detail below. This was the second observation of Brock in Iris' inclusive class as he was working on the social studies task (see observation 2). As described in Iris' in-depth example, this ongoing, complex task required students to read,

consolidate multiple sources of information, identify main ideas, write notes, and organize a presentation on natural resources. This observation was of the second lesson for this task, which followed an introductory lesson on the task requirements and time for groups to begin working. In this lesson, after a brief review, students were asked to continue working in groups to identify main ideas from brochures and write notes.

When the investigator entered Iris's classroom, Iris had just finished giving instructions to her 18 students that this was a work period for them to "continue finding information about Natural Resources for your group presentations." She briefly outlined that they should work with their group to find information about their topics using the guide she had provided. At that point, Iris asked for any questions, of which there were several about the presentation and one about working independently. In response to the latter question, Iris clarified that each group could decide amongst themselves how they wanted to accomplish the task. She continued on to explain that if they decided to break up the task into smaller parts and distribute the work load, or work on the whole thing together, they could. After answering several more questions, Iris asked students to rejoin the previous day's groups and begin working.

The two participants in this class, Sara and Brock, had been assigned to the same group during the previous lesson. Sara moved to the table where their group was working promptly after the instructions were given, whereas Brock chatted about an unrelated topic with a peer at his desk until Iris called their names and instructed them to get moving.

In their group of six, three students sat on one side of the table, with Sara at the end. Brock sat in the middle of two students on the opposite side. After some discussion of what the task was and what section they should read, one member of the group spoke over the rest to indicate one certain passage. Throughout this discussion, Brock was attentive to his peers' comments but did not contribute his ideas. Group members then started reading the selected passage independently. After approximately two minutes of reading, three students in the group

had finished and started talking about an unrelated topic. Shortly after, Brock and another student finished and joined the conversation, leaving Sara reading independently. As soon as Sara noticed that the rest of the group was not reading anymore, she stopped as well. Brock noticed this and told her to keep reading because "...we won't tell you the answers, you need to finish." Sara resumed reading for approximately 30 seconds longer and then started writing in her book on her own. Brock and the rest of the group continued their off-topic conversation until Iris neared their group. One student noticed this and pronounced that they should look at their first topic. Sara piped up at this point to provide her understanding of what she learned about the first topic. While she was speaking, Iris approached their group, and observed their progress for approximately 30 seconds. Once the group had discussed the topic for several minutes, they agreed on several points and recorded their ideas in their books. Again, Brock was quiet throughout this discussion. But he appeared engaged as he started writing ideas down promptly after they were presented.

At that point, the investigator approached Brock and had him quietly indicate his SE on the SE Probe. He pointed to 3/5 on both scales, demonstrating hesitancy when giving his task specific SE rating by looking back at the task prior to indicating his rating. The investigator moved away from the group at this point so that Brock could continue working.

Once the majority of the group had their ideas written down, one student, assuming a leadership role, instructed the others to continue reading from the textbook under the next heading. Brock had completed his writing early and was already reading this passage. While reading, he stopped at a word and asked a peer what it meant. The peer looked over at the word he was pointing to and quietly gave him an accurate definition. Brock nodded his head in response and continued reading. As students finished reading they, again engaged in an off-topic discussion while they waited for other group members to finish. Brock was the second to last to finish reading, while Sara was again the last. The self-appointed group leader summarized what

he considered the main ideas for the topic but another student contradicted him with an alternate perspective. Several members disputed their ideas and a discussion followed. During this time, Brock re-read the passage they were discussing, while another member went to the front of the room for an alternative book. When that student returned with the book, several students gathered around to read a section related to their dispute. At this point, Iris came over to their group and gave them a reminder that they needed to work quietly so they would not distract others. One student in the group told Iris what they were discussing and asked for her clarification. Iris provided a clear explanation of the topic under dispute and the students wrote down her ideas.

After most students finished writing, one student suggested that they move to the last question because it was related to their discussion. The self-appointed group leader disagreed, stressing that they should continue working down the page. Another student agreed to move to the last question and they agreed to do that and then move up to the questions they missed. Brock listened to these points but did not participate in the disagreement. All students in the group began reading the last section, including Brock. While reading, the student across the table tapped his pencil repeatedly on the desk and Brock, quite politely, asked him to stop because it was distracting. The student agreed in a neutral tone, put his pencil down, and fidgeted with his fingers instead.

Once most of the group had finished reading, they began discussing what to write under the appropriate heading. At that point Iris interjected, giving students the reminder that the notes they created were for them to make their presentation from, implying that they needed to not just answer the questions, but also to understand the content so they could explain it to the class. She also reminded students that they only had two more minutes so they should finish up what they were working on. Brock and his group promptly resumed their discussion, with Brock expressing his ideas about what to write at one point. The group wrote down his idea without comment and

continued on to write down another student's contribution. Iris stopped the class at that point and told students to put their materials away. While closing his binder and textbook, Brock chatted with a peer about an unrelated topic and continued on to put his books in his locker.

During the interview that followed this observation, the investigator first showed Brock his SE ratings on the SE probe and asked him to elaborate on his ratings and rationale. Brock explained that his general SE for this type of task was 3/5, feeling that he could be successful about half of the time because it was usually hard to find the answers from the textbook and then write them in his own words. This description was consistent with Brock's description of his SE for writing in his pre-meeting and Iris' placement of Brock in Leanne's pull-out class. In regard to his task specific SE, Brock justified his 3/5, "somewhat confident" rating, explaining that it was challenging to find the main ideas for each topic. When asked about why he looked back at the brochure when he was providing his SE rating, Brock explained that he was thinking about how successful he thought he could be.

Next, Brock was asked about his task interpretation and personal objectives. Although there were curricular and learning instructional foci within the lesson, Brock only described that task was to read the pages, make notes, and present to the class, without articulating that he recognized that they were learning about Natural Resources, or that they were practicing their reading comprehension and note taking skills. When articulating his goals, Brock indicated that he set the general goal of completing the task.

The investigator then asked Brock about his perceptions of observed SRL-supportive instructional features including complexity in skills and goals, choices in process and roles, and procedural scaffolding. First, in reference to the complexity of the task, Brock commented that it was a big task and that he was thankful that they had more than one class to work on it. Second, when talking about choices in general, Brock raised that he liked that they could figure out how they wanted to go about completing the task and that they did not have to answer each question

in order. He did not address having choices in the role he played in his group, not appearing to have recognized that this was an option. Finally, in regard to procedural scaffolding, he expressed that he liked it when Iris would come over and help them, especially to solve disagreements, because it was, “hard to get some of those guys just to agree and move on.”

Following that, Brock was questioned about some qualities of placements that were observed such as working as a group and the peers in his class. In response to questions about group work, Brock expressed that he enjoyed working in a big group, especially on hard, long activities, because they could help one another and it made it more interesting. When asked specifically about his interaction with another student when he asked for a definition, Brock shrugged his shoulders and said it was fine, indicating a very neutral response. He did comment that he thought he was good about asking for help when he did not understand something, such as in this case. When asked about his group’s effectiveness in general, he responded that he thought that they worked well together, sometimes getting distracted but not often.

Finally, the investigator asked Brock about observed SE and SRL behaviours to determine Brock’s intentions. First, Brock was asked about his focus and participation. He confirmed observations that he was engaged in the task and that, even though he did not always contribute, he was listening and “thinking about stuff.” He did not mention that he engaged in off-topic discussions, but he did reiterate that some of his group members could get distracted at times. In reference to Brock’s SRL behaviours, Brock said that he was good at reading so sometimes when things did not make sense he would re-read (“just like my teacher always tell us to do”). When asked about things that he did to help him focus, he pointed out that he asked his group member to stop making a distracting noise. This was something that the investigator had not considered when recording his SRL behaviours, demonstrating the importance of following up with students to determine intentions behind actions.

This description provided one example of how Brock related his SE to task difficulty and used effective strategies in Iris' inclusive class. As well, it demonstrated how Brock focused on procedures when interpreting the task, rather than the learning opportunities. In addition, this description detailed how Brock expressed awareness of certain SRL-supportive instructional features including complexity, choice in process (but not group role), and procedural scaffolding.

## **Cooper**

As described above, Cooper was ten-year old boy with high academic achievement in reading and writing. Cooper attended Inger's grade 4 inclusive class and had attended challenge writing classes in the past.

**Pre-meeting.** In his initial interview, Cooper explained that he "liked" both reading and writing. In reference to reading, he read both "at school and every night before bed," and stated that he enjoyed reading textbooks at school "a bit," but he was more interested in learning from what he read. In regard to writing, Cooper demonstrated a great deal of enthusiasm when discussing his enjoyment of writing, reporting that he wrote more at school just because he did not have time at home. When looking at the literacy task used to contextualize the Self-Efficacy Measure, Cooper provided high ratings of 5/5 for all items including those that addressed reading and writing skills. Using the same task to contextualize the Self-Efficacy Probe, Cooper felt he could "always" complete this general type of task successfully, adding that he is "good at these ones, they are easy." When looking at this particular literacy task, Cooper again felt "very confident" that he could complete the task successfully. Overall, Cooper expressed high SE for both reading and writing tasks throughout this interview, which complemented Inger's report of Cooper's strong literacy performance

**Observations and post-meeting.** In phase three, after his pre-meeting, Cooper was observed three times in Inger's inclusive class (see Table 8). An overview of Cooper's SE and SRL in the context of the literacy tasks in that context is provided in Table 15.

The following discussion describes patterns discovered by comparing data compiled throughout phase three that provide insight into Cooper's SE in relation to contextual factors. First, Cooper brought high SE to literacy tasks and his SE varied between 3/5 to 5/5 depending on the task and the context in which it was embedded. This pattern of providing a range of SE ratings depending on tasks and context was consistent with both Sara and Brock.

Second, Cooper was observed during two lessons when he was working on the Review task. In the first lesson (observation 1) he related his general SE rating of 4/5 to his ability by explaining that he was usually good at this type of task, and his task specific SE rating of 3/5 to task difficulty, indicating that this particular task was harder than usual. In the second lesson (observation 3), he related both his general and task specific SE of 5/5 to his ability, reporting that he was very confident because he was "usually good at these activities."

Looking at contextual factors that differed between these two lessons on the Review task, it appeared that all SRL-supportive instructional features were similar, except that it was only in the second lesson when instrumental scaffolding was present. As was observed with Brock, Cooper used more strategies when instrumental scaffolding was presented. More specifically, when Inger cued Cooper to use additional sources of information to answer his question, he used a map in one instance and the computer in another. As in Brock's case, if instrumental scaffolding for strategies prompted Cooper to use more strategies, and recognize that he had strategies he could use, it may have then positively affected his SE. Another difference between Cooper's approaches to the lessons was that, in the second, where his SE was higher, Cooper interpreted that his task was to learn about the topic. Correspondingly, he set both performance and learning personal objectives to both complete the task and to learn in order to prepare for the test. In contrast, in the first lesson, Cooper perceived the task's purpose, and set his personal objective, as just to complete the questions. It may have been that his greater use of strategies in the second lesson was related to a deeper task interpretation. Although Cooper did not identify



these contextual factors as influential when discussing his SE during interviews, they may have played a role in Coopers' SE and SRL in these tasks.

Third, while Cooper most commonly attributed his SE to his ability, in the lesson where he was working on the Persuasive Writing task (see observation 2), he related his high SE to the presence of choices. More specifically, he rated his general SE as 4.5/5, explaining that it depends on the topic, and that if he gets to choose then he can always be successful. In regard to his task specific SE, he provided a 5/5 rating based on the fact the he got to choose what he could write about. Therefore, for this task, Cooper perceived the provision of choice in product as pivotal to SE. This finding followed the trend of students relating their high SE to the presence of choices, as noted above in Sara and Brock's descriptions.

Fourth, when looking at his strategy use, Cooper exhibited a range of cognitive and self-regulating strategies when he was working on the Review task (see observations 1 and 3), but none when working on the Persuasive Writing task (see observation 2). During the first lesson on Review tasks, he used strategies including looking up answers in different sections of the textbook and the glossary, monitoring his progress by reviewing completed questions, and checking the amount of remaining time. As discussed above, in the second lesson on Review tasks, Cooper used even more strategies such as referencing a map, using the internet to reconcile conflicting information, organizing his work prior to starting the task, monitoring his understanding by asking his teachers for clarification, and self-assessing his progress. In contrast, during the Persuasive Writing task, Copper did not demonstrate or discuss any evidence of SRL behaviours.

When looking at contextual factors that varied between these tasks, several differences were noted that may have contributed to this pattern. First, fewer SRL-supportive instructional features were present during the Persuasive Writing task, where Cooper did not exhibit use of SRL. This absence of supports to Cooper's SRL may have played a part in his lack of strategy

use. Second, Inger had students working independently during the Persuasive Writing task, but provided a choice for them to work on their own or with a partner during the Review task. Cooper took advantage of the opportunity to work with partners for the majority of his time on the Review task. The provision of group work during the Review task may have prompted Cooper to use strategies because of exposure to student models or opportunities for interaction. Third, this was the first lesson in which Cooper had worked on the Persuasive Writing task, whereas he had worked on the Review Task multiple times prior to these observations. It could have been that his relative lack of familiarity with this particular task led him to not recognize opportunities to use strategies. That said, Cooper explained that he had worked on this type of task before, so he knew what to do. Nonetheless, any one, or a combination of these factors, may have impacted Cooper's use of strategies between observations of these two tasks.

**In-depth example.** To provide a detailed description of Cooper's SE and SRL in the context of literacy tasks, an account of one observation of Cooper is provided below. This observation took place as Cooper was working on the Persuasive Writing task in Inger's inclusive classroom (see observation 2). This was the first time that students had worked on this particular task so this was an introductory lesson. Inger was drawing on previously considered content, specifically about tone and word choice. As a result, Inger first reviewed tone and word choice, introduced and connected these previously presented ideas to what it means to write persuasively, and then had students work on the task, to independently write a persuasive paragraph that would convince their parents of something.

Upon arriving in Inger's classroom, the investigator noted that all 18 students were sitting quietly at their desks while Inger led a discussion on tone at the front of the room. She had a presentation set up on the interactive whiteboard and was asking student volunteers to read from the slides. Cooper raised his hand to participate on two occasions and was picked once, reading a short section on tone slowly but proficiently. After each slide was read, Inger asked the class to

identify the tone that the piece set and to explain why. She then asked the students if there were any particular word choices that led to the setting of the tone. Throughout these discussions, Cooper appeared to be engaged as he demonstrated attentiveness by directing his eyes to the front of the room. Although fiddling with a pencil on his desk, this did not appear to distract him.

Once the presentation was complete, Inger asked the class to provide a review of what they had learned about tone. While students volunteered their ideas, Inger wrote a list on the board under the heading: “Tone – Main Ideas.” Cooper offered his ideas once and raised his hand a second time but was not chosen. Once a list was created, Inger asked students to brainstorm what persuasion was and several students raised their hands. Cooper did not raise his hand to participate in this discussion. After four different students had expressed their ideas, Inger explained the link between tone and persuasion to the class. Following that, Inger outlined the work for this particular lesson, which was for students to write a persuasive letter to their parents using one particular tone throughout. Several students then raised their hands to ask questions. Prior to answering them, Inger explained that they had “free choice” in what they wanted to convince their parents of, and that it could be silly but “had to be appropriate for school.” In response, two students lowered their hands. Inger went through the remaining questions, instructing students where to write their letters and explaining how long they should be. Once questions were answered, Inger opened a self-assessment checklist for writing on the computer so that students could see it on the interactive whiteboard and reviewed it with the class. The checklist included: one introduction sentence, at least three supporting sentences, at least one concluding sentence, and proofreading using COPS (capitals, omissions, punctuation, and sentence structure).

As soon as the task was set, Cooper opened his book and started writing with his head down and shoulders hunched over. After approximately two minutes, Cooper looked up and around the room, flicking his pencil across his desk repeatedly. At this point, the investigator

approached him, asking him to provide a SE rating. He indicated that his general SE was 4.5/5 and his task specific SE was 5/5. The investigator let him get back to his work. Cooper continued to play with his pencil for several minutes until his pencil connected with his water bottle lid and it fell on the floor. The student next to him picked it up and passed it back to him, making an unrelated comment about hockey. The two engaged in an off-topic conversation for a few minutes until Inger approached their desks. When told to stop talking and get down to work, Cooper explained that he was stuck and was just thinking. Inger left and he continued flicking his pencil for several more minutes. He suddenly resumed writing and continued to work at a steady pace for the next 10 minutes until he started drawing in the corner of his page. Cooper continued drawing for several minutes, until Inger announced that it was time to move on and to pack up their writing books. Cooper quickly closed his book and put it away.

Following this observation, Cooper participated in a brief interview. To begin, Cooper was shown his SE probe with his ratings and was asked if he continued to feel that same way and to explain why or why not. He indicated that his SE was the same for both and that he rated his general SE at a 4.5/5 because it depends on the topic, but if he gets to choose what he writes about, then he can always be successful. When explaining why he did not give a 5/5 he indicated if he did not have a choice in what he can write about, his teacher could make it difficult, so he was hesitant to give an “always successful” rating, “just in case.” When discussing his specific SE for the task, he reiterated that it was because he was given a choice in his topic.

Next, Cooper was asked about his task interpretation and personal objectives. He explained that the task was to write a persuasive letter using appropriate tone and that his goal was simply to write this letter. Following that, the investigator inquired about Cooper’s perceptions of observed SRL-supportive instructional features including complexity in skills, choice in product and self-assessment. In reference to complexity, Cooper explained that they had worked on this type of task before so they knew what to do, which he liked because then it

was easier for him. When choice in the topic of their writing was mentioned, Cooper eagerly expressed, again, that this was why he liked this task. In regard to self-assessment, Cooper did not acknowledge the presence of the checklist as important to him, only briefly stating that he forgot to look at it.

The investigator then asked Cooper about his perceptions of his classroom, his peers in particular. Cooper did not respond directly to these prompts, just mentioning that he liked his classmates and that sometimes they got in trouble for talking.

Finally, Cooper was asked about his observed SE behaviours and about strategy use to determine if he was using strategies that were not apparent to the investigator. When asked about his SE behaviours such as his engagement, participation, motivation, and off-task discussions, Cooper stressed how attentive he was and that he worked hard. He indicated that he spent a lot of time thinking because he got stuck for ideas. When asked to explain what he does when he gets “stuck,” Cooper did not articulate any concrete strategies, stating instead that he thinks a lot. He did acknowledge that he was talking to his peer and that they got caught, but indicated that it “was not a big deal.” In regard to further questions about both cognitive and self-regulating strategies, Cooper did not indicate that he intended to use any strategies while he was working, rather he thought of an idea right away and went with it.

This description highlighted how, when Cooper was presented with choice in product, he related it to his high SE. As well, this example described the context in which Cooper did not use strategies (first lesson on task, working independently, and relatively fewer SRL-supportive instructional features), in contrast to greater strategy use in other observations. It also exemplified how Cooper did not consistently recognize SRL-supportive instructional features such as, in this example, opportunities to self-assess.

## **Matthew**

As previously described, Matthew was a ten-year old boy who had low academic achievement in both reading and writing. He attended Inger's grade 4 inclusive class.

**Pre-meeting.** During Matthew's initial interview, he expressed that he did not feel that he was strong at reading or writing. He indicated that he preferred reading "kids' books" at home such as Robert Munch, Little Critters, and Dr. Seuss. When discussing reading at school, he described his dislike for reading textbooks and articles, but explained that he enjoyed reading "stories, information or chapter books." In regard to writing, he stated he "was not fond" of writing at school but liked working on creative stories at home. On the Self-Efficacy Measure, Matthew's responses varied significantly as he indicated that he felt very confident for reading tasks but "not at all confident" for writing tasks and for remembering what he read. When discussing the task that was used to contextualize the Self-Efficacy Measure and the Self-Efficacy Probe, Matthew explained that he remembered doing the task or something similar but did not enjoy completing the task. When prompted for more information, he could not recall the reasons behind his feelings. He rated his general SE for this type of task at 2 out of 5, indicating that he felt that he could complete the task successfully between never and half of the time. In contrast, he provided a higher task specific SE rating of 4 out 5, explaining that on this particular task, he felt he was between somewhat to very confident that he could complete the task successfully. Overall, Matthew indicated relatively higher SE for reading than writing, but he expressed that he found both challenging at school. This was consistent with Inger's report that he struggled with his reading and writing achievement and had received pull-out support for writing in past years.

**Observations and post-meeting.** In phase three, after his pre-meeting, Matthew was observed five times in Inger's inclusive class during social studies and language arts classes (see Table 8). An overview of Matthew's SE and SRL in each observation is provided in Table 16.

Data compiled in phase three suggested the following patterns in Matthew's SE and SRL in the context of literacy tasks. First, Matthew's general SE rating spanned between 3 and 5, while his task specific SE ranged from 2 to 4. Regardless of high or low SE ratings, Matthew most frequently related his SE to factors surrounding the task (just as Sara and Brock did), including the amount of time he had to complete the task or task difficulty.

In regard to time, Matthew consistently referenced either sufficient or insufficient time to complete the task. For example, when working on the Review Task (observation 4), Matthew explained that his low task specific SE of 2/5 was because he could not "find the information fast enough to finish in time." Consistent with observations, when discussing time, Matthew indicated that his SE was higher when he felt he had more time and was lower when he perceived he would run out of time to complete the task. It was interesting to note that each time Matthew used the self-regulating strategy of monitoring his progress in relation to time, he also attributed his SE to the amount of time available. For example, when working on the Summary task (see observation 5), Matthew related his task specific SE to time, explaining that he thought he would have enough time to complete the task, and monitored his progress throughout the lesson by repeatedly checking the time.

Matthew also frequently raised how challenging the reading material was when describing his SE ratings. It was interesting to note that, when Matthew related his SE to how hard the reading was during the Summary task, he did not notice that choice in materials was present, which potentially would have enabled him to control the degree of difficulty in reading material. As well, when working on the Persuasive Writing task (see observation 3), Matthew explained that he provided a 3/5 general SE rating because it was hard when they had to think of a topic, implying that, in this lesson, choice in product appeared to have a negative impact on Matthew's SE for the task. Matthew was not provided with choice in product in other lessons for comparison. Thus, evidence related to Matthew's self-efficacy also suggests how provision of

choice might interact with students' perceptions of task difficulty, as raised in the descriptions of both Sara and Cooper. First, choice in materials appears to be linked with the degree of control that students have over the level of challenge, thereby impacting their perceptions of task difficulty. Second, in this example of Matthew, choice in product for him made the task more difficult, which appeared to play a part in his low SE rating.

Second, Matthew attributed his SE to his ability rather than to task features during two observations. First, when Matthew was working on the Persuasive Writing task (see observation 3), he provided one of his lowest task specific SE ratings (2/5), explaining that he was "bad at thinking of ideas." This, again, reflected the role of choice in Matthew's SE, since providing choice in product in this task required Matthew to engage in an activity that he found particularly challenging. Second, when working on the Vocabulary task (see observation 1), Matthew provided his highest general SE rating of 5/5, which he linked to opportunities to use his strategies such as working sequentially to complete the task. Not only did Matthew rate his SE the highest for this task, but it was also the only task for which Mathew set both performance and learning personal objectives, to both complete the task and to apply his learning to future tasks. More specifically, he explained that he wanted to "always add more detail to my writing." In all other lessons, Matthew's personal objectives were typically more narrowly focused on just completing task requirements, such as finishing the review page. A similar pattern was also noted based on Cooper's third observation when he was working on the Review task, where his SE was higher when he set a personal objective to both complete and learn about the task.

**In-depth example.** A detailed account of one observation is described below to provide insight into Matthew's SE and SRL in the context of one literacy task. During this first observation of Matthew, he was working on the Vocabulary task in Inger's inclusive class (see observation 1). Even though Inger had taught lessons on vocabulary choices and the five senses throughout the year, this was the first lesson that connected them together in the context of



writing. Inger explained to the investigator that the intent of this task was to have students exercise their writing skills. She planned to first introduce the topic and then have students begin working on the task, suspecting that it would span multiple lessons, which it ultimately did.

When the investigator entered the room, all 20 of Inger's students were seated at their desks listening as Inger introduced the topic of word choice at the front of the room. Inger asked the class to explain what she meant by the term "word choice" in relation to reading and writing. Several students raised their hands, including Matthew, who was sitting at a desk in the front row, off to the left. Inger selected several students to contribute their ideas about what word choice was. She then connected word choice to the "Reading Power" of visualizing and asked the class to think about another similar assignment they had completed.

Inger then talked about senses, asking the class to explain what senses were and how they could be connected to word choice. Again, several students raised their hands, including Matthew. Inger selected three students to share their ideas and then moved on to introduce the task for this lesson. She explained that the students were going to be chocolate "connoisseurs" for the day, meaning that they were going to experience chocolate with their senses. This sparked several students to murmur about their predictions for the task.

Once Inger regained the class' attention, she had them focus on the interactive whiteboard and asked for volunteers to read the paragraph about the task. Matthew raised his hand to volunteer and was selected, reading aloud clearly with good intonation. Inger praised Matthew's reading and reiterated what was on the slide, explaining that first she was going to pass out the charts for students to fill in, second she would have helpers pass out the chocolate, and third that they were to work in their groups to complete the worksheet by sampling the chocolate and filling in the appropriate place with strong "sense" related vocabulary word. After that, Inger answered several questions, for example, about whether they could choose their favourite chocolates first. In response, Inger explained that they could choose how they went

about completing the task, but she warned them that they might forget what each chocolate tasted like if they ate them all at the start without writing on their worksheets.

Inger then set students off to work while she organized helpers to distribute materials. While they were waiting, Matthew began chatting with his group about their excitement for the task. Once they had their chocolates and worksheets, and while they sampled the first chocolate, Matthew chatted with the boy next to him about his enjoyment of the task and his preferences for certain chocolates. During this time, Inger travelled around the room checking on each group's progress. When she arrived at Matthew's group, she asked them to start thinking of their word choices. Once Inger left their desks, Matthew started writing on his worksheet and then eagerly shared his words with his group. One member of his group mentioned that his word was in the wrong place, so Matthew reread the instructions and then corrected his work. His group continued on sampling chocolates, adding words to their worksheets, and sharing their ideas for approximately 10 minutes.

The investigator stopped Matthew briefly at one point to ask him to rate his SE for the task. He indicated a 5 for his general SE and a 4 for his task specific SE. The investigator then let him get back to work, as he started looking at the clock.

During the next 15 minutes Matthew was observed working independently, with the boy beside him, and with his whole group. As well, he checked the clock several times and after the fourth time, he mentioned to the group that they had to hurry up because they were running out of time. Two members of the group thought that they would have next class as well and expressed that they did not think there was a rush. The boy working beside Matthew agreed with him that they should hurry up, so the two of them worked together, discussing and adding words to their worksheets for another five minutes.

Inger then acquired the class's attention to have one student show the class his chart and explain what he had done, giving examples of words and how they were chosen. After he

finished, Inger reinforced that this was just one way of going about the task and that students could complete it “whatever way you want.”

Once Inger was finished, Matthew looked at the time again and told his partner again that they needed to hurry to finish all the spots on the worksheet. They worked steadily for another 3 minutes, sharing their ideas, and talking about how good the chocolates were, until Inger announced that class was over and they needed to clean up. Matthew quickly wrote down several more words until Inger provided a second prompt for students to get ready for recess.

Following this observation, Matthew participated in an interview with the investigator. First, the investigator showed Matthew his SE ratings and asked him to indicate if there were any changes and to explain why he chose those ratings. Matthew indicated that he still felt the same, explaining that his SE was high for this type of task in general because he could use strategies to complete the task. When asked further about this, he explained that his strategy of working his way sequentially down the worksheet, eating a chocolate, brainstorming, and writing down the answers would make him successful when completing this type of task again. In regard to his task specific SE, he expressed that he could be successful but he felt constrained by time in that he did not have sufficient time to complete the task.

The investigator then asked Matthew about how he interpreted the task and what personal objectives he set. Matthew explained that the task was to use their senses to complete the worksheet and that his goal was to finish the worksheet and add more details to his writing by using his senses.

Next, Matthew was asked about his perceptions of the SRL-supportive instructional features that the investigator observed, including complexity in skills, choices in process and role in group, and student modeling. When discussing these items, Matthew referenced that he enjoyed the fact that they had more time to work on this task, so that he could have time to complete it. He did not pick up on the fact that they could go about completing the task in their

own manner or that they had a choice in their role in their group. He did mention that he liked seeing what other students had done, adding that he liked it when his own work was chosen as an example.

Following that, the investigator asked Matthew about observed qualities of placements, including the teacher-to-student ratio, instructional focus, and his peer relations. He did not comment when asked about the teacher-to-student ratio. In contrast, when talking about the instructional focus on first reading, then writing, Matthew explained that even though he usually did not enjoy writing, in this task it was okay because they only had to write single words. When discussing his peer interactions, Matthew indicated that he liked his whole class, had many friends, and liked the “hustle and bustle” of a classroom. He explained that the noise of other people working made him focus more. When asked about his perception of the incident when his group member told him his information was in the wrong place, Matthew did not react in a positive or negative way, explaining that he checked his work and fixed it.

Finally, Matthew was asked about his observed SRL and SE behaviours to confirm intentions behind these actions. In reference to questions about his focus, Matthew indicated that he was very focused during both the instructions and on the task, rarely getting off-topic. He also felt that he kept his group on task by telling them to hurry up. Matthew added that he was “keeping an eye on the clock to make sure they did not run out of time.” With a laugh he then admitted that they ran out of time, but at least they could work on it the following day.

This example highlighted Matthew’s consistent task engagement, his use of self-regulating strategies related to time management, and his most common SE attribution to time. As well, this description outlined Matthew’s only observation where he set both performance and learning personal objectives, to both complete the task and apply the lesson learned to his future work, which coincided with his highest SE rating. Matthew’s high SE may have emerged from,

or supported, his awareness and implementation of SRL strategies such as his systemic approach to complete the task.

### **Oceana**

As described earlier, Oceana was a high achieving ten-year old girl who was in Inger's grade 4 inclusive class.

**Pre-meeting.** During her initial interview, Oceana articulated higher SE for reading than for writing. When discussing her reading preferences, Oceana quite passionately exclaimed that she would read anything. She expressed a particular interest in reading novels at home. Although she explained that reading textbooks at school would not be her first choice, she did like to learn new “interesting” things from them. In regard to writing, she indicated some difficulties expressing her ideas but explained that it depended on the topic. She explained that, when given the option, she preferred writing on the computer because her ideas came out so quickly, so typing would make her work tidier. On the Self-Efficacy Measure, Oceana indicated high, “very confident” ratings across all reading and writing questions. The same pattern was noted in Oceana's responses to the Self-Efficacy Probe where she gave herself 5/5 rating for both the general type of task and the specific one in front of her. In the context of discussing the task used to contextualize both of these measures, Oceana expressed that she considered these tasks, where she had to read and then write a response, challenging, but that she was consistently successful when completing them.

**Observations and post-meeting.** During phase three, after the pre-meeting, Oceana was observed five times in Inger's inclusive classroom during social studies, language arts, and science classes (see Table 8). An overview of Oceana's SE and SRL in the context of these literacy tasks is provided in Table 17.

Comparing data compiled in phase three provided insight into Oceana's SE and SRL in relation to contextual factors. First, consistent with her reports of high SE in her pre-meeting, and

irrespective of context, Oceana consistently rated her SE high at 5/5, with only one incidence of rating her general SE at 4/5. She provided this rating when she was working on the Review task (see observation 4). In regard to her relatively lower SE rating, Oceana explained that sometimes these types of tasks can be challenging, and although reading in the textbook is usually easy, sometimes it can be hard to find the exact answer the teacher is looking for. It was interesting to note that, during the first lesson where she was observed working on this same task (see observation 2), she rated her SE as 5/5 without reference to task difficulty. Rather, during this first lesson, Oceana attributed her high SE to her strong ability to complete the task.

When exploring if contextual factors contributed to Oceana's general SE ratings in the same task across these two lessons, several differences were noted. These included the range of choices, type of scaffolding, and peer interactions around her. Oceana did not describe any of these variances as playing a role in her general SE during either of these lessons. Ruling out these factors, it could be that Oceana's interpretation of the task changed over time and in turn impacted her SE. More specifically, when her SE was high, it was the third time she had worked on this task, whereas her SE was relatively lower during the sixth time that she worked on the task. It could be argued that she attributed her SE to her ability during the first observation (earlier lesson), but that after working on the task for several lessons, she found that it was more difficult than first anticipated to find the exact answer the teacher was looking for, leading her to provide a relatively lower SE rating.

Second, two patterns were noted when looking at Oceana's SE attributions. First, as indicated in the description of Cooper, who also had high academic achievement, Oceana most frequently related her SE to her ability level, often explaining that she was "really good" at the activity. Second, consistent with other students, including Sara, Brock, and Cooper, in one lesson Oceana related her high task specific SE to the availability of choice. More specifically, during the lesson when Oceana was working on her Science blog (see observation 5), she attributed her

SE to the provision of choice in the product she could create. She explained that she felt she could be successful in this task because she could make her own design to express her ideas. This suggests that choice could be related to SE in this study both for students who were proficient in literacy tasks (Cooper and Oceana) and for students who were struggling (Sara, Brock).

Fourth, with respect to strategies, Oceana exhibited use of different self-regulating strategies during all lessons and used cognitive strategies in all but one lesson. In that lesson, which involved working on the Persuasive Writing task (see observation 3), she used self-regulating strategies but did not exhibit or discuss implementing any cognitive strategies. It was interesting to note that this was the same task in which Cooper failed to demonstrate any strategy use, one lesson later.

When looking at contextual factors that may have differed between this observation and others of Oceana, three patterns were noted. First, in contrast to Cooper's observation, this was the second lesson where students were working on this task, therefore lack of familiarity was less likely to have been a factor in Oceana's less evident strategy use. Second, as was the case in Cooper's observation, this was the only lesson where students worked primarily independently which may have resulted in lack of opportunities for students to observe peer models or work together in ways that surfaced or promoted strategy use. Third, again as noted in Cooper's observation, the least number of SRL-supportive instructional features were present in this lesson in comparison to Oceana's other observations. The reduced number of these instructional features may have limited Oceana's opportunities to use strategies in this context. Therefore, consistent with interpretations of patterns in Cooper's case, it may also have been for Oceana that independent work and a lower number of SRL-supportive instructional features played a role in her relatively lower level of strategy use during this observation.

**In-depth example.** To provide insight into Oceana's SE and SRL in context an in-depth description of one observation of Oceana is provided below. This observation occurred as

Oceana was working on the Science Blog task within Inger's inclusive class (see observation 5). This was the second lesson where Inger had students work on this task. The first lesson included a review of the blog site, which students had been introduced to in the past, and an introduction to this complex, self-directed task. Inger reported that she spent a significant portion of the prior lesson thoroughly explaining the task. As described in detail above, this task required students to use multiple strategies in order to consolidate different sources of information to create a blog that represented their understanding of the unit on Weather. Inger explained that the goal of this lesson was to give students a work period on this task. Students were going to be given at least two additional lessons to continue creating their Blogs before they would present them to the class.

As the investigator entered the classroom, Inger's 18 students were standing in line to get laptops from the portable cart at the front of the room. Once they had their laptops, they returned to their desks and turned them on. Inger was at the front of the room supervising and assisting students as they unlocked the laptops from the cart. She briefly reminded students that while they were waiting for their laptops to start up they could get out their science textbook, notes, or any other material they would need to work on their blog. After each student got their laptop and returned to their desk, Inger wrote the website domain name for the blog on the board with their log-in instructions and gave oral instructions to "look at the board when you are ready."

During this time, Oceana had started her laptop, got out her binder, and was talking to the boy beside her about the slow computers. Once her computer was operational, she referenced the board, logged onto the website, and her blog opened up. She promptly showed the boy beside her the work that she had completed so far, exclaiming, "Look at all this," and then talking about the specifics of her thinking bubbles that were attached to a character. At this point the investigator traveled around to her desk and asked her what she was working on. She animatedly explained that she was making a blog which was a website of information that you can make from scratch.



She showed each part of the website to the investigator. When asked how she got all her information, Oceana explained that she accessed textbooks and websites. To not impede her work, the investigator thanked her and let her continue working.

Oceana spent several minutes scrolling through her work, moving objects and text boxes before getting out her textbook from her locker and returning to her desk. She then flipped through to the chapter on Weather and read the page. When she reached the end, she opened another internet tab and went to the Wikipedia website and typed “Tornadoes” into the search bar. As the page loaded she looked over at her peer’s work beside her and made a positive comment about a graphic he had placed on his blog. They discussed where he got it and how he just copied and pasted it onto his blog for a few moments before Oceana refocused her attention on her own computer. Oceana scrolled down the page and clicked on the graphic on the right hand side opening a series of pictures of tornadoes. She selected one, copied it and pasted it onto her blog, adding the title “Nature’s Disasters” to the top of the page.

Inger circulated the room while students were working, checking on student’s work and helping them problem-solve computer and content issues. When she got to Oceana’s desk she praised her for using such a unique title and continued on. Oceana went back to the Wikipedia website, returned to the information page and consulted the text for a few minutes. She then reread her textbook page on Tornadoes and started writing in a text box on her blog. She continued writing for several minutes and then stopped to look at the clock. She then turned the page in her textbook and read about the next topic, on “Hurricanes.” Once she was finished the page, she again returned to the Wikipedia website, searched Hurricanes, and read the information there for several minutes. She paused from her work to observe two students who were having an off-topic discussion nearby and then looked at her peer’s work for several minutes. The investigator approached her briefly at this point to have her rate her general and task specific SE.

On both of these scales she pointed to the 5/5 “very confident” rating, quietly saying that she loves this activity. The investigator left her to continue her work.

Once again, Oceana looked at the clock and began working. For several minutes she wrote about Hurricanes, consulting both her textbook and Wikipedia at regular intervals. Inger then reminded students that they only had 5 minutes left before recess and that they should start winding down, getting their last sentences out, saving their work, and logging off. Oceana quickly saved her work and turned her computer screen to her peer beside her to share her work. They spent the next few minutes talking about their work and sharing ideas. Then, with Inger’s prompting that they should log off, Oceana shut her computer down and returned it to the front of the room.

After the observation, Oceana participated in an interview with the investigator. First, Oceana was asked about her SE rating. She explained that her general and task specific SE throughout the lesson was very high. When asked why, she attributed her general SE to her enjoyment of the task, and her task specific SE to the provision of choice in how to make her own design and express her ideas.

Next, Oceana was asked to explain her task interpretation and personal objectives. She focused on both task procedures and learning, explaining that she was supposed to build a website blog about all the information that she learned. Her personal objective was to finish the project so that she could share the information with her peers and learn from their presentations too. Again, she referenced how much she enjoyed working on this task and seeing what other people did as well.

Following that discussion, the investigator asked Oceana about her perceptions of SRL-supportive instructional features observed, specifically complexity in skills, goals, and strategies and choice in materials, product, and process. Oceana discussed the importance of having multiple days to complete the project, indicating that she felt students needed time to learn how

to use the program, get information from different places, and check information before adding it to a blog. When asked why information needed to be checked, Oceana explained that Inger had talked to them about checking information using two sources to confirm that it was correct before adding it, “just to be sure that you have your facts straight because you don’t want to teach everyone the wrong thing.” In response to questions about having choices, Oceana picked up right away on all forms of choice, stressing the importance of having different sources to choose from and creating the blog in their own way to make what they want because that made it fun.

Oceana was also asked her perspectives about the teacher-to-student ratio, instructional focus, and her peer relations. Oceana did not have much to say in regard to questions about the instructional ratio or dual focus of instruction on both reading/writing skills and learning about the Weather. She just shrugged her shoulders and commented on how much she liked this task. When asked about her peer interactions, Oceana explained that she liked her classmates and that she got along well with the boy she sat next to, explaining that they had been in the same class since Grade 1. She also raised that she liked how Inger let them talk when they were working because then they could help each other with work, but that sometimes it got noisy in her classroom which she did not like.

Finally, the investigator asked her questions about observed SRL and SE behaviours to confirm intentions behind these actions. In reference to looking at the clock, Oceana explained that she was just checking the time to make sure she was on track and not spending too much time on one section. When asked about how she completed the task, Oceana explained her strategy of reading the textbook, checking the information with Wikipedia (“to make sure it was up-to-date”), and writing her understanding in her own words. Overall, Oceana confirmed that the positive verbal and nonverbal SE behaviours which she exhibited during observations

reflected her confidence in completing the task. As well, her account of her strategy use was consistent with observed SRL behaviours.

This observation provided one example of how Oceana provided high SE ratings and was engaged in tasks. As well, this particular example exemplifies how Oceana related her high SE to choice in product and how that choice enabled her to feel successful. In addition, this example highlights how Oceana was aware of the SRL-supportive instructional features of complexity and choice and the impact on her engagement (e.g., her perception that it was important to have multiple days to learn the program and gather multiple sources of information).

### **Arlene**

As discussed above, Arlene was a ten-year old girl in Grade 4 in Sasha's support class. She was diagnosed with a LD in the form of a reading disability and written output disorder and struggled in both of these literacy areas.

**Pre-meeting.** In phase three, during her initial interview, Arlene described her feelings about reading and writing in detail, identifying those elements of each literacy task that she felt were her strengths and weakness. Overall, she was very positive about reading, specifying that she was an avid reader who enjoyed fiction chapter books the most. Her writing skills were weaker in her opinion, as she stated that she "has trouble" in this area. Her feelings about her writing mirrored what her teacher, Sasha, reported about her writing achievement. But, Sasha also indicated that Arlene's reading level was approximately one year behind her age.

On the Self-Efficacy Measure, Arlene provided high "very confident" ratings for all questions except for explaining what she read to another student. On this question she indicated a "somewhat confident" rating, explaining that although she could understand what she read, sometimes it was difficult for her to explain what she read to other people. In discussion of the task that was used to contextualize both the Self-Efficacy Measure and the Self-Efficacy Probe,

Arlene expressed that she remembered the task and liked it. She provided general and task specific SE ratings of 5/5 on the Self-Efficacy Probe, indicating that she always felt she could complete the task successfully and that she was very confident she could successfully complete this particular task. Overall, Arlene indicated that she had a high SE for reading and writing in this context.

**Observations and post-meeting.** After the pre-meeting, in phase three, Arlene was observed three times in Sasha's support classroom, twice during language arts classes and once during Social Studies (see Table 9). An overview of Arlene's SE and SRL in relation to literacy tasks is provided in Table 18.

Data compiled in phase three provided insight into Arlene's SE and SRL within literacy tasks as put forward in Sasha's classroom. First, consistent with other students, Arlene's SE ratings ranged according to different tasks and contexts, in her case from between 3/5 to 5/5. Second, Arlene most frequently related her SE to her enjoyment of the task, explaining that, when she liked a task, she felt she could be successful at it. Arlene related her SE to enjoyment during observations when she reported relatively higher SE. And although she did not describe the link explicitly between having choices and SE, she was more likely to relate SE to enjoyment during observations when choices were present.

Arlene attributed her SE to enjoyment during the Metaphor task (see observation 2) and the Historical Figure task (see observation 3), which were the two tasks on which her SE ratings were relatively higher. When she was working on the Metaphor task, Arlene related her high 5/5 SE rating to her enjoyment and the amount of work she had completed on her poster. When Arlene was working on the Historical Figure task (see observation 3), she rated her general and task specific SE at 4/5. While she linked her general SE in this context to just her enjoyment of the task, she talked about both her enjoyment and the difficulty of the task when accounting for her task specific SE. She explained that although she liked this particular task, the reading was

hard to understand. Note here that, although choice in materials was provided, and Arlene chose to access a variety of texts, there was little difference in reading level across available materials. As a result, it could be argued that the sheer presence of choice in materials may not provide students with opportunities to control the degree of challenge in ways that foster SE; rather the nature of these choices and the teacher support provided to make the best use of them may also play important roles.

Third, Arlene provided her lowest SE ratings when she was working on the Notes task (see observation 1), when she gave 3/5 ratings for both her general and task specific SE. Her rationale for these ratings revolved around the lesson not being set out in a way that matched how she learns. More specifically, Arlene explained, “Even though I learned a bunch, I would not do well on a test from this because I need to see it.” This comment reflected strong awareness and insight into strategies and necessary supports for her learning.

As well, this was the only lesson where Arlene interpreted the task and set her personal objective to learn. More specifically, Arlene interpreted the task as having the purpose of learning about the Explorers, which was reflected in her personal objectives that also focused on curriculum-based learning. Looking at difference in contextual factors between observations, it was noted that this was the only task whose focus concentrated on both learning skills and learning curriculum content. It could be argued that this instructional focus played a role in Arlene interpreting the task and setting personal objectives to learn about the content.

**In-depth example.** To provide insight into Arlene’s SE and SRL for literacy tasks embedded in context, a detailed description of one observation of Arlene is provided below. During this observation, Arlene was working on the Historical Figure task in Sasha’s support class (see observation 3). This was the second lesson where students were working on this task. Sasha reported that, in the first lesson, she had introduced the task, provided a few brief examples, and had students begin researching different historical figures. She explained that this

task was one of several cumulative tasks that students would complete during the third term. The intent of these tasks was for students to apply the research skills they built throughout the year to independent projects where they had to read and summarize information from different sources to write a speech or create a presentation about a topic. In this particular lesson, Sasha hoped that all students would finish selecting their historical figures and start collecting information for their speech.

When the investigator entered Sasha's support classroom, the six students were settling into their desks while Sasha was gathering materials. Students were chatting at their desks, opening their language arts binders, and shuffling through papers. Sasha moved to the front of the classroom, gaining students' attention by having them repeat a clapping pattern. After clapping out the pattern, four students were looking up at the front of the room, while two others continued chatting. Sasha asked these students to stop talking and focus on her at the front. She then gave the rest of the students the instruction to "show me you are paying attention by showing me your eyes." At this point all students looked up to the front as Sasha began her instructions.

She first asked students to recall what they started working on last class. She called on one student who promptly raised her hand. This student explained that they were choosing their historical figure for their speech. Sasha asked the class how they would go about choosing one person from the list she gave them. Two students called out an answer related to reading and researching and Sasha asked them to raise their hands. She then called on Arlene, who did not have her hand raised, and who was turned around in her seat. Arlene twisted in her chair and explained that they would have to learn about the different people so they could choose which one they liked. She continued to explain that they could read about them on the computer or in the books or "to search their own minds or others." In response, Sasha asked Arlene to clarify her comment about minds. Arlene specified that, if they knew about the person already, they

could just remember that, or they could ask people like Sasha or the librarian about the person to find out what they knew. Sasha complimented Arlene's "unique" idea and asked the students to tell her a list of sources of information so that she could write it on the board. After writing Arlene's idea about your own knowledge or that of other "experts," Sasha got feedback from other students in the room to create a list that included the computer, the books at the front of the room, brochures, textbooks, and books from the library. Sasha then instructed students that this was an independent activity but they could chat about interesting information they learned. She asked each student to turn to the green handout she had provided last class that provided a checklist of information that they needed to find about the historical figure they chose. Finally, she asked students if they had any questions and set them off to work.

Arlene immediately went to the front of the room and took a book from the shelf. Another student approached the same shelf and Arlene declared that the book she had chosen had her own historical figure in it. The other student told her that was fine because it did not pertain to anyone she wanted to research. Arlene then went back to her desk and started flipping through the book. Before getting to her section, Arlene turned to the students behind her and asked who they were learning about. After listening to them, she turned around in her chair and started rifling through the contents of her desk. She remained hunched over, looking in her desk for several minutes until Sasha approached her, asking her what she was doing. Arlene explained that she was looking for her workbook. When Sasha questioned why she was doing that, explaining that the notes she was looking for were in her binder, Arlene responded with the comment "oh ya" and began flipping through her binder for her notes. Sasha remained by her side while Arlene looked for her notes until it became apparent that her notes were not in her binder. At this point, Sasha suggested that Arlene look in different places around the room, making several suggestions. For the next four minutes Arlene unsuccessfully looked around the classroom in piles of student work and in her locker. In the meantime, Sasha looked through the



contents of Arlene's desk, finding her work just as Arlene returned to her desk. In response to Sasha finding her notes, Arlene threw up her hands with a smile on her face, demonstrating amusement that it was where she was originally looking.

With her work on her desk, Arlene settled into her chair, sitting on one of her feet, and resumed flipping through the book on her desk. When she reached the appropriate section, Arlene read the page aloud quietly for a few minutes and then began writing feverishly on her paper. After several minutes the investigator approached Arlene's desk and quietly asked her what she was working on. Arlene explained that she was writing about her historical figure. The investigator then asked her about her progress. Arlene explained that she had finished her first paragraph and was working on her second. When asked what her first paragraph was about, she had to reread it aloud in order to explain what it was about. At this point the investigator asked Arlene to rate her SE on the SE probes and she indicated a 4/5 rating for both general and task specific SE, explaining that she enjoyed the task but that it could be hard. The investigator then let Arlene get back to work.

Arlene sat for a minute, looking around the room at her peers and out the window before shaking her head, reading her work briefly, again aloud, and beginning to write. She wrote for approximately two more minutes and then began squirming in her seat. She stopped working again and looked around the room, then turned around in her seat and asked her peer what she was doing. They engaged in both on- and off- topic discussion for a few minutes and then Arlene left her seat, approaching Sasha's desk to ask if she could use her computer. Sasha agreed and Arlene took her book from her desk and moved to her computer. Arlene went to Wikipedia and typed the name of her historical figure into the search bar. When the page came up, Arlene scrolled down the page and read a section aloud. She then said aloud, "That's not it ... born in ..." and began signing quietly to herself. After approximately five minutes of scrolling up and down, clicking on pictures and links, she returned to her desk and wrote something in her notes.

Sasha then informed the class that it was time to put their materials away and change for PE. Arlene pushed her binder into her desk with her paper on top and went outside to her locker.

Following the observation, Arlene participated in an interview. First, the investigator asked Arlene about her task interpretation and personal objectives. Arlene explained that she had to read about her historical figure and find all the information on the checklist that Sasha gave them, and that today she was just working on her writing. The investigator then showed her the SE Probe and asked her to explain her ratings and to indicate if there was any change. Arlene explained that when she first found out about the project during the last lesson her confidence was not as high, but then she started liking it during this lesson. She explained that the reading could be hard to understand, but that she still felt pretty confident that she could be successful at it.

The investigator then asked Arlene about her perceptions of observed SRL-supportive instructional features such as complexity in skills, choice in materials, the product, and the process, and self-assessing her work according to the checklist. Arlene explained that it was important to have so many days to work on it because it was such a large project with so many parts. With regard to choices, Arlene only picked up on having a choice of historical figure, explaining that it was good because girls do not always want to learn about historical boys and vice versa. Despite using different materials and completing the task in her own manner, Arlene did not identify these as choices in discussion. Finally, in response to questions about the checklist, Arlene explained that it was “essential” because otherwise they would not know what to write about.

Next, the investigator asked Arlene about qualities of the placement, including the teacher-to-student ratio, instructional focus, and peer relations. Arlene said she really liked her support class because it had fewer students, was not as busy, and she got her own computer. As well she explained that she liked a smaller class because she got to know everyone really well. In

regard to questions about which skills she felt she had to use to accomplish the task, Arlene again described how the reading part was hard but that she did not mind the writing. She did not raise having to use research skills, and when directly asked about them, commented that she looked things up on the computer but did not elaborate beyond that. In response to inquiries about her peer interactions, she did not elaborate on her interactions with other students during this observation.

Finally, Arlene was asked about the SE and SRL behaviours she exhibited in order to clarify intentions. When asked about reading aloud, Arlene explained that she always did this because it helped her understand the content more when she could hear it as well as read it. Next, the investigator asked Arlene about using different materials. While Arlene did not address that she was given a choice, she did reiterate that the reading was all challenging. Finally, Arlene was asked about shaking her head and she indicated that she was monitoring her attention, explaining that “I realized I was not working so I gave my head a little shake and started to work again.” At this point Arlene was asked generally about her focus during the observation to provide her with an opportunity to raise any intentional behaviours that the investigator had missed. Arlene indicated that she focused pretty well for the most part, but that she could get off-task sometimes. She said that it was hard to find her materials, but that was okay because she was unorganized.

This observation provided an example of how Arlene related her high SE to enjoyment and task difficulty. As well, in this lesson it was possible to observe how choice in materials was provided, and how, although she took advantage of different reading materials, Arlene still found the choices to be at a similar difficulty level. Thus, in this instance having choice did not allow Arlene to control the level of challenge of her reading, or to raise her SE by modifying task difficulty. In addition, while Arlene did demonstrate some sensitivity to the match between the instructional context and her optimal ways of learning (e.g., “seeing things”), and although she

applied strategies for self-regulation (e.g., monitoring and sustaining attention) and strategies that seemed to support her learning (e.g., reading out loud), she was not completely aware of features of context that might have been affecting her learning and self-efficacy (e.g., about opportunities to make some kinds of choices).

## **Nalat**

As previously discussed, Nalat was an eleven-year old girl in Grade 4 who attended Sasha's support class. She had been diagnosed with language-based LD in the area of reading and struggled with both her reading and writing in Sasha's class.

**Pre-meeting.** In the initial interview, during phase three, Nalat explained that she enjoyed reading "older books" that were above her grade level and that she read every night at bedtime. Mystery novels were her favourite and she was currently on Chapter 15 of her novel, "The House of the Scorpion," which she had started the previous week. Nalat's descriptions contrasted with Sasha's report that Nalat struggled to read and comprehend grade level texts. When discussing writing, Nalat was hesitant to share her ideas, stating that she "does not really like [writing]."

Looking at the task used to contextualize the Self-Efficacy Measure and Self-Efficacy Probe, Nalat explained that she did not like this kind of activity, specifically because of having to answer questions in writing. When answering the questions for the Self-Efficacy Measure, Nalat expressed that she was very confident about understanding what she was reading. On the four other questions, addressing reading and writing skills, she gave herself a 4/5 rating indicating that she felt confident only when she had a chance to read the material a second time. Looking at the Self-Efficacy Probe, Nalat again gave herself 4/5 ratings for both general and task specific SE. She explained that she felt pretty confident that she could do this type of task in general, but for the referenced task in particular she was "not entirely sure." Overall, Nalat expressed significantly higher SE for reading than for writing.

**Observations and post-meeting.** After the pre-meeting, during phase three, Nalat was observed three times in Sasha's support class, once during Social Studies and twice during Language Arts (see Table 9). An overview of Nalat's SE and SRL in the context of literacy tasks during these lessons is provided in Table 19.

Comparing data compiled during phase three provided insight into Nalat's SE and SRL in relation to contextual factors. First, consistent with all other students, Nalat's SE varied according to each task as embedded in context. She provided the highest general and task specific SE ratings of 5/5 during the two lessons when she was working on the Metaphor task (see observations 1 and 3). In reference to choices, she explained that, for both lessons, she felt like she could be successful when she had a choice in the end product, in this case what she could draw for her writing metaphor. This was consistent with Cooper and Oceana's descriptions of their SE in relation to choice in product.

With regard to enjoyment, this was Nalat's most frequent SE attribution (consistent with Arlene). During each lesson, Nalat related her general and/or task specific SE to enjoyment, although sometimes in addition to other factors. For example, during the first observation of Nalat working on the Metaphor task, she related her SE to both choice and enjoyment, explaining that she felt she could be successful because she enjoyed the task and that she got to choose what she could draw for her metaphor.

During the first Metaphor lesson, Nalat's task persistence appeared to be supported by a positive peer comment and teacher support. When Nalat expressed her dislike of her drawing, her peer provided positive reinforcement for her drawing skills and Nalat resumed working. As well, in response to her teacher's nonverbal cue to continue working, Nalat starting writing after taking a break. These features may have played a role in Nalat's enjoyment, and perceptions of SE, for this task.

In contrast, Nalat provided her lowest general and task specific SE ratings of 3/5 when working on the Textbook task (see observation 2). She again linked both her general and task-specific SE to her enjoyment and engagement, but here she also linked her task specific SE to the difficulty of the task. When asked, she explained that she did not like the task, was bored, and found it hard. It is important to note that, while in the Metaphor lesson Nalat's SE may have been supported by positive peer interactions, during this lesson, a peer's comment may have served to undermine her persistence. During this lesson, a peer (Arlene) made a critical comment to Nalat when she asked Sasha a question that Arlene, incorrectly, thought that Sasha had already answered. Nalat exhibited a negative reaction to Arlene's comment, as she sat back in her chair and frowned at her. When asked about this interaction in the final interview, Nalat explained that she was not pleased with Arlene's comment, indicating that she felt it was unfair. This example is another reflection of how a peer's comment may be related to a student's level of engagement, enjoyment, and perceptions of task difficulty and SE (as was observed for Sara).

Also noted was that, like Arlene, it was only for this task that Nalat interpreted the purpose, and set the personal objective, of learning about the textbook topic, here Explorers. This was the only task whose focus concentrated on both learning skills and learning curriculum content. It appeared that an instructional focus on curriculum content prompted both of these students to interpret the task and set personal objectives to learn about the material.

**In-depth example.** To provide insight into Nalat's SE and SRL in context, an in-depth description of the first observation of Nalat while she was working on the Metaphor task (see observation 1) is provided in this section. This was the second lesson where Sasha had students work on this task. As described above in the in-depth example of Sasha's classroom, Sasha reported that during the first lesson, students reviewed the writing traits that they had focused on extensively throughout the year, and examined samples of metaphors. She then introduced this complex task of reading about each trait from multiple text sources and creating a metaphor to

represent each trait. In the lesson described here, Sasha asked students to build on their understanding of metaphors and writing traits, first reviewing these topics before having students work independently to read about the trait of their choice and create their metaphor.

When the investigator entered Sasha's support class, the six students were working throughout the room, two at their desks, two at their computers, one at the round table, and another at the carpet. Shortly after, Sasha called students' attention to the front, requesting that they finish up their work and return to their desks. Within two minutes all of the students had returned to their desks and were chatting amongst each other. Sasha gained their attention by clapping a pattern and having the class repeat it.

She then asked students to recall what they were working on with the writing traits, first asking what the traits were. Several students turned to reference the writing traits display at the back of the room and then raised their hands. One student called out a trait. Sasha complimented her but provided a reminder to raise her hand before speaking. Sasha then called on two other students who recalled the remaining traits. Sasha then asked for a volunteer to explain what they were working on in relation to the traits. There was no response from the six students, so Sasha called on one student to explain the project. He articulated what they were working on, "creating posters of each of the traits," and Sasha then called on another student to elaborate. That student explained that they were selecting metaphors to represent the writing traits. Sasha complimented him and asked if the students had any questions about their projects so far. There was no student response to her inquiry so Sasha instructed students to get out their materials and start working. She reminded them that "you can pick where you want to work in the room" and suggested that they might want to spread out.

It took most students in the class, including Nalat, a few minutes to find their materials, establish a place to work and begin focusing on the task. Nalat looked in her desk for materials and then went to the pile of posters at the front of the room, flipping through them until she

found her own. She then returned to her desk, showed her work to her peer behind her, explaining who she was going to draw. After a brief off-topic discussion about her character with her peer, she got out her pencil box and started working. She created light pencil lines, frequently erasing them and making adjustments.

Approximately four minutes later, Nalat stopped drawing and started playing with a bracelet on her peer's desk. She then turned around and started discussing her peer's work for a few minutes. Sasha approached the pair after a few minutes to inquire about their progress. Nalat showed her what she was working on explaining that she did not think her drawing was good, which is interesting in that it suggested Nalat took a break from working when her self-assessment (and possibly confidence) were lower. Sasha suggested that she might work on the writing component first and then come back to the drawing, but reinforced that "you can pick which you want to do first." Nalat explained her plan of completing the drawing first so that she could label it with the writing. Sasha agreed, and let Nalat get back to work.

Nalat refocused on her work for several minutes before a peer approached her desk to look at her work. Nalat frowned at her picture and expressed how she did not like it because she could not draw her character's face correctly. Her peer reinforced that it looked great stating, "It is perfect, you are so good at drawing!" Nalat smiled at her peer and then erased the eyes and started drawing them again. Here it appeared that Nalat found a positive comment from a peer to be supportive, which may also have encouraged her task persistence.

Approximately four minutes later, Nalat stopped working, shifted around in her desk so that she was sitting on her other leg and stared around the room. She continued looking around at others, without talking, for several minutes. Sasha caught her eye, smiled at her, and made a gesture with her hand to start writing again. Nalat shifted in her seat again and resumed working.

At this point, the investigator approached Nalat and asked her to provide a SE rating on the probes. Nalat pointed to the two scales, indicating 5/5 for both. The investigator then allowed



Nalat to resume her work. Several minutes later, the girl sitting behind Nalat poked her in the back with her pencil and Nalat abruptly turned around smiling but expressing pain. They chatted about poking each other with different objects for several minutes before Nalat asked her what she wanted. She showed Nalat her work and asked for help drawing one particular item. Nalat agreed, erased a section and spent a few minutes drawing on her peer's work. During this time, they chatted about the drawing and what she wanted Nalat to draw. Sasha again approached the pair, asking how things were going. The girl explained that Nalat was helping her draw one section and Sasha agreed that this was okay as long as it was the peer's ideas not Nalat's. The two students agreed that that was the case and the girl explained what Nalat was drawing and why. Sasha turned to the clock during the discussion and announced, once she was finished explaining her idea, that it was time to pack up and move on to the next activity. Nalat continued drawing until Sasha explicitly instructed her to stop, explaining that she would have sufficient time to continue working later on. Nalat ceased working and packed up her own materials, putting her poster back in the pile at the front of the room and her pencil back in her case.

After the observation, Nalat participated in an interview. The investigator first showed Nalat her SE ratings from the observation and asked her if they changed throughout the observation or if they were different. Nalat indicated that they were the same, explaining that she felt very confident she could be successful on this type of task and this one in particular because she liked it and got to choose what she could draw.

Nalat was then asked about her task interpretation and the personal objectives she set. Nalat explained that the task was to create a metaphor for the writing traits and explained that her goal was to draw her character and write about how she was connected to "tone." After that, she was asked about the SRL-supportive instructional features that were noted during this observation, including complexity in skills and goals, and choices in product, process and where to work. Nalat responded quickly to the question about choices, explaining that she liked how

they had a choice of what to draw and that they could usually work where they liked, although she preferred to work at her desk. She did not respond to additional questions about complexity or choice in process.

Next, Nalat was asked about the qualities of this placement, including teacher-to-student ratio, instructional focus, and peer relations. She indicated that she liked working in a small class because it was not as noisy and that she liked that it was okay to talk while they were working. When talking about the reading and writing components of the task, Nalat focused on the fact that, in this lesson, she was mostly focused on drawing, because she did not read or write that day. When the investigator asked her about her interaction with her peers, for example, when she was given praise for her drawing, Nalat said that she liked that people thought she was good at drawing, even though she did not see it, and that she enjoyed drawing.

The investigator then asked Nalat about some of her observed SE and SRL behaviours including frowning and her focus and persistence when engaged with her work. Nalat explained that she did not like when it was hard to draw some parts, especially when what she drew did not match what she had in her head, but that she still enjoyed drawing. When asked about drawing light pencil lines and erasing them, Nalat explained that she always used the strategy of making sketches first and then created her final drawing afterward. In regard to her focus, Nalat did not comment on any challenges staying focused, or talk about her looking around the room or participating in off-topic discussions with her peer. Instead, she explained that she had worked hard and made good progress on her work.

This example demonstrated how Nalat provided high SE ratings when she enjoyed the task and was provided with choices in the product she created. As well, it demonstrated her consistent use of strategies and how she focused on the procedural elements of completing the task when interpreting this particular task, setting goals and engaging in her work. Like Arlene, Nalat did not always recognize or respond to SRL-supportive instructional features that were

present during the lesson such as choice in process and complexity. What was interesting was that her task persistence, particularly through obstacles (e.g., problems drawing what was in her head), and potentially challenged self-efficacy for drawing, did seem to be supported by prompting by her teacher and positive feedback from her peers.

### **Cross-Case and Cross-Class Patterns in SRL and SE in Relation to Context**

#### **SRL-Supportive Instructional Features and Qualities of Placements**

Three analyses were conducted to investigate how teachers were implementing SRL-supportive instructional features and how qualities of placements may have afforded or constrained teachers' use of those features. The first examined the occurrences of SRL-supportive instructional features in each type of placement (see Table 20), the second explored how teachers were providing support to students to take advantage of those features in ways that supported their SRL, and the third examined how qualities of placements (instructional focus, teacher-to-student ratio, and peer relations) were related to the presence of SRL-supportive instructional features (see Table 21)

In the first analysis, the presence or absence of SRL-supportive instructional features across different classes during phase one (see Table 6) and phase three (see Tables 7 through 10) were examined (see Table 20). Overall, it was found that teachers were similar in the number and kind of SRL-supportive instructional features they implemented in their classes. The result was that clear differences between placements could not be detected, suggesting that in this study placement in itself did not shape how SRL-supportive instructional features were afforded or constrained in different classes. This finding is perhaps not completely surprising, given that teachers were selected for this study because they were invested in and committed to providing instructional features that provided opportunities to support SRL in their classrooms.

While teachers did not differ in how frequently they used certain instructional features, some features were used more or less by all teachers. First, while complexity in skills was

observed in each lesson across classes, complexity in goals was more variable, and complexity in strategies only occurred on one occasion. Complexity in goals occurred more frequently in Iris (6/8) and Sasha's (3/8) lessons. In contrast, this type of complexity was present in only two of Inger's lessons and never in Leanne's observations. As well, complexity in strategies only occurred in one task in Inger's class but not in the other three teachers' lessons. Second, all teachers were observed presenting different types of choices to their students with choices in processes and products occurring most frequently. That said, choice in where students worked did not occur in Iris or Leanne's classrooms. The limited time and lack of physical space may have contributed to Leanne not providing this choice in her pull-out classroom. In addition, choice in who students could work with was observed in all classrooms except for in Iris' classroom. Third, looking at instrumental support, scaffolding was more common than modeling. In particular, teacher modeling was only presented twice, once in each of Sasha and Leanne's classrooms. As well, student modeling was observed in only 6/39 lessons, more frequently in Sasha's class (3/15) than in others. In contrast, both types of scaffolding was used by all teachers, with instrumental scaffolding occurring more frequently (16/39) than procedural scaffolding (11/39). Finally, student self-assessment was implemented by Inger four times and by Sasha one time, while neither Iris nor Leanne presented these assessment practices. These findings suggest that, while these committed teachers were doing a good job of implementing certain SRL supportive features across different kinds of placements, future research could focus on whether and why teachers were differentially employing different kinds of practices.

The second analysis examined how teachers were implementing these features in ways that supported students to self-regulate. Results of an in-depth analysis found that teachers were rarely providing students with support to recognize and take advantage of opportunities created by instructional features in ways that facilitated their SRL. In particular, Inger was the only teacher that drew students' attention to the availability of SRL-supportive instructional features.

For example, once Inger was observed providing instrumental scaffolding to direct Cooper's attention to his choice of materials; another time she promoted students' use of a self-assessment checklist as part of a Social Studies task. That said, there was only one observation where Inger went the next step to support students' use of an SRL-supportive instructional feature in ways that might have facilitated their self-regulation. During this observation, Inger provided students with instrumental scaffolding to not only select effective materials when provided with choices, but also to recognize the importance of selecting texts to support their self-regulated learning. While no other teachers were observed supporting students' uptake of opportunities to self-regulate using these features, this could have been due to the increased number of observations of Inger's class. This finding suggests that teachers need to, not only structure classroom instruction in ways that afford opportunities for self-regulation, but also to provide support for students to understand and take advantage of those opportunities.

Third, in order to more deeply examine relationships between particular qualities of placements and the presence or absence of SRL-supportive instructional features, Table 21 was created. Patterns evident in this table suggest five trends. First, complex tasks that required implementing multiple strategies were not observed when the teacher-to-student ratio was low, the instructional focus was on just learning skills, or students worked in partners or groups. Considering that this form of complexity only occurred during one observation, it is difficult to hypothesize the conditions that would suggest why this did or did not occur.

Second, choice in what role students took in groups did not occur when students were focused on just learning skills or when working independently. In most of the observations where the task focused on learning skills, students also worked independently (14/18). Here it makes sense that students had few opportunities to choose roles when they were working independently. Third, in the 16 observations where students worked as partners or in groups, they were not provided with choice in product. Here it may have been that students were more

likely to be given a choice in end product when working on their own rather than as a group. As well, teachers may have perceived it too challenging for students to figure out what they would create as a group.

Fourth, student modeling only occurred when students were working on the Vocabulary task in Inger's inclusive classroom, when the teacher-to-student ratio was high and students were focused on learning skills with a partner or group. Again, the rarity of this occurrence makes it challenging to propose how these qualities of placements afforded or constrained teachers in implementing this instructional feature. Fifth, opportunities for students to self-assess were less evident when the task was focused on both learning skills and curriculum content or when students were working as partners or in groups. In particular, student self-assessment occurred during four lessons where students were working on two different writing tasks. While choice in product and independent work were also present during these lessons, these features were commonly observed in lessons (12/31). No other contextual factors or features of the tasks were evident that appeared to facilitate teachers providing opportunities for students to self-assess their work during these particular tasks and not others.

Overall, while some small differences in the presence or absence of certain SRL-supportive instructional features were observed that could be linked to the three qualities of placements examined in this study, these patterns were not particularly robust (given the prevalence of most SRL-instructional features across all four classrooms), and limited suggestions could be provided to explain how qualities of placements may have afforded or constrained teachers' ability to embed instructional features into their classroom teaching. As a result, there is little evidence from this study suggesting that the qualities of classroom placements played a significant role in shaping teachers' use of SRL-supportive instructional features.

## **SRL-Supportive Instructional Features and SE**

The second research question addressed in this study focused on how the SRL-supportive instructional features embedded in the classroom contexts studied here might have been associated with participants' SE. To identify patterns across cases, Table 22 provides an overview of students' SE attributions in relation to their SE ratings, and Table 23 highlights the most common factors each student related to their SE. In this section the first focus is on the role of choice in students' SE, given that it was the only SRL-supportive instructional feature that students associated with their SE levels. Next, a review of patterns in students' SE attributions, evident in Table 23, is provided.

Patterns apparent in Table 22 reveal that, looking at the range of SE attributions across students' observations, choice was the only SRL-supportive instructional feature that students explicitly connected to their levels of SE. As described in the case study descriptions above, for the most part students' attributing their SE to choice coincided with higher SE ratings (see Table 24), because they tended to recognize how having choices provided them with opportunities to establish conditions in which they would be successful (e.g., by controlling task difficulty and/or by increasing enjoyment). The one exception was for Matthew, when he perceived having a choice in product (i.e., what to write about) as increasing the difficulty of a task.

From the student descriptions above, two types of choices appeared to be related to students' SE attributions, choice in materials and choice in product (see Table 25). In regard to choice in materials, for Sara and Brock, this type of choice appeared to allow them to control task difficulty, primarily by providing them with opportunities to select texts at their reading level. Thus, Sara and Brock reported higher SE (i.e., confidence in being successful) in observations when choice in materials was available. That said, students' recognizing and taking advantage of choice in materials appears to be vital to having an impact on SE. For example, although choice in materials was present while Matthew was reading, he failed to recognize that

he had this choice. During this observation, he related his SE to the difficulty level of the text, which he potentially could have controlled if he had recognized that he could select from easier materials. In addition to students' perceptions, the nature of choices in materials available appears to be important. This was exemplified in the observation of Arlene, when choice in materials was present, and taken advantage of, but the reading level of all texts was high and did not vary, thereby prohibiting Arlene from controlling the degree of challenge in reading level.

In terms of choice in product, Cooper, Oceana, Nalat, and Matthew all related their SE during observations to this type of choice. The first three of these students considered that having choice in the end product enabled them to be successful. For example, Cooper perceived the provision of choice in product as pivotal to his SE when working on the Persuasive Writing task. In contrast, when working on this same task, this choice in product seemed to have played a part in Matthew's low SE rating, by increasing his perception of task difficulty (again, from his perspective, choice made it hard to think of a topic and ideas). These two significantly different reactions to the same choice in product emphasizes, again, the importance of recognizing interactions between what students bring to contexts (e.g., interests, strengths) and contextual features (e.g., provisions of choice), as they affect both students' interpretations of tasks and their SE. In sum, choice in materials has potential to enable students to control the degree of challenge over the task difficulty and choice in product may support students to feel that they can be successful. That said, it is not just the presence or absence of choice that impacts students SE, it is also the nature and individual interpretation of these choices that is important.

As can be observed in Table 23, in this study students related their SE to both factors related to the environment, such as choices provided, task difficulty, time available, or learning environment, and to personal factors, such as their ability, use of strategies, enjoyment, engagement, ways of learning, or perception of grade they could attain. First, considering factors related to the task, in addition to choice in materials moderating students' perceptions of task



difficulty, a clear relationship was also evident between perceived task difficulty and students' SE ratings. Consistently, when students perceived the task to be hard or challenging, they provided relatively lower SE ratings. In contrast, when students reported that the task was easy, they indicated high SE ratings. In regard to time, although Oceana was also concerned about the amount of time available and was careful to monitor the time left to complete a task, Matthew was the only student who related time to his SE. He provided lower SE ratings when he felt he had insufficient time and higher SE when he perceived enough time to complete the task. Only one student linked SE to other aspects of the learning environment. Specifically, during an observation in which a peer made a negative comment, Sara indicated a low SE rating, explaining that the task was hard, the classroom was too loud and she would prefer to work alone.

Second, in regard to personal factors, both ability and enjoyment were identified most frequently. When Cooper and Oceana related their ability to their high SE, they were consistently positive about their abilities, explaining that they were "good" at various tasks. In contrast, Matthew's perception of his low ability, in terms of generating ideas, appeared to influence his interpretation of task difficulty when he was given a choice in product, which then appeared to lower his anticipation of being successful, as reflected in lower SE ratings. Many students also related their SE to enjoyment. For example, both Arlene and Nalat explained that they were more likely to be successful when they liked the task. Similarly, when Oceana referenced enjoyment in relation to her consistently high SE, she indicated that it was simply because she liked the task. When making a connection between choices and SE, Brock indicated that his high SE was related to his enjoyment of the novel he had been able to select because he had a choice in materials. Sara's case revealed the complexity in associating students' SE ratings to perceived ability and/or enjoyment. In her case, her self-perceptions of low ability overrode her associating success with task enjoyment. In explaining a low SE rating of 2/5, Sara explained that, even

though she liked the task, she was not great at it, and so was not that confident in completing it successfully.

Although less common across participants, some students attributed their SE to other personal factors. First, only Matthew linked his SE to his strategy use. Encouraging in this pattern is that Matthew associated his success with a controllable factor (i.e., his ability to systematically work through a task). A bit more discouraging was that it was only Matthew who made this connection. Second, at one point, Arlene indicated that her SE was a result of not being taught in a way that she learns. Although this resulted in low SE, it reflected Arlene's strong awareness and insight into her learning style, which unfortunately, was not observed in other students. Third, on one occasion, Oceana related her high SE to her ability to achieve a good grade, in addition to her strong ability and enjoyment of the task. Finally, engagement was also only raised once when Nalat explained that her low SE was a result of boredom, in addition to her dislike of the task and its difficulty level.

Although speculative given the small number of students in this study, there were some interesting patterns in terms of the most commonly identified factor associated with SE by students depending on their achievement levels and placements. For example, Sara and Brock, who attended both an inclusive and a pull-out placement, most commonly associated SE with task difficulty. Similarly Matthew, who had low academic achievement but only attended an inclusive class, also most frequently attributed his SE to factors related to the task, including both time and task difficulty. In contrast, Cooper and Oceana, who had high achievement and were in inclusive placements, were the most likely to link high levels of SE to positive self-perceptions of ability. Finally, for Arlene and Nalat, who were both only in support placements, enjoyment of the task was most frequent SE attribution.

These trends are interesting in that they suggest students' focus when considering how SE might have been influenced at least in part by their placement, or at least by the reasons why

students were enrolled in certain placements. That said, Table 23 shows how, while certain emphases in SE attributions were apparent for each student, all students related SE to between 3 and 5 factors, and in so doing considered both features of the environments in which they were working (i.e., choices, task difficulty, time available, environment) and personal factors (i.e., ability, enjoyment, ways of learning, strategy use). Examples provided in case descriptions and this analysis suggest that SE emerged from an interaction between these two kinds of factors (e.g., Matthew's perceptions of his ability in relation to the provision of choice in product and concomitant increase, from his perspective, in task difficulty; Nalat's increase in SE when choices were provided because of the increase in personal enjoyment).

As well, throughout these cases, variability in students' SE ratings reinforced how contextually situated SE is. All students, regardless of their initial SE perceptions or their academic achievement, exhibited some range in their SE ratings. For example, Cooper, who had high SE for reading and writing and high academic achievement, and Nalat, who had LD, high SE for reading but low SE for writing, and low academic achievement, both expressed SE ratings that ranged from 3/5 to 5/5 and could be related to the particular contexts in which they were working. This exemplifies the situated nature of SE and the importance of considering not only students' general SE for the type of task but their SE for specific tasks as embedded in particular classrooms in terms of shaping SRL and literacy performance.

### **Contextual Factors, SE, and SRL**

The third research question addressed how the relationship between contexts where students were working (SRL-supportive instructional features; qualities of placements) might have been associated with students' SRL and SE. An extensive analysis of each student's descriptive portraits was conducted to investigate patterns within and across cases. This involved cross-case and cross-environment analyses of: (a) context, including SRL-supportive instructional features and qualities of placements, and (b) response to tasks, including SE and

SRL behaviours, literacy performance, and task interpretation. Above and beyond patterns already presented (e.g., choice as related to SE), results of these analyses indicated three further patterns.

The first was noted during observations of Brock and Cooper when, in response to instrumental scaffolding, it appeared that these two students implemented more cognitive strategies. To determine if this trend extended to other students, an in-depth analysis of all students' observations was conducted. Findings here were that instrumental scaffolding and cognitive strategy use were not as clearly related in observations of other students. These findings suggest that, at least for two students, providing instrumental scaffolding may have prompted them to think about and use a wider variety of strategies. But, as was found when assessing the impact of choice in product on student learning, the influence of SRL-instructional factors on different students may not be uniformly consistent.

The second pattern related to the personal objectives students set and their SE. Personal objectives that focused on both the learning outcomes and the procedural elements of completing the task coincided with higher SE ratings for two students. More specifically, when Cooper and Matthew indicated that their personal objectives for a particular task were both performance and learning oriented, they provided their highest SE ratings across observations. A check for the robustness of this pattern across cases suggested that a relationship between personal objectives and SE was also apparent for two other students. Specifically, when Arlene and Nalat set just learning objectives rather than both performance and learning goals, they provided their lowest SE ratings from across observations. It may be that attending to the performance elements of completing the task, in tandem with learning, may facilitate SE as the sense of accomplishment of completing the task is a more concrete, measurable outcome than just learning alone.

It may be that some students need to address both learning and completing the task to feel they can be successful or that some students' who bring high SE to the task set both learning and

completing goals. This pattern suggests that high SE might either emerge from, or support students' engagement in literacy activities in ways that interweave attention to task completion with more meaningful learning. But the differences in these examples again highlight the need to explore students' engagement in literacy practices as situated in context.

Third, for some students, peer relations appeared to play a role in their perceptions of SE. For example, peer comments may have impacted factors that both Sara and Nalat related to their SE. Both Sara and Nalat reported low SE during tasks in which peers made negative comments to them. More specifically, Sara reported low SE during a task in which a negative peer comment may have highlighted her reading insecurities, while Nalat reported low enjoyment of the task when a peer criticized her question. In contrast, Nalat's task persistence appeared to be supported by a peer's positive comment about her drawing, which may have contributed to her enjoyment, persistence and SE. These examples illustrate a potential relationship between peer comments and some students' SE.

## **Chapter Five**

### **Discussion**

This study investigated the SRL and SE of students at different achievement levels, including those with LD, as they worked on literacy tasks in different placements (inclusive, support, or pull-out) where teachers were implementing SRL-supportive instructional features. Research questions investigated were: (a) how were teachers implementing SRL-supportive instructional features (complexity, choice, non-threatening assessment, and instrumental support) in their classrooms, and did qualities of placements (instructional focus, teacher-to-student ratio, and peer relations) afford or constrain how these features were enacted? (b) how were SRL-supportive instructional features related to the SE of intermediate students during literacy tasks? and (c) overall, how were the contexts wherein students were working (SRL-supportive instructional features; qualities of placements) associated with students' SRL and SE during literacy tasks? To address these three research questions, a qualitative case study was conducted of seven intermediate students learning in four different classrooms. In the report of findings, descriptions were provided of each instructional context, of students' literacy engagement, and of patterns evident across students and classes. In this chapter, findings are discussed in relation to the prior research literature for each research question in turn. Next, an outline of theoretical, methodological, and teaching implications is provided. At the end, suggestions for future research directions are outlined.

#### **SRL-Supportive Instructional Features and Qualities of Placements**

The first research question in this study focused attention on how teachers were implementing SRL-supportive instructional features and how qualities of placements may have afforded or constrained teachers' enactment of those instructional features. Attention to these questions was motivated by prior research that debated whether or not inclusive or support placements are more ideal for building academic (e.g., Bouffard & Couture, 2003; Fore et al.,

2008) and social-emotional skills (e.g., Schunk & Zimmerman, 2007; Whitley, 2008; Wiener & Tardif, 2004). Mixed findings in prior research on student outcomes in different placements motivated this study to explore the ways in which different placements might afford, constrain, or shape teachers' implementation of SRL-supportive instructional features.

In the context of this study, teachers' implementation of SRL-supportive instructional features across placements was similar. Thus, there was little evidence from this study to suggest that teachers were systematically affected by placement in their ability to support SRL. Note, however, that this study may have been limited in its ability to discern differences, partly because of the small scale (just looking across four classrooms), and partly because all teachers were selected because of the priority they placed on supporting SRL.

That said, an interesting finding was that certain SRL-supportive instructional features were implemented more or less by all teachers. Beginning with complexity, certain types of complexity, such as in skills where teachers required students to draw upon and build skills from prior lessons, was common practice across participating teachers. This practice is consistent with literature that suggests the value of providing complex tasks in ways that support students' SRL (e.g. Perry, 1998; Perry & Drummond, 2002; Perry et al., 2003; Perry et al, 2004; Turner, 1995). In this case, teachers appeared to expect students to remember, apply, and integrate knowledge and skills cumulatively across lessons in ways that fostered task complexity. As well, designing complex tasks facilitates students' motivation (Turner, 1995), a key recommendation for improvement for writing instruction (Cutler & Graham, 2008).

In addition to complexity, all teachers implemented choices in different forms throughout their lessons. Again, this practice is consistent with literature that supports providing students with choices in order to increase their interest in writing (Harris & Graham, 1997), to foster SRL (Boekaerts, 1997; Eshel & Kohavi, 2003; Perry, 1998; Perry & Drummond, 2002; Perry & Winne, 2006), and to raise SE (Guthrie et al., 2004; Walker, 2003).

Looking at teachers' use of instrumental support, scaffolding occurred more frequently than modeling. In particular, both procedural and instrumental forms of scaffolding were commonly used by teachers, with instrumental scaffolding occurring slightly more often than procedural. At times, instrumental scaffolding was provided in ways that took advantage of the presence of SRL-supportive instructional features, such as the provision of choices, consistent with Perry et al.'s (2002) account of teachers in high-SRL classrooms. As well, some teachers used instrumental scaffolding to prompt students to think about and use SRL strategies.

Finally, non-threatening assessment in the form of student self-assessment was observed infrequently. The absence of observations of self-assessment in certain teachers' classrooms could have been due to difference in numbers of observations. That said, even when self-assessment was encouraged as part of the learning process (i.e., expectations that students would monitor performance against criteria), students did not always take advantage of these opportunities. This reinforces the point that it is not enough to just implement SRL-supportive instructional features. Teachers and researchers must also gain insight into students' perceptions of these features in order to determine their impact on students' SRL and SE.

Further, as Perry et al. (2007) have argued, instrumental scaffolding may also be needed to support students' active and strategic engagement in ways afforded by those instructional features. As a result, analyses of teachers' enactment of SRL-supportive instructional features were conducted in order to examine how teachers implemented instructional features in ways that drew students' attention to the value of these features and how to use them to self-regulate their learning. From this investigation it was found that although teachers were implementing SRL-supportive instructional features, they were rarely doing so in ways that supported students to take advantage of opportunities to use these features in ways that fostered their SRL. The infrequency of this support implies that teachers need to not only provide



opportunities for students to use these instructional features, but also to build in supports for students to recognize and utilize these instructional features to support their SRL.

In addition to examining the link between the provision of SRL-supportive instructional features and overall placement per se and how these instructional features were provided, analyses were also undertaken to see if three features that may systematically differ across inclusive, support, and pull-out classrooms (i.e., teacher-student ratio, instructional focus, and peer relationships) might have been systematically related to how SRL and SE were supported. When relating qualities of placements to observed SRL-supportive instructional features, five very tentative patterns were found.

First, complex tasks that required using multiple strategies were not observed when the teacher-to-student ratio was low, the instructional focus was on learning skills, or students worked in partners or groups. But this form of complexity was only present during one observation, which makes it difficult to suggest why this SRL-supportive instructional feature did not occur when these qualities of placements were present.

Second, choice in what role students assumed in groups did not occur when students were focused on learning skills or working independently. The nature of independent work logically coincides with lack of opportunities to select roles in groups. Similarly, looking at the link to a focus on learning skills, it was found that, in most observations (14/18), lessons that included tasks that concentrated on learning skills involved students working independently. In only a small number of observations (4/31) were learning skills a focus in group work, where choice in role might have been observed.

A related, third pattern was that students were not provided with choice in product during the 16 observations when they worked as a partner or in groups. A greater number of observations of this pattern were present, which suggests that it might indeed have been less likely for teachers to provide this form of choice when students would have had to negotiate a

product. But little insight was available from prior literature, because although extensive research on the role of choice in supporting students' SE has been conducted (e.g., Guthrie et al., 2004; Walker, 2003), limited work has been cited on how the types of choices provided (e.g., in role or in product) might be related to specific contextual factors in which they occur.

Fourth, student modeling only occurred when students were working on the Vocabulary task in Inger's inclusive classroom when the teacher-to-student ratio was high and students were focused on learning skills and working in partners or with groups. But because this pattern was only observed in one inclusive placement class, it was difficult to draw any conclusions about why modeling would have been favoured in only this kind of context. It is interesting to note that teachers so infrequently used models. It could have been the case that, in their pull-out or support classes, Sasha and Leanne chose not to use student models because, in the context of tasks presented, few students could successfully model the task, coping strategies, or SRL behaviours. As Hampton and Mason (2003) point out, role models of academic success tend to be more prominent among students without LD. But then again, teachers in inclusive classrooms only infrequently used models as well. Again, a review of literature yielded little insight into qualities of contexts that support the provision of models, despite research indicating that modeling supports students' SE (e.g., Schunk 1989; Schunk & Zimmerman, 2007; Walker, 2003).

Fifth, opportunities for students to self-assess their work were present during writing tasks, and were not present when the task focused on both learning skills and curriculum content or when students were working as partners or in groups. Although self-assessment was observed in only 4/31 lessons, it occurred each time in inclusive or support placements, but not during Leanne's pull-out class. This may have been due to the limited number of observations conducted in this class, the time restrictions of these lessons to one hour, or that self-assessment occurred at the end of larger projects, which were not part of these observations.

While these tentative patterns were suggestive, great caution should be exercised in interpreting their significance. Generally, these differences were grounded in only a few observations, and could be attributed to the varying number of observations throughout phases one and three in inclusive (23), support (8), and pull-out (8) placements and in Iris' (8), Inger's (15), Sasha's (8), and Leanne's (8) classrooms. Also, because literature identifies a range of instructional features that have been associated with supporting SRL (e.g., Boekaerts, 1997; Eshel & Kohavi, 2003; Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004; Schunk & Zimmerman, 2007), potentially more interesting here was the observation that certain features were more or less common across all teachers. Future research might focus on affordances or constraints operating across placements that shape how these different instructional features are adopted.

### **SRL-Supportive Instructional Features and SE**

When examining the potential influence of SRL-supportive instructional features on students' SE, three themes were evident. First, choice appeared to play a role in students' SE ratings, but the sheer presence of choices did not ensure an impact on SE. Rather, the effect of choices also depended on reciprocal interactions between the student and their perceptions, the learning context, and the nature of choices available. Second, providing choices was just one of a number of factors that students related to their SE. Examining interactions among contextual and personal factors revealed the complexity in how SE emerges in the context of students' literacy engagement. Third, beyond choices, no other SRL-supportive instructional features appeared to have a direct impact on the SE of students in this study.

#### **Choice**

In the context of this study, the provision of choices appeared to play an important role in students' SE. This finding complements a great deal of literature that suggests that there is a

connection between students' SE and choices. For example, Guthrie et al. (2004) identify choice in addition to goals, materials, and collaboration as instructional practices that foster SE. As well, Walker (2003) stresses the roles of choice, as well as strategy, self-evaluation, and assessment context in supporting SE. In addition, choice was one of the 20 factors that Ferrara (2005) lists as promoting reader SE. Patterns in this study were consistent with this literature, which links choices and SE.

Several reasons were suggested in this study's findings that might explain how the provision of choices had an impact on students' SE. First, when Sara and Brock were provided with choices in materials, they had the opportunity to control the degree of challenge by selecting materials that were at their reading level. This finding supports the assertion that Perry and her colleagues made regarding choice fostering a sense of control over challenge (Perry, 1998; Perry & Drummond, 2002; Perry et al., 2004). Second, similar to their contribution to students' ability to control the degree of challenge, within certain contexts, choices enabled students to control the level of task difficulty. This was consistent with Perry and her colleagues' research that specifies how choices can facilitate students controlling task difficulty (Perry et al., 2004). For example, in the case of Sara and Brock, the provision of choice enabled them to select materials that they felt they could be successful reading, thereby supporting their SE. This was consistent with Wigfield et al.'s (2004) finding, which was that the provision of choices enabled students to make selections based on their ability, increasing their success and thereby raising their SE. Third, the provision of choice in material may have facilitated Sara and Brock to select materials that were interesting to them, which according to Walker (2003), would have cultivated SE because it would enabled students to tailor tasks in ways that would draw on their interests.

That said, the provision of choices alone was not sufficient to ensure a positive impact on students' SE. Rather, consistent with Bandura's (2003) social cognitive perspective, where human functioning is considered the result of reciprocal interactions between personal factors,

behaviours, and environmental conditions, the effect of choices in this study appeared to depend on: (1) the personal factors students brought with them to the task, (2) students' perception of choice, (3) the particular learning context, (4) and the nature of the choice itself.

First, in this study, the personal factors that students brought with them to the task, such as their SE perceptions, appeared to interact with how they interpreted choices in relation to their SE. For example, Matthew brought low SE for writing with him to one writing task, which may have impacted his reaction to the provision of choice in what he could write about. In turn, he related his low SE to the presence of choice in product. This instance exemplifies Bandura's (1993) assertion that SE beliefs are personal factors that students bring with them to the learning context and that these beliefs are bi-directionally related to students' SRL behaviours and the context in which they are learning. That said, regardless of the different personal factors that students brought with them to tasks, choice appeared to play an influential role in their perceptions of SE.

Second, students' perception of the choice, particularly recognizing and taking advantage of available choices, appeared to have a vital impact on the SE of students in this study. This was exemplified when Matthew related his SE to the difficulty level of the text, which he potentially could have controlled if he had recognized that he could have selected from easier materials. This finding is consistent with Butler and Cartier's (2005) theoretical framework, which describes how students' learning is shaped by their perceptions of the environment, in addition to how they attend to, interpret and utilize supports.

Third, the context appeared to have a significant impact on what students considered most salient to their SE. For example, when Sara and Brock were working on the Reading Response task, they both perceived the material they were asked to read to be the most significant factor impacting their SE for that particular task. As well, they both related their SE to choice of what material they could select to read. This was not the case in other observations

when Sara and Brock were provided with choice in materials but related their SE to other factors, such as when they were working on the social studies task and related their SE to task difficulty and ability. Contextual influences on the relationship between choice and SE were also observed for Oceana. When working on the Science Blog task, Oceana perceived that choice in product, specifically in how she designed her blog to express her understanding, was the most important factor that enabled her to anticipate being successful. In contrast, when she was working on the Persuasive Writing task, she was provided with choice in product but related her SE to her enjoyment and ability to get a good grade. Thus, findings in this study suggest that students' perceptions of their SE and the task are embedded in context, and that these perceptions may impact the value they place on the provision of choices.

Fourth, the nature of choices provided appeared to be important when considering the impact on students' perceptions, recognition, and utilization of the choice. For example, although Arlene used different materials when choices were present, the lack of variability in the reading level of texts eliminated her ability to control the degree of challenge. This finding that the nature of choice was important is consistent with literature that suggests that students need to be provided with a selection of reading materials suited to their reading levels to cultivate their SE (Ferrara, 2005).

### **Environmental and Personal Factors Students Related to SE**

In addition to choice, students in this study also related their SE to other environmental (task difficulty, time available, learning environment) and personal (ability, strategies, enjoyment, engagement, ways of learning, grades) factors. As described earlier, the provision of choices appeared to have an effect partly by influencing some of these other factors, including levels of task difficulty and enjoyment. But these and other factors were also observed to have a direct effect on students' SE during literacy tasks. Thus, in this section, this study's findings on

contextual and personal factors related to SE are reviewed and related to patterns observed in the literature.

First, each student related his or her SE to task difficulty in at least one observation, with three students, Matthew, Sara, and Brock, most commonly associating their SE with this factor. It would appear that all students, even those who brought different personal factors (e.g., prior achievement) with them to classrooms, perceived task difficulty as an influential factor when rating their SE. As well, students provided lower SE ratings when they perceived tasks to be challenging and higher SE when they considered tasks to be easier. This finding was consistent with those of Schunk (1989), who found that students' perceptions of content difficulty impacts their SE, in that if students interpreted a task as too hard, their SE for the task was low.

Second, students commonly attributed their SE to their ability, or their perceptions of being "good" or "bad" at completing a task. In order to form these impressions of ability, students had past experience with either these specific tasks or similar types of tasks. That students referenced ability perceptions gained from prior experiences is consistent with research indicating that performance on similar tasks is one source of SE beliefs (Klassen & Lynch, 2007; Lackaye & Margalit, 2006).

Enjoyment of the task was another common SE attribution among students, especially for Arlene and Nalat who most frequently related their SE to this factor. This finding was interesting, in that it suggested that students associated the likelihood of their being successful with how much they would like being engaged in the task. It appears, then, that at least some of the students in this study recognized the importance of engagement, and motivation control, in successful task engagement. This finding is consistent with literature that links SE to engagement (e.g., Ryan, 2000; Walker, 2003) and motivational beliefs, such as interest (e.g., Schunk, 2003; Walker, 2003; Wigfield et al., 2004). As well, some students deliberately used choice to create

an opportunity to support motivation (i.e., as a motivation control strategy). This connection between choices and motivation is consistent with research that explains that the provision of choices enables students to pursue personal interest thereby promoting their motivation (e.g., Turner, 1995).

Six other factors were raised by students when discussing their SE. Limited research could be found which directly connected SE with most of these other factors, including time, learning environment, engagement, learning style, or expected grades. However, during one observation, Matthew linked his SE to strategy use, and an extensive body of literature does support a reciprocal connection between students' use of SRL strategies and positive SE. For example, Usher and Pajares (2008) argue that critical to SRL is students' SE for their capabilities to self-regulate; and students who self-regulate tend to have a higher SE for learning (Zimmerman et al., 1992). Matthew's explicit link between his SE to his SRL strategy use was encouraging, in that he related his potential for success to his ability to use good strategies for managing and completing the task. Less encouraging was that other students failed to make this explicit connection.

Throughout this study, students' SE attributions suggested interactions between environmental and personal factors. For example, Matthew linked choices to task difficulty in light of his initial SE perceptions, while Nalat drew on her understanding of her personal likes and dislikes when making choices that would increase her level of task enjoyment. As a result, the patterns revealed in this study suggest that SE influences and emerges in complex ways during literacy engagement. Again, drawing on Bandura's (2003) social cognitive perspective, SE appears to emerge from reciprocal interactions between students' interpretations (behaviours) in light of their SE beliefs, interests, strengths, etc. (personal factors) within the task context (environmental conditions). While researchers commonly point to three major sources of SE, including social persuasion, personal accomplishments, and vicarious experiences (Bandura,



1997; Schunk, 1991; Walker, 2003), a review of the literature failed to reveal research that described a similarly complex interplay between personal, behavioural, and environmental factors in students' SE formation in the context of tasks.

### **Other SRL-Supportive Instructional Features**

The present study investigated whether a range of SRL-supportive instructional features might also be supportive of SE. In this study, attention focused on the extent to which environments offered tasks with complexity, choices and non-threatening assessments and teachers' provision of instrumental support including modeling and scaffolding. However, as reported above, the only factor explicitly associated with SE by students in this study was the provision of choice.

It is not clear why other SRL-instructional features were not perceived by students as influential in this study. One possibility is that opportunities in some areas were not sufficiently available to have an important influence. For example, a good deal of literature suggests that both self-assessment and modeling should be supportive of students' SE (e.g., Schunk, 2003; Walker, 2003). However, in this study, students were provided with opportunities to self-assess their work in only 4/31 observed lessons. Opportunities for observing teacher and student models, another feature that researchers indicate supports SE (e.g., Schunk, 1989; Schunk & Zimmerman, 2007; Walker, 2003), only occurred in 3/31 observations. Another possible factor was that, even when SRL-supportive instructional features were present, students did not always explicitly recognize or take advantage of their presence. For example, not only did both self-assessment and exposure to models occur rarely, but students did not always recognize that modeling occurred or take advantage of opportunities to self-assess their work. For example, when Cooper was working on the Persuasive Writing task he was presented with a self-assessment checklist, but during the follow-up interview he did not acknowledge that the checklist was important, rather indicating that he forgot to look at it. The combination of limited

observations of these factors along with students either not recognizing or taking advantage of these opportunities may have contributed to students not relating their SE to SRL-supportive instructional features, such as self-assessment or modeling, in the context of this study.

### **Contextually-Situated SE**

The variability observed in students' SE rating across different contexts reinforces the contextually-situated nature of SE. It would appear that, for students in this study, SE perceptions were bi-directionally related to the interaction between what they brought to the task (e.g., prior SE beliefs and experiences with the particular task), their performance (e.g., as their SE perceptions shifted during cycles of self-regulation), and environmental conditions (e.g., choices). This finding is consistent with Butler and Cartier's (2005) emphasis on students building knowledge as individuals within a specific context and the social cognitive perspective that focuses on human functioning as the result of reciprocal interactions between personal, behavioural, and environmental factors (Bandura, 1993). While students bring a general level of SE to their learning contexts, it is valuable to examine how their task-specific SE unfolds dynamically within particular contexts. As a result, the observed contextually-situated interaction between personal, behavioural, and environmental factors emphasizes the need to consider SE from a dynamic perspective, such as the one used in this study, in order to understand students' SE perceptions.

### **Contextual Factors, SE, and SRL**

The final research question addressed in this study considered more holistically how contextual factors, including SRL-supportive instructional features, qualities of placements, and other observed variables, might have been supportive of students' SRL or SE. The variability of students' SE when approaching different tasks emphasizes the contextual nature of SE and therefore the value of exploring how contextual factors impact students' SRL or SE. When exploring the relationship between students' SRL and SE and the contexts in which they were

working, three themes were evident. First, a reciprocal interaction between instrumental scaffolding, students' SRL strategy use, and their SE perceptions was observed for two students. Second, some students' personal objectives appeared to be related to their SE perceptions. Third, a relationship between peer comments and some students' SE perceptions was observed.

### **Instrumental Scaffolding**

In this study, it appeared that providing students with instrumental scaffolding created opportunities for some students to think about and use SRL strategies, which then coincided with higher SE ratings. More specifically, both Brock and Cooper implemented more cognitive strategies and indicated higher SE ratings when provided with instrumental scaffolding that prompted them to brainstorm potential strategies. Important about this observed pattern is that it again reveals the reciprocal interactions in students' literacy engagement among personal factors, behaviours, and environmental conditions (Bandura, 1993).

The finding that Brock and Cooper used more strategies when provided with instrumental scaffolding is consistent with literature that identifies instrumental scaffolding as an environmental condition that fosters SRL (e.g., Harris & Graham, 1999; Meyer & Turner, 2002; Perry et al., 2003; Turner, 1995). In these contexts, when instrumental scaffolding was provided, both Brock and Cooper used more cognitive strategies. Similarly, Brock and Cooper having high SE when they were provided with instrumental scaffolding is congruent with research that points to the important role that instrumental scaffolding plays in students' SE (e.g., Schunk, 1996, 2003). For example, Schunk (1996) found that when students are cued to attend to the relationship between task performance and strategy use their perceptions of SE were impacted.

The pattern observed between Brock and Cooper's strategy use and SE has potential to elaborate understandings drawn from prior research about how SRL and SE might be reciprocally connected (e.g., Garcia-Sanchez & Fidalgo-Redondo, 2006; Klassen, 2010; Pajares,

2002; Pintrich & De Groot, 1990; Schunk, 2003; Schunk & Zimmerman, 1994, 2003; Zimmerman, 1989; Zimmerman et al., 1992). On one hand, it could have been that students' high SE for a task supported them to implement cognitive strategies (Usher & Pajares, 2008). As Walker (2003) found, the level of SE that students have for using strategies influences the quality and quantity of strategies they employ. On the other hand, using more strategies may also have raised Brock and Cooper's SE. For example, Zimmerman et al. (1992) describe that students who self-regulate tend to have a higher SE for learning, while Butler (1995, 1998a) and others have shown how successfully engaging in strategy use has the potential to enhance SE. This interaction between SRL and SE was also observed when Matthew related his high SE to his awareness and implementation of multiple strategies. In this case, it could have been that Matthew's strategy use both facilitated and was supported by his SE. Thus, findings from this study extend prior research by providing portraits of how SRL and SE were reciprocally interconnected.

### **Personal Objectives**

For some students in this study, the nature of personal objectives appeared to be related to their SE. More specifically, during lessons in which Cooper and Matthew set personal objectives for both learning and performance (to complete the task), their SE was the highest across all their observed lessons. In contrast, when Arlene and Nalat set only learning personal objectives, they provided the lowest SE ratings across observations.

Extensive research has examined students' goal orientation in relation to SE (e.g., Schunk, 1996; Sungar, 2007; Tabassam & Grainger, 2002; Zimmerman et al., 1992) and research suggests that students' task perceptions may interact with the types of goals they establish (Butler & Cartier, 2005). For example, Walker (2003) suggests that students who have low SE tend to set performance objectives rather than learning oriented goals. This contrasts Arlene and Nalat's low SE when setting only learning goals. That said, limited research has concentrated on

students' SE in relation to focusing on both learning and performance personal objectives in contrast to one form or the other, or the impact of different levels of SE (low or high) on students' personal objectives. As a result, these patterns make a unique contribution by suggesting a potential connection between students' SE perceptions and focusing on learning and performance objectives versus one type or the other. That said, these patterns were not observed across all students in this study. For example, during the second observation of Sara when she was working on the social studies task, she indicated that she was going to learn about the topic and provided a relatively average SE rating across observations. From a social cognitive perspective, it may be that other contextual factors, such as students' SE beliefs, reciprocally interact with the types of personal objectives students establish and their SE.

### **Peer Relations**

In the context of this study, peer relations appeared to play a role in some students' SE perceptions. In particular, Sara reported low SE when a peer made a negative comment regarding her reading, and Nalat reported high SE when a peer made a positive comment about her drawing. This finding compliments literature that identifies social persuasion, in addition to personal accomplishments and vicarious experiences, as sources of SE beliefs (Bandura, 1997; Schunk, 1991). As Schunk (2003) explains, positive persuasion raises students' SE for learning. As well, Klassen and Lynch (2007) found that students with LD, such as both Sara and Nalat, specifically isolated verbal persuasion in the form of feedback as a valuable source of SE. Additionally, peers' comments appeared to support not only Nalat's SE, but also her task persistence. This finding is consistent with Bandura's (1997) assertion that verbal persuasion leads to greater effort and persistence.

It is important to note that in this study most peer interactions across classrooms were constructive and positive, so that there were few instances where negative peer interactions were observed. It is significant that, in both cases when those negative interactions occurred and were

not corrected by teachers, students linked those interactions in some way to persistence or SE. Thus, it appears that teachers in this study did a good job of establishing classroom conditions where students' feedback to one another was positive (e.g., by redirecting/correcting when peer feedback went off track), which was a classroom feature potentially associated with students' development of positive SE. This finding suggests that teachers need to be aware of, and attend to their students' interactions and perceptions when working with peers. This is consistent with literature on peer relations which suggests that establishing a positive classroom culture where students are supportive rather than critical of their peers may help support students' SE (Stevens & Slavin, 1995). As Turner (1995) explained, "Situations that encourage productive social interaction offer an important vehicle for the development of student self-competence in literacy" (p. 418).

### **Contributions and Implications**

This section highlights contributions and implications that derive from this research. Discussion focuses, in turn, on key theoretical, methodological, and practical contributions and implications.

#### **Theoretical Contributions and Implications**

The findings in this study consistently reinforced Bandura's theory of reciprocal interactions between personal factors, behaviours, and environmental conditions. More specifically, exemplified throughout this study was the importance of exploring students' SE in context, considering what they brought with them to their literacy engagement and their SE and SRL behaviours as situated in the learning environment (SRL-supportive instructional features and qualities of placements). As well, findings were consistent with Butler and Cartier's (2005) theoretical model, put forward here, and Perry's (1998) research on contexts that support SRL by showing dynamic and reciprocal interconnections among personal, behavioural, and contextual

factors in students' literacy engagement. For example, expected connections between the SRL-supportive instructional feature of choice and students' SE were revealed.

This study was also valuable in terms of investigating *in situ* when and how providing choices had a positive impact on SE. A key contribution here is uncovering the complex interactions among environmental conditions, such as the particular learning context and provision and nature of choice, and personal factors, such as individuals' SE, perceptions of the learning environment, and priorities in how SE emerges in the context of literacy engagement. Indeed, what was very clear in the findings from this study was just how contextually-bound SE was, exemplified in how sensitive SE perceptions were for students in different contexts and variable tasks and conditions.

The complex interactions between personal, behavioural, and environmental conditions were also evident when uncovering the kinds of environmental influences that needed to be attended to such as choices, instrumental scaffolding, and peer relations. Beyond simply examining the presence or absence of these contextual factors, this study made an important contribution by examining the ways in which these contextual factors did or did not have an influence. This was illustrated when investigating when and how choices had a positive or negative impact on students' perceptions of SE, when exploring how SE and SRL might be reciprocally informed in relation to instrumental scaffolding, and when examining the contexts in which peer comments interacted with students' perceptions of SE.

In addition, findings in this study contributed to the literature on learning disabilities by exploring the SE and SRL of three students with LD. These case provided insight into the SE of students with LD as situated in context such as how they set personal objectives in relation to their task interpretations. As well, findings in this study reinforced research on recommendations for writing instruction for students with LD by describing instances when peer relations appeared to play a role in the SE of students with LD. This observation coincided with Graham & Harris'

(1988) research on creating a positive social climate supportive of writing development and the role of social persuasion as a source of SE beliefs (Bandura, 1997; Schunk, 1991; Walker, 2003).

### **Methodological Contributions and Implications**

Findings here suggest the value of adopting a case study approach to exploring factors interacting in context. In this study, the case study methodology enabled creating rich descriptions of students' learning in contexts, while cross-case analysis revealed patterns across classrooms and students. This method enabled studying SE from a situated perspective, which was essential in order to explore the reciprocal interactions between personal factors, behaviours, and environmental conditions. For example, the variability of SE for students depended on the interaction between what they brought to their literacy engagement, their behaviours in relation to the task, and also the contextual factors present.

The case study design used here also afforded collecting and cross-referencing multiple forms of data in order to advance understanding about SRL and SE in relation to contextual factors. The combination of using observations, interviews, and rating scales provided in-depth understanding of what students were doing in context and how those interactions related to their perceptions. Insight into not only the presence or absence of contextual factors, but how students interpreted these contextual factors was vital to understanding how students' perceptions of context impacted their SE. For example, interviews enabled students to articulate their interpretations of contextual factors, which uncovered the finding that students' perceptions of choices, instrumental scaffolding, and peer relations impacted their SE in different ways.

Another productive methodological strategy used here was the approach of looking at both students' general SE for the type of task and their task specific SE, both at the start of a lesson and as it evolved during learning. This approach assisted in eliciting more information from students about how their SE shaped and evolved in relation to contextual factors that were important to them. More specifically, teasing apart general and task specific SE provided



opportunities for students to explain how and why their SE shifted in relation to different events (e.g., peer feedback) or varied across tasks and classrooms, such as if the presence of choice in one particular task enabled them to feel successful.

### **Practical Contributions and Implications**

Results from this study revealed the types of supports that teachers did or did not use across different classroom placements. What was found was that, while some features were used quite consistently across classrooms (e.g., providing choice), others were rarely used (e.g., providing opportunities for self-assessment). Implications are that teachers and students may benefit from attending to how a fuller range of SRL-supportive instructional features could be embedded within different kinds of classroom placements. As well, findings in this study indicated that teachers were rarely implementing instructional features with attention to how these features were supporting students' SRL. This implies that teachers need to attend to not only just presenting students with SRL-supportive instructional features, but also how they provide support for students to use these features to self-regulate their learning. In addition, findings here also suggest that teachers need to provide choices, and other SRL-supportive instructional features, in ways that attend to individual and contextual factors. In particular, teachers need to be sensitive to how individual students interpret classroom practices in relation to their perceived ability and initial SE. As well, it appears to be insufficient just to provide SRL-supportive instructional features such as choices or self-assessment tools; teachers also need to be aware of students' recognition and utilization of these features, and to help mediate students' engagement with them so as to support SRL and SE. Furthermore, teachers also need to be aware of the value students put on certain SRL-supportive instructional features and structure them accordingly. For example, teachers need to recognize the value students place on choices in the context of tasks, and ensure that the choices they do provide are diverse enough to support students' ability to adjust the difficulty and enjoyment levels of tasks.

In addition to attending to SRL-supportive instructional features, findings in this study suggest that teachers also need to be aware of other personal and contextual factors. First, teachers need to pay attention to students' task interpretations and personal objectives that might shape their SRL and SE. Second, findings in this study imply that teachers need to be aware of, and attend to, students' interactions with peers and their perceptions of these interactions. More specifically, teachers need to establish positive classroom cultures that promote constructive peer feedback, which has the potential to support students' SE. Third, teachers need to attend to the ways in which students interpret and respond to instrumental scaffolding so as to promote their awareness and use of strategies and potentially their SE. Fourth, findings in this study suggest that teachers need to help mediate students' recognizing connections between strategy use and their successful task completion, so as to enhance SE. In other words, teachers can assist students in recognizing the value of using strategies as tools to help them be successful.

### **Future Research and Limitations**

This section outlines future research directions that are suggested based on an analysis of both the strengths and limitations of this study. First, from a methodological perspective, using qualitative case studies coupled with cross-case analysis provided strong insight into students' literacy engagement as situated in context. Findings in this study revealed variations in SE within contexts and highlighted potential connections as to why these differences occurred. As well, this combination of data collection measures (observations, interviews, and rating scales) enabled understanding of students' perceptions, intentions, and actions within context. Future research could continue with this type of case study methodology by looking at different samples of students in varying contexts to explore if patterns are similar across other students, teachers, schools, and districts.

In addition to future case studies in different contexts, this type of research could be extended to span longer periods during the school year in order to explore developmental

changes in students' engagements in literacy tasks. For example, the long-term effect of instrumental scaffolding could be examined in relation to students' SRL and SE throughout the school year. As well, longer case study research could enable researchers to examine specific contextual factors in greater depth. For example, work, such as Ryan (2000) conducted, which explored peer relations in terms of nature, scope and effect on students' academic outcomes, could be extended to study how personal, behavioural, and environmental conditions that contribute to peer relations can be related to students' SE. Furthermore, extending future case studies over longer periods of time would provide greater opportunities to ensure equal distribution of observations among students and placements, something that was not possible in the current study due to students' distribution within classrooms and time constraints. In sum, future case studies of this type could be conducted using different students and contexts and over a greater length of time to explore developmental changes and specific contextual factors in greater depth, and to ensure equal observations of students and placements.

In addition to further case studies following this research design, this research could be complemented by larger scale studies that explore systemic variations between particular contextual factors and students' SE and SRL. For example, future work could investigate students' perceptions of qualities of placements, such as peer relations, or SRL-supportive instructional features, such as self-assessment or modeling, in relation to their SE and SRL.

Several additional findings in this study provide opportunities for further investigation. First, the findings regarding when and how choices had a positive impact on SE suggests the value of greater investigation into: how students' perceptions of choice impacted their SE, what particular aspects of choice impacted their SE, and how different types of choices related to students' SE. Broader understanding of choices in relation to students' SE perceptions could provide valuable information to teachers as they structure tasks to facilitate students' SE. Second, the interaction between students' personal objectives and their SRL and SE warrants

further investigation into how setting performance and/or learning goals are related to students' SE and SRL. Third, findings in this study revealed the kinds of SRL-supportive instructional features that teachers were and were not using in their classrooms and the important effect that some of these features had on students' SE. Future research could investigate ways to support teachers in adopting and implementing a fuller range of the types of instructional features, in addition to establishing qualities of contexts that support students' SE. Fourth, the finding that SE and SRL might be reciprocally linked to the provision of instrumental scaffolding for some students warrants future investigation into the ways in which instrumental scaffolding is interpreted by students. Further research in this area would benefit teachers as it could facilitate their understanding of how they can structure instrumental scaffolding to support students' SE and SRL.

### **Conclusion**

The overarching goal of this study was to explore how educational programs could structure instruction and placements in ways that support the SE of students at different achievement levels, including those with LD. Students' SE and SRL were explored as situated in their engagement within literacy tasks as embedded in context. Patterns which emerged using case study methodology suggested that students' perceptions of contextual factors, including tasks, SRL-supportive instructional features (e.g., choices, instrumental scaffolding), and features of classroom placements (e.g., instructional focus, peer relations), had an influential role in shaping perceptions of SE. Throughout this study, the importance of exploring students' engagement in literacy tasks as situated in context was emphasized. As well, trends in this study indicated that it was not the placement per se that impacted students' SE, but rather it was individual students' perceptions of contextual factors present in those placements interacting with what students brought to their literacy performance that, together, influenced their SE.

Table 1

*Outline of Three Study Phases*

<b>Phase One</b>	Identify and observe classrooms	<p>Identify potential teacher participants and provide them with letters of recruitment and consent.</p> <p>Observe consenting teachers using teacher observation instrument with the goal of understanding how they were implementing SRL-supportive instructional features in their classroom and select teachers that were implementing these features.</p>
<b>Phase Two</b>	Identify student participants	<p>Provide consent and assent forms to students within participating teachers' classrooms who met the selection criteria and select student participants based on variation in academic achievement, age, gender, and placement.</p>
<b>Phase Three</b>	Gather data about student learning in classrooms	<p>Pre-meeting: Gather data from students (using Interviews, SE measure, and SE probe) to facilitate rapport and gain insight into students' perceptions of, and SE for, literacy tasks.</p> <p>Observations: Observe in classrooms to provide insight into the relationships between students' perceptions of themselves and contexts, SE and SRL, SRL-supportive instructional features as implemented by teachers, and qualities of placements (using Observation, SE Probe, and Interviews).</p> <p>Post-meeting: Interview each student for 10 – 15 minutes in their classroom using the student interview protocol to investigate their SE in the context of literacy tasks and to repeat the SE Probes.</p>

Table 2

*Overview of Teacher's Classrooms*

Teacher	Placement Type	Grade	Class Size	Gender Breakdown
Iris	Inclusive	5	20	12 female: 8 male
Inger	Inclusive	4	20	9 female: 11 male
Sasha	Support	4/5	10	7 female: 3 male
Leanne	Pull-out	5	8	4 female: 4 male

Table 3  
*Distribution of Teacher and Student Participants*

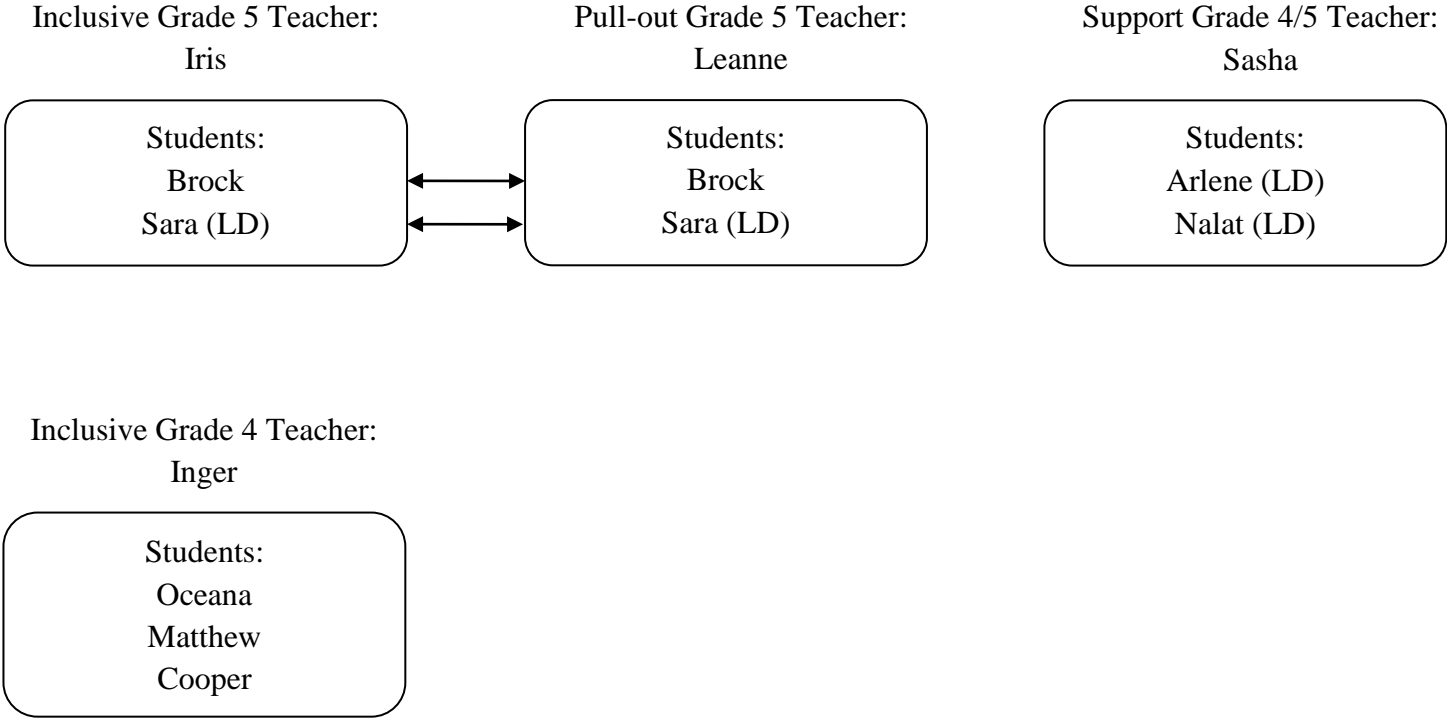


Table 4

*Overview of Student Participants*

Student	Age	Grade	Gender	LD/Non LD	Academic Achievement	Teacher	Placement
Sara	11	5	Female	LD	Low	Iris	Inclusive and Pull-out
Brock	11	5	Male	Non LD	Low	Iris	Inclusive and Pull-out
Cooper	9	4	Male	Non LD	High	Inger	Inclusive
Matthew	9	4	Male	Non LD	Low	Inger	Inclusive
Oceana	9	4	Female	Non LD	High	Inger	Inclusive
Arlene	9	4	Female	LD	Low	Sasha	Support
Nalat	9	4	Female	LD	Low	Sasha	Support



Table 5

*Understanding Students' Engagement in Literacy Practices in Different Classrooms*

Focus of Data Collection		Phase One: Classroom Observations	Phase Three: Pre-meeting	Phase Three: Observations	Phase Three Post-meeting
Context	SRL-supportive instructional features	Observations with Running Records		Observations with Running Records	
	Qualities of placements			Observations with Running Records	
Task Engagement	SRL			Observations with Running Records	Interview
	Task interpretation			Brief Interviews	Interview Work Samples
	Literacy performance			Observations with Running Records Work Samples	
Self-Efficacy Perceptions			Interview SE Measure SE Probe	Observations with Running Records Brief Interviews SE Probes	Interview SE Probe

Table 6

*Initial Observations of Teachers' SRL-Supportive Instructional Features during Phase One*

SRL-Supportive Instructional Feature		Iris Observation		Inger Observation		Sasha Observation		Leanne Observation	
		One	Two	One	Two	One	Two	One	Two
Complexity	Skills	X	X	X	X	X	X	X	X
	Goals Strategies	X	X	X					
Choice	Where students work			X	X	X	X		
	Role in Group	X							
	Who students work with			X		X	X		
	Materials		X		X				X
	Product	X	X	X			X	X	X
Instrumental Support	Process				X			X	X
	Student Modeling				X	X	X		X
	Teacher Modeling					X		X	
	Instrumental Scaffolding	X	X	X	X	X	X	X	X
	Procedural Scaffolding			X	X	X	X	X	X
Non-Threatening Assessment	Student Assessment				X				

Table 7

*Iris's Classroom Context during Observations*

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
One	Brock (1)	<i>Reading Response task:</i> Independent reading and writing reflections in reading log	Twenty-second lesson for task	Complexity in skills Choice in materials Choice in process	1 teacher: 18 students Learning instructional focus Peer Relations: independent work
Two	Sara (1)		Twenty-third lesson for task	Complexity in skills Choice in materials Choice in process	1 teacher: 18 students Learning instructional focus Peer Relations: independent work
Three	Brock (2)	<i>Social Studies task:</i> Read and take notes from booklet with goal of presenting information to class.	Second lesson for task	Complexity in skills Complexity in goals Choice in role Choice in process Procedural scaffolding	1 teacher: 18 students Learning and curricular instructional focus Peer Relations: independent and group work, students on- and off-topic
Four	Sara (2)		Third lesson for task	Complexity in skills Complexity in goals Choice in role Choice in process	1 teacher: 18 students Learning and curricular instructional focus Peer relations: independent and group work, on- and off- topic discussions, disputes among group members
Five	Brock (3)		Fourth lesson for task	Complexity in skills Complexity in goals Choice in role Choice in material Choice in process Instrumental scaffolding	1 teacher: 20 students Learning and curricular instructional focus Peer relations: independent and group work, on- and off- topic discussions
Six	Sara (3)		Fifth lesson for task	Complexity in skills Complexity in goals Choice in role Choice in material Choice in process Instrumental Scaffolding	1 teacher: 20 students Learning and curricular instructional focus Peer relations: independent and group work, on- and off- topic discussions

Table 8  
*Inger's Classroom Context during Observations*

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
One	Matthew (1)	<i>Vocabulary task:</i> Read about word choice in persuasive writing then complete worksheet while sampling chocolates with senses.	First lesson for task	Complexity in skills Choice in role Choice in process Student modeling	1 teacher: 20 students Learning instructional focus Peer relations: independent, partner, and group work; students engaged in on- and off-topic discussions; students helped each other; students had disputes about pace of group
Two	Oceana (1)		Second lesson for task	Complexity in skills Choice in role Choice in process Student modeling	1 teacher: 20 students Learning instructional focus Peer relations: independent, partner, and group work; students engaged in on- and off-topic discussions; students helped each other; students had disputes about pace of group
Three	Matthew (2)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test.	Second lesson for task	Complexity in skills Choice in where to work Choice in who to work with Instrumental scaffolding Procedural scaffolding	1 teacher: 20 students Learning and curricular instructional focus Peer relations: independent and partner work; students helped each other; students engaged in on- and off-topic discussions; students compared worked with one another
Four	Oceana (2)		Third lesson for task	Complexity in skills Choice in where to work Choice in who to work with Procedural scaffolding	1 teacher: 20 students Learning and curricular instructional focus Peer relations: independent and partner work; students consulted each other for answers and to compare work; students engaged in on- and off-topic discussions

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
Five	Cooper (1)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test.	Fourth lesson for task	Complexity in skills Choice in where to work Choice in who to work with Choice in materials Choice in process	1 teacher: 18 students Learning and curricular instructional focus Peer Relations: independent and partner work; students help and compared worked with one another, on- and off-topic discussions
Six	Cooper (3)		Fifth lesson for task	Complexity in skills Choice in where to work Choice in who to work with Choice in materials Choice in process Instrumental scaffolding	1 teacher: 18 students Learning and curricular instructional focus Peer relations: independent and partner work; on-topic discussions
Seven	Oceana (4)		Sixth lesson for task	Complexity in skills Choice in where to work Choice in who to work with Choice in materials Choice in process Instrumental scaffolding	1 teacher: 20 students Learning and curricular instructional focus Peer relations: independent and partner work; student compared progress to participant; students shared information in groups
Eight	Matthew (4)		Seventh lesson for task	Complexity in skills Choice in where to work Choice in who to work with Choice in materials Choice in process Instrumental scaffolding	1 teacher: 20 students Learning and curricular instructional focus Peer relations: independent and partner work; participant helps peer
Nine	Cooper (2)	<i>Persuasive Writing task:</i> Read about tone, discuss, and then write with persuasive tone.	First lesson for task	Complexity in skills Choice in product Student self-assessment	1 teacher: 18 students Learning instructional focus Peer relations: independent work; off-topic discussions with peers

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
Ten	Oceana (3)	<i>Persuasive Writing task:</i> Read about tone, discuss, and then write with persuasive tone.	Second lesson for task	Complexity in skills Choice in product Student self-assessment	1 teacher: 18 students Learning instructional focus Peer relations: independent work; participant helping another student
Eleven	Matthew (3)		Third lesson for task	Complexity in skills Choice in product Student self-assessment	1 teacher: 18 students Learning instructional focus Peer relations: independent work
Twelve	Oceana (5)	<i>Science Blog task:</i> Creating a blog in Science class by reading and writing about the weather	Second lesson for task	Complexity in skills Complexity in goals Complexity in strategies Choice in materials Choice in product Choice in process	1 teacher: 18 students Learning and curricular instructional focus Peer relations: independent work with some on-topic discussions, students helped and shared their work with one another
Thirteen	Matthew (5)	<i>Summary task:</i> Reading Social Studies textbook and filling in summary page for main ideas	First lesson for task	Complexity in skills Choice in where to work Choice in who to work with Choice in materials	1 teacher: 18 students Learning instructional focus Peer relations: independent work; off-topic discussions among students; students helped and shared their work with each other

Table 9

*Sasha's Support Classroom Context during Observations*

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
One	Nalat (1)	<i>Metaphor task:</i> Read about writing traits and create own metaphor for each	Second lesson for task	Complexity in skills Complexity in goals Choice in where to work Choice in product Choice in process	1 teacher: 6 students Learning instructional focus Peer Relations: independent work, students provide help and compare work to each other , on-and off- topic discussions
Two	Arlene (2)		Third lesson for task	Complexity in skills Complexity in goals Choice in where to work Choice in product Choice in process	1 teacher: 4 students Learning instructional focus Peer relations: independent work, off-topic discussion
Three	Nalat (3)		Fourth lesson for task	Complexity in skills Complexity in goals Choice in product Choice in process Instrumental scaffolding	1 teacher: 4 students Learning instructional focus Peer relations: independent work, on-and off- topic discussion, students shared their work with one another
Four	Nalat (2)	<i>Textbook task:</i> Read and discuss Social Studies textbook with class	First lesson for task	Complexity in skills Procedural scaffolding	1 teacher: 5 students Learning and curricular instructional focus Peer Relations: group work, students asking questions, student comments about others questions
Five	Arlene (1)	<i>Notes task:</i> Identify main ideas from Social Studies textbook and create notes of main ideas as a group	Second lesson for task	Complexity in skills Procedural support Choice in role	1 teacher: 5 students Learning and curricular instructional focus Peer Relations: group work, students asking questions, student comments about others questions and ideas, student lead discussion of main ideas, student disputes

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
Six	Arlene (3)	<i>Historical Figure task</i> : Reading different source of materials to gain information for writing speech about a historical figure	Second lesson for task	Complexity in skills Choice in materials Choice in product Choice in process Self-assessment	1 teacher: 6 students Learning instructional focus Peer relations: independent work, on- and off-topic discussions, students shared their work with one another



Table 10

*Leanne's Pull-out Classroom Context during Observations*

Observation	Student observed	Literacy task	Lessons for each task	SRL-supportive instructional features	Qualities of placement
One	Sara (4)	<i>Main Ideas task:</i> Read from text and highlight main ideas	Sixth lesson for task	Complexity in skills Choice in role Choice in who Choice in materials	1 teacher: 8 students Learning instructional focus Peer Relations: independent and group work
Two	Sara (5)		Seventh lesson for task	Complexity in skills Choice in role Choice in who Choice in materials	1 teacher: 8 students Learning instructional focus Peer Relations: independent and group work, peers help each other
Three	Sara (6)	<i>Reading Response task:</i> Read novel and write a response.	Second lesson for task	Complexity in skills Choice in product Procedural Scaffolding	1 teacher: 8 students Learning instructional focus Peer Relations: independent work
Four	Brock (4)		Third lesson for task	Complexity in skills Choice in product	1 teacher: 8 students Learning instructional focus Peer relations: independent work, off-topic discussion, students compared work to one another
Five	Brock (5)		Fourth lesson for task	Complexity in skills Choice in product	1 teacher: 8 students Learning instructional focus Peer relations: independent work, students compared work to one another
Six	Brock (6)	<i>Paragraph Structure task:</i> Reading passage, finding main ideas, and writing responses using proper paragraph structure	Second lesson for task	Complexity in skills Choice in product Choice in process Instrumental Scaffolding	1 teacher: 7 students Learning instructional focus Peer relations: independent work, students helped each other and compared their work

Table 11

*Sara's SE and SRL during Literacy Tasks in Iris' Inclusive Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Sara (1)	<i>Reading Response task:</i> Independent reading and writing reflections in reading log	General SE rating: 5/5 Attributed to choice Task specific rating: 4/5 Attributed to choice Engaged in task	Task Interpretation: focused on procedures: to read and then write a reading response Personal Objective: focused on performance: to complete the task Cognitive strategies: finger tracking Self-regulating strategies: re-read a page
Sara (2)		General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 3/5 Attributed to task difficulty and environmental factors Engaged in task Participated in group	Task interpretation: focused on learning: to learn about the topic Personal objective: focused on performance: to complete the task Cognitive strategies: asked peer a question Self-regulating strategies: re-read a passage, organized work
Sara (3)	<i>Social Studies task:</i> Read and take notes from booklet with goal of presenting information to class.	General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 3/5 Attributed to task difficulty Engaged in task Prepared for lesson	Task interpretation: focused on procedures: to finish the section she was responsible for presenting Personal objective: focused on performance: to complete the task Cognitive strategies: finger tracking Self-regulating strategies: re-read work, ignored distracting peers, stayed at desk for quiet environment

Table 12

*Sara's SE and SRL during Literacy Tasks in Leanne's Pull-out Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Sara (4)	<i>Main Ideas task:</i> Read from text and highlight main ideas	General SE rating: 3/5 Attributed to task difficulty and ability level Task specific SE rating: 3/5 Attributed to task difficulty Reluctant to share ideas with partners Participated in group	Task interpretation: focused on procedures: to highlight the main ideas Personal objective: focused on performance: to complete the task Cognitive strategies: used finger tracking, read aloud quietly
Sara (5)		General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 2/5 Attributed to task difficulty Engaged in task	Task interpretation: focused on procedures: to finish the page Personal objective: focused on performance: to complete the task Cognitive strategy: read aloud quietly
Sara (6)	<i>Reading Response task:</i> Read novel and write a response.	General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 2/5 Attributed to ability and enjoyment Engaged in task	Task interpretation: focused on procedures: to read and write a full page Personal objective: focused on performance: to complete the task Cognitive strategies: asked teacher for clarification, asked student a question about task

Table 13

*Brock's SE and SRL during Literacy Tasks in Iris' Inclusive Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Brock (1)	<i>Reading Response task:</i> Independent reading and writing reflections in reading log	General SE rating: 5/5 Attributed to enjoyment Task specific SE rating: 5/5 Attributed to choice of material Engaged in the task	Task interpretation: focused on procedures: to read his book Personal objective: focused on performance: to complete the task Cognitive strategy: finger tracking Self-regulating strategy: re-read a page
Brock (2)		General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 3/5 Attributed to task difficulty Required prompting to start task Engaged in task Off-topic discussions	Task interpretation: focused on procedures: to read the page, make notes, and present to class Personal objective: focused on performance: to complete the task Cognitive strategy: asking peer for a definition Self-regulating strategies: reread a page, asks peer to stop making a distracting noise
Brock (3)	<i>Social Studies task:</i> Read and take notes from booklet with goal of presenting information to class	General SE rating: 5/5 Attributed to ability Task specific SE rating: 5/5 Attributed to ability Participation in group Participation in class Articulated confidence	Task interpretation: focused on procedures: to a read specific section and make notes Personal objective: focused on performance: to complete the task Cognitive strategies: asked teacher questions, articulated list of comprehension strategies when prompted and then chose to read additional information, articulated different sources of information when prompted and then chose read from textbook. Self-regulating strategies: planned which strategy to use

Table 14

*Brock's SE and SRL during Literacy Tasks in Leanne's Pull-out Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Brock (4)	<i>Reading Response task:</i> Read novel and write a response.	General SE rating: 4/5 Attributed to task difficulty Task specific SE rating: 4/5 Attributed to task difficulty Engaged in task Off topic discussion	Task interpretation: focus on procedures and learning: to write a response and show understanding about reading in writing Personal objective: focused on performance: to complete the task and show understanding
Brock (5)		General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 4/5 Attributed to enjoyment Engaged in task Engaged in instructions	Task interpretation: focus on procedures and learning: to think about reading for understanding Personal objective: to complete task and show understanding
Brock (6)	<i>Paragraph Structure task:</i> Reading passage, finding main ideas, and writing responses using proper paragraph structure	General SE rating (reading): 3/5 General SE rating (writing): 2/5 Attributed to task difficulty Task specific SE rating (reading): 4/5 Task specific SE rating (writing): 3/5 Attributed to task difficulty Engaged in task Engaged in instructions	Task interpretation: focus on procedures: to write a paragraph Personal objective: focused on performance: to complete the task Cognitive strategies: asked teacher for assistance, asked peer for help Self-regulating strategies: articulated strategies to double check answers in response to prompt and chose to use reread passage and answers.

Table 15

*Cooper's SE and SRL during Literacy Tasks in Inger's Inclusive Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Cooper (1)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test	General SE rating: 4/5 Attributed to ability Task specific SE rating: 3/5 Attributed to task difficulty Engaged in the task Off-topic discussion Motivating others	Task interpretation: focused on procedures: to read and answer all the questions Personal objective: focused on performance: to complete the task Cognitive strategies: looked up answers in different sections textbook Self-regulating strategies: reviewed questions completed and checked time
Cooper (2)	<i>Persuasive Writing task:</i> Read about tone, discuss, and then write with persuasive tone	General SE rating: 4.5/5 Attributed to choices Task specific SE rating: 5/5 Attributed to choices Engaged in task Engaged in instructions Participated in class Motivated Off-topic discussions	Task interpretation: focused on procedures: to write a persuasive letter Personal objective: focused on performance: to complete the task
Cooper (3)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test	General SE rating: 5/5 Attributed to ability Task specific rating: 5/5 Attributed to ability Engaged in task Articulation of confidence Persistency when faced with difficulties	Task interpretation: focused on learning: to finish answers and then write jot notes from them to help study for test Personal objective: focused on performance: to complete the task and for learning Cognitive strategies: used map for reference, used computer to look up conflicting information with peer Self-regulating strategies: organized work prior to starting the task, asked teacher for clarification, ensured completed all questions

Table 16

*Matthew's SE and SRL during Literacy Tasks in Inger's Inclusive Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Matthew (1)	<i>Vocabulary task:</i> Read about word choice in persuasive writing then complete worksheet while sampling chocolates with senses.	General SE rating: 5/5 Attributed to strategy use Task specific SE rating: 4/5 Attributed to lack of time Engaged in task Engaged in instruction Participated in class Articulated enjoying task Motivated	Task interpretation: focused on procedures and learning: to finish the worksheet and then to add more detail to writing in the future Personal objective: focused on performance: to complete the task and apply skills to future work Cognitive strategies: completed each section fully before moving on to the next Self-regulating strategies: re-read instructions, re-wrote answers, checked time while working
Matthew (2)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test.	General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 3/5 Attributed to task difficulty Engaged in task Assisted peer Persistency when faced with challenges	Task interpretation: focus on procedures: to finish page by end of class Personal objective: to complete task Cognitive strategies: asked teacher question Self-regulating strategies: moved to a quiet spot to work, re-directed peer conversation
Matthew (3)	<i>Persuasive Writing task:</i> Read about tone, discuss, and then write with persuasive tone.	General SE rating: 3/5 Attributed to task difficulty Task specific SE rating: 2/5 Attributed to ability Engaged in task Engaged in instruction Participated in class Participated in group	Task interpretation: focus on procedures: to write something to persuade parents Personal objective: to complete task Cognitive strategies: used brainstorm of ideas Self-regulating strategies: planned what was going to write prior to starting task

Student Observations	Literacy Task	Self-Efficacy	SRL
Matthew (4)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test.	General SE rating: 3/5 Attributed to lack of time Task specific SE rating: 2/5 Attributed to lack of time Engaged in task Articulated low confidence Off-task behaviours Off-topic discussion	Task interpretation: focus on procedures: to answer all the questions Personal objective: focused on performance: to complete the task Cognitive strategies: sought answers from multiple sources, used finger tracking, used index, asked for teacher assistance, confirmed conflicting information using multiple sources Self-regulating strategies: tracked which questions were answered, organized materials prior to starting task, consulted time remaining for task
Matthew (5)	<i>Summary task:</i> Reading Social Studies textbook and filling in summary page for main ideas	General SE rating: 4.5/5 Attributed to task difficulty Task specific SE rating: 4/5 Attributed to time Engaged in task Articulated confidence Off-topic discussion	Task interpretation: focus on procedures: to finish the summary page Personal objective: focused on performance: to complete the task Cognitive strategies: asked for peers and teachers assistance Self-regulating strategies: checked time



Table 17

*Oceana's SE and SRL during Literacy Tasks in Inger's Inclusive Class during Observations*

Student Observations	Literacy Task	Self-Efficacy	SRL
Oceana (1)	<i>Vocabulary task:</i> Read about word choice in persuasive writing then complete worksheet while sampling chocolates with senses.	General SE rating: 5/5 Attributed to ability Task specific SE rating: 5/5 Attributed to task difficulty Engaged in task Engaged in instructions Participated in class Participated in group Motivation	Task interpretation: focus on procedures: to finish the chart Personal objective: focused on performance: to complete the task Cognitive strategy: used thesaurus Self-regulating strategies: organized materials prior to starting lesson, monitored attention
Oceana (2)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test.	General SE rating: 5/5 Attributed to ability Task specific SE rating: 5/5 Attributed to ability Engaged in task	Task interpretation: focus on procedures and learning: to finish the page to help her study Personal objective: focused on performance: to complete the task Cognitive strategies: asked for assistance from peer Self-regulating strategies: monitored attention
Oceana (3)	<i>Persuasive Writing task:</i> Read about tone, discuss, and then write with persuasive tone.	General SE rating: 5/5 Attributed to ability, enjoyment, grades Task specific SE rating: 5/5 Attributed to ability, enjoyment, grades Engaged in task Engaged in instruction Participated in group Motivation	Task interpretation: focus on procedures: to write a paragraph Personal objective: focused on performance: to complete the task Self-regulating strategies: asked teacher to clarify instructions

Student Observations	Literacy Task	Self-Efficacy	SRL
Oceana (4)	<i>Review task:</i> Read from textbook and answer review questions for Social Studies test.	General SE rating: 4/5 Attributed to task difficulty Task specific SE rating: 5/5 Attributed to task difficulty Engaged in task	Task interpretation: focus on procedures: to answer the questions to help study and ask questions Personal objective: focused on performance: to complete the task  Cognitive strategies: shared information with peer Self-regulating strategies: ignored distractions, moved locations
Oceana (5)	<i>Science Blog task:</i> Creating a blog in Science class by reading and writing about the weather	General SE rating: 5/5 Attributed to enjoyment Task specific SE rating: 5/5 Attributed to choice Smiling Engaged in task Articulated enjoyed task	Task interpretation: focus on procedures and learning: to finish the blog so that she could share her information with peers and learn from them Personal objective: focused on performance: to complete the task and learn Cognitive strategies: looked up information from multiple sources Self-regulating strategies: monitored progress against time

Table 18

*Arlene's SE and SRL during Literacy Tasks in Sasha's Support Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Arlene (1)	<i>Notes task:</i> Identify main ideas from Social Studies textbook and create notes of main ideas as a group	General SE rating: 3/5 Attributed to way she learns Task specific SE rating: 3/5 Attributed to way she learns Engaged in task Participated in group Distracted Prepared	Task interpretation: focus on learning: to learn about Explorers Personal objective: to learn Cognitive strategies: finger tracking Self-regulating strategies: monitoring attention
Arlene (2)	<i>Metaphor task:</i> Read about writing traits and create own metaphor for each	General SE rating: 5/5 Attributed to enjoyment Task specific SE rating: 5/5 Attributed to enjoyment and current completion Engaged in task Articulated enjoyment Shared work Smiled	Task interpretation: focus on procedure: to work on her metaphor Personal objective: focused on performance: to complete the task Cognitive strategies: self-talk Self-regulating strategies: monitored her time
Arlene (3)	<i>Historical Figure task:</i> Reading different source of materials to gain information for writing speech about a historical figure	General SE rating: 4/5 Attributed to enjoyment Task specific SE rating: 4/5 Attributed to task difficulty and enjoyment Engaged in task Shared work	Task interpretation: focus on procedure: to write speech about an historical figure Personal objective: focused on performance: to complete the task Cognitive strategies: read aloud, looked up information from multiple sources Self-regulating strategies: monitored attention

Table 19

*Nalat's SE and SRL during Literacy Tasks in Sasha's Support Class during Observations*

Student Observation	Literacy Task	Self-Efficacy	SRL
Nalat (1)	<i>Metaphor task:</i> Read about writing traits and create own metaphor for each	General SE rating: 5/5 Attributed to choice and enjoyment Task specific SE rating: 5/5 Attributed to choice and enjoyment Frowned Distracted	Task interpretation: focus on procedures: make a drawing to show the trait and connect the picture to the trait Personal objective: focused on performance: to complete the task Cognitive strategies: made initial sketches Self-regulating strategies: assessed work and made revisions, articulated plan
Nalat (2)	<i>Textbook task:</i> Read Social Studies textbook with class	General SE rating: 3/5 Attributed to enjoyment and engagement Task specific SE rating: 3/5 Attributed to task difficulty, enjoyment, and engagement Engaged in task Distracted Participated in class Participated in group	Task interpretation: focus on learning: to learn about Explorers Personal objective: to learn Cognitive strategy: finger tracking Self-regulating strategy: asked teacher to clarify task
Nalat (3)	<i>Metaphor task:</i> Read about writing traits and create own metaphor for each	General SE rating: 5/5 Attributed to choice Task specific SE rating: 5/5 Attributed to enjoyment Engaged in task Articulated enjoyment of task Motivation	Task interpretation: focus on procedures: make a drawing to show the trait and connect the picture to the trait Personal objective: focused on performance: to complete the task Cognitive strategy: asked teacher question Self-regulating strategies: recognized and corrected error, moved stability ball to desk, articulated plan

Table 20

*Occurrence of SRL-Supportive Instructional Features in Different Classes during Phases One and Three*

SRL-Supportive Instructional Feature		Class				Total
		Iris	Inger	Sasha	Leanne	
Complexity	Skills	8/8	15/15	8/8	8/8	39/39
	Goals	6/8	2/15	3/8	0/8	11/39
	Strategies	0/8	1/15	0/8	0/8	1/39
Choice	Where students work	0/8	9/15	4/8	0/8	13/39
	Role in Group	5/8	2/15	1/8	2/8	10/39
	Who students work with	0/8	8/15	2/8	2/8	12/39
	Materials	5/8	7/15	1/8	3/8	16/39
	Product	2/8	5/15	5/8	6/8	18/39
	Process	6/8	8/15	4/8	3/8	21/39
Instrumental Support	Student Modeling	0/8	3/15	2/8	1/8	6/39
	Teacher Modeling	0/8	0/15	1/8	1/8	2/39
	Instrumental Scaffolding	4/8	6/15	3/8	3/8	16/39
	Procedural Scaffolding	1/8	4/15	3/8	3/8	11/39
Non-Threatening Assessment	Student Self-Assessment	0/8	4/15	1/8	0/8	5/39
TOTAL		37/112 (33%)	74/210 (35%)	38/112 (33%)	32/112 (29%)	

Table 21

*Presence of SRL-Supportive Instructional Features in Relation to Qualities of Placements during Phase Three*

SRL-Supportive Instructional Feature		Teacher-to-student ratio		Instructional Focus		Peer Relations	
		Low	High	Learning Skills	Learning Skills and Curriculum Content	Partner/Group	Independent
Complexity	Skills	X	X	X	X	X	X
	Goals	X	X	X	X	X	X
	Strategies		X		X		X
Choice	Where students work	X	X	X	X	X	X
	Role in Group	X	X		X	X	
	Who students work with	X	X	X	X	X	X
	Materials	X	X	X	X	X	X
	Product	X	X	X	X		X
	Process	X	X	X	X	X	X
Instrumental Support	Student Modeling		X	X		X	
	Teacher Modeling						
	Instrumental Scaffolding	X	X	X	X	X	X
	Procedural Scaffolding	X	X	X	X	X	X
Non-Threatening Assessment	Student Self-Assessment	X	X	X			X

Table 22

*Students' Self-Efficacy Attributions in Relation to General and Task Specific Ratings*

Participant	Observation	General SE Rating	General SE Attribution	Task Specific SE Rating	Task Specific SE Attribution
Sara	One	<b>5</b>	<b>Choice</b>	<b>4</b>	<b>Choice</b>
	Two	3	Task difficulty	3	Task difficulty and environment
	Three	3	Task difficulty	3	Task difficulty
	Four	3	Task difficulty and ability	3	Task difficulty
	Five	3	Task difficulty	2	Task difficulty
	Six	3	Task difficulty	2	Ability and enjoyment
Brock	One	5	Enjoyment	<b>5</b>	<b>Choice</b>
	Two	3	Task difficulty	3	Task difficulty
	Three	5	Ability	5	Ability
	Four	4	Task difficulty	4	Task difficulty
	Five	3	Task difficulty	4	Task difficulty
	Six	3 (reading) 2 (writing)	Task difficulty	4 (reading) 5 (writing)	Task difficulty
Cooper	One	4	Ability	3	Task difficulty
	Two	<b>4.5</b>	<b>Choice</b>	<b>5</b>	<b>Choice</b>
	Three	5	Ability	5	Ability
Matthew	One	5	Strategy use	5	Time
	Two	3	Task difficulty	3	Task difficulty
	Three	<b>3</b>	<b>Choice</b> and task difficulty	2	Ability
	Four	3	Time	2	Time
	Five	4.5	Task difficulty	4	Time
Oceana	One	5	Ability	5	Task difficulty
	Two	5	Ability	5	Ability
	Three	5	Ability, enjoyment, and grades	5	Ability, enjoyment, and grades
	Four	4	Task difficulty	5	Task difficulty
	Five	5	Enjoyment	<b>5</b>	<b>Choice</b>
Arlene	One	3	Way she learns	3	Way she learns
	Two	5	Enjoyment	5	Enjoyment and completion
	Three	5	Enjoyment	4	Task difficulty and enjoyment
Nalat	One	<b>5</b>	<b>Choice and enjoyment</b>	<b>5</b>	<b>Choice and enjoyment</b>
	Two	3	Enjoyment and engagements	3	Task difficulty
	Three	<b>5</b>	<b>Choice</b>	5	Enjoyment

Table 23

*Students' Self-Efficacy Attributions*

SE Attributed to...		Arlene (LD)	Nalat (LD)	Sara (LD)	Brock (Low)	Matthew (Low)	Cooper (High)	Oceana (High)
Environment	Choices Presented		X	X	X	X	X	X
	Difficulty level	X	X	X*	X*	X*	X	X
	Time to complete the task					X*		
	Learning environment			X				
Personal	Ability level			X	X	X	X*	X*
	Enjoyment of the task	X*	X*	X	X			X
	Use of strategies					X		
	Engagement in the task		X					
	How the student learns	X						
	Grade they can to achieve							X

*Note.* \* indicates most frequent SE attribution.



Table 24

*Self-Efficacy Attributions, Average and General Self-Efficacy Ratings and Number of Instances*

SE Attributed to ...		Average General SE Rating	# of Instances of General SE Attribution	Average Task specific SE Rating	# of Instances of Task specific SE Attribution
Environment	Choice	4.5	5	4.8	5
	Difficulty	3.2	14	3.6	15
	Time	3	1	3.7	3
	Environment	n/a	0	3	1
Personal	Ability level	4.6	7	4	6
	Enjoyment	4.7	7	4.3	6
	Strategies	5	1	n/a	0
	Engagement	3	1	n/a	0
	Way Learn	3	1	3	1
	Grades	5	1	5	1

Table 25

*Type of Choice for Student Self-Efficacy Attributions*

Student	Observation	Type of Choice SE Attribution	Description
Cooper	Two	Product	Choice of writing topic
Matthew	Three	Product	Choice of writing topic
Oceana	Five	Product	Choice of design for blog to express ideas
Nalat	One	Product	Choice of what she could draw
Nalat	Three	Product	Choice of what she could draw
Sara	One	Materials	Choice of reading materials
Brock	One	Materials	Choice of reading material

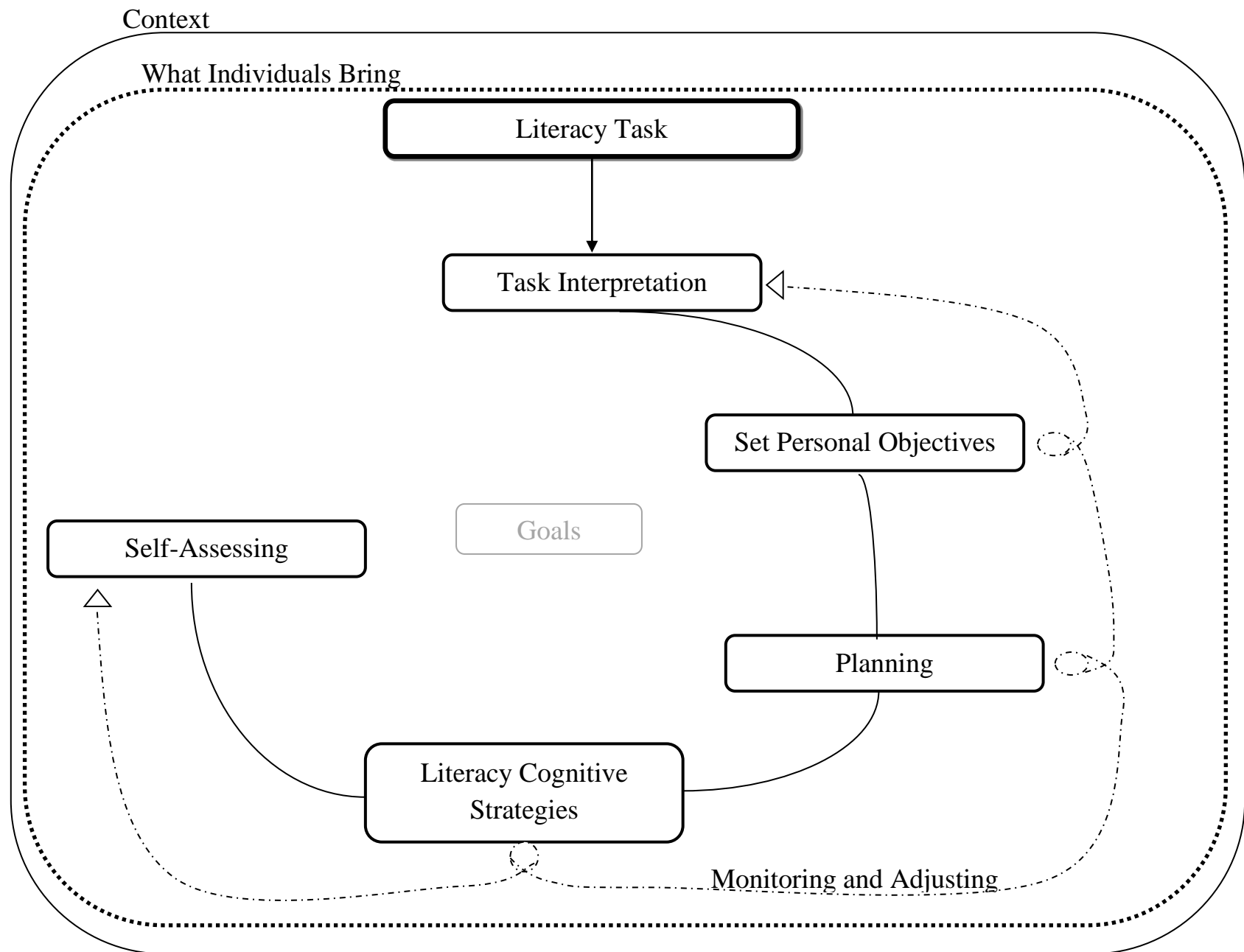
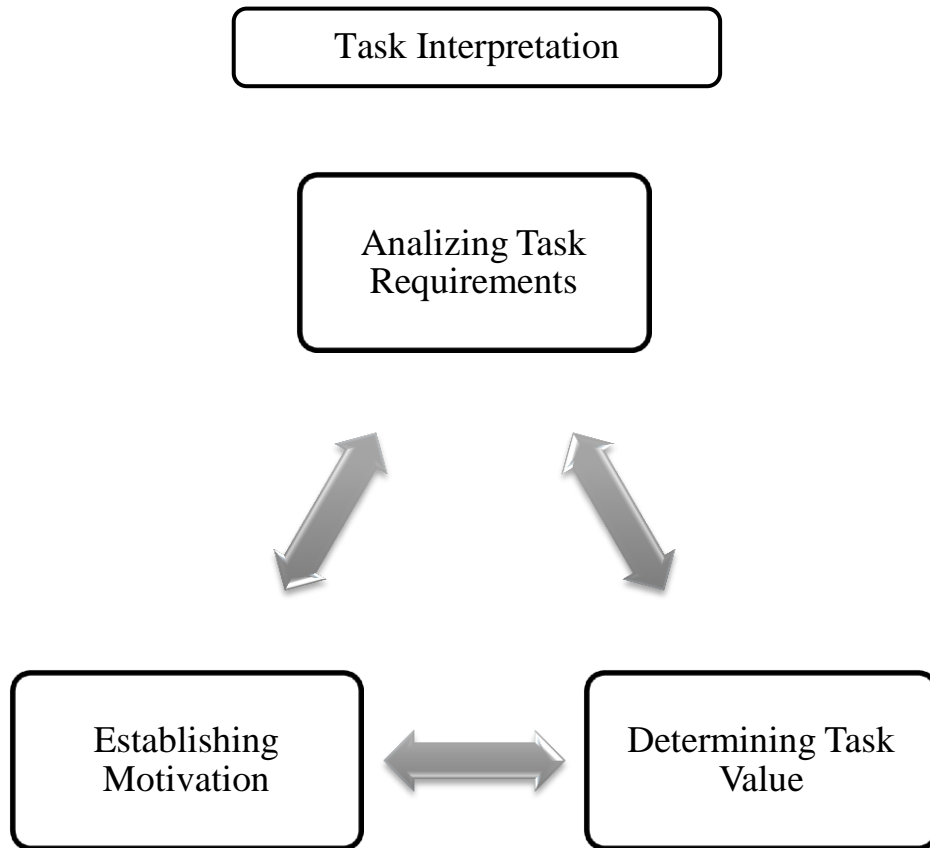


Figure 1. SRL Model (Adapted from Butler & Cartier, 2004)



*Figure 2.* Components of Task Interpretation

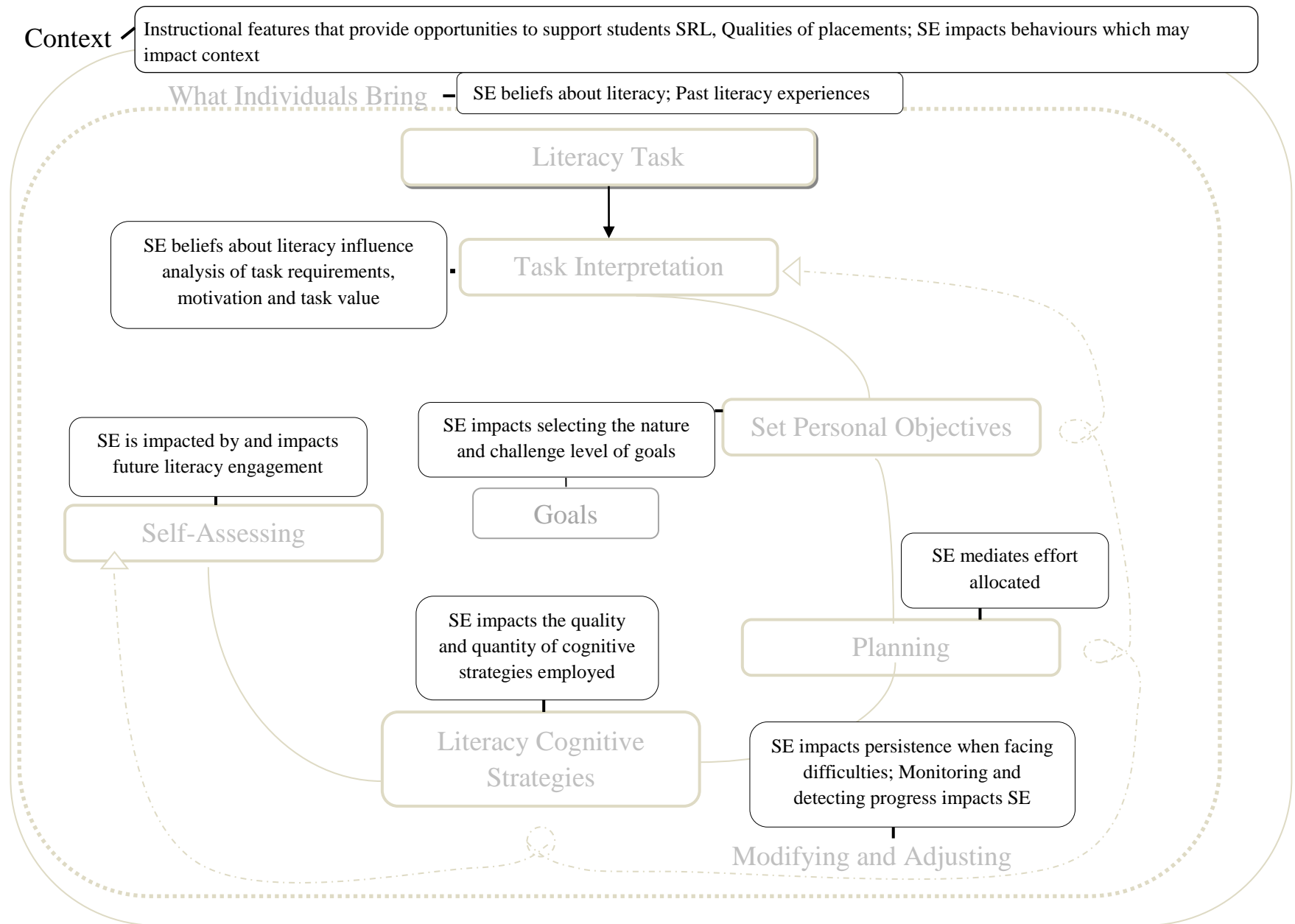
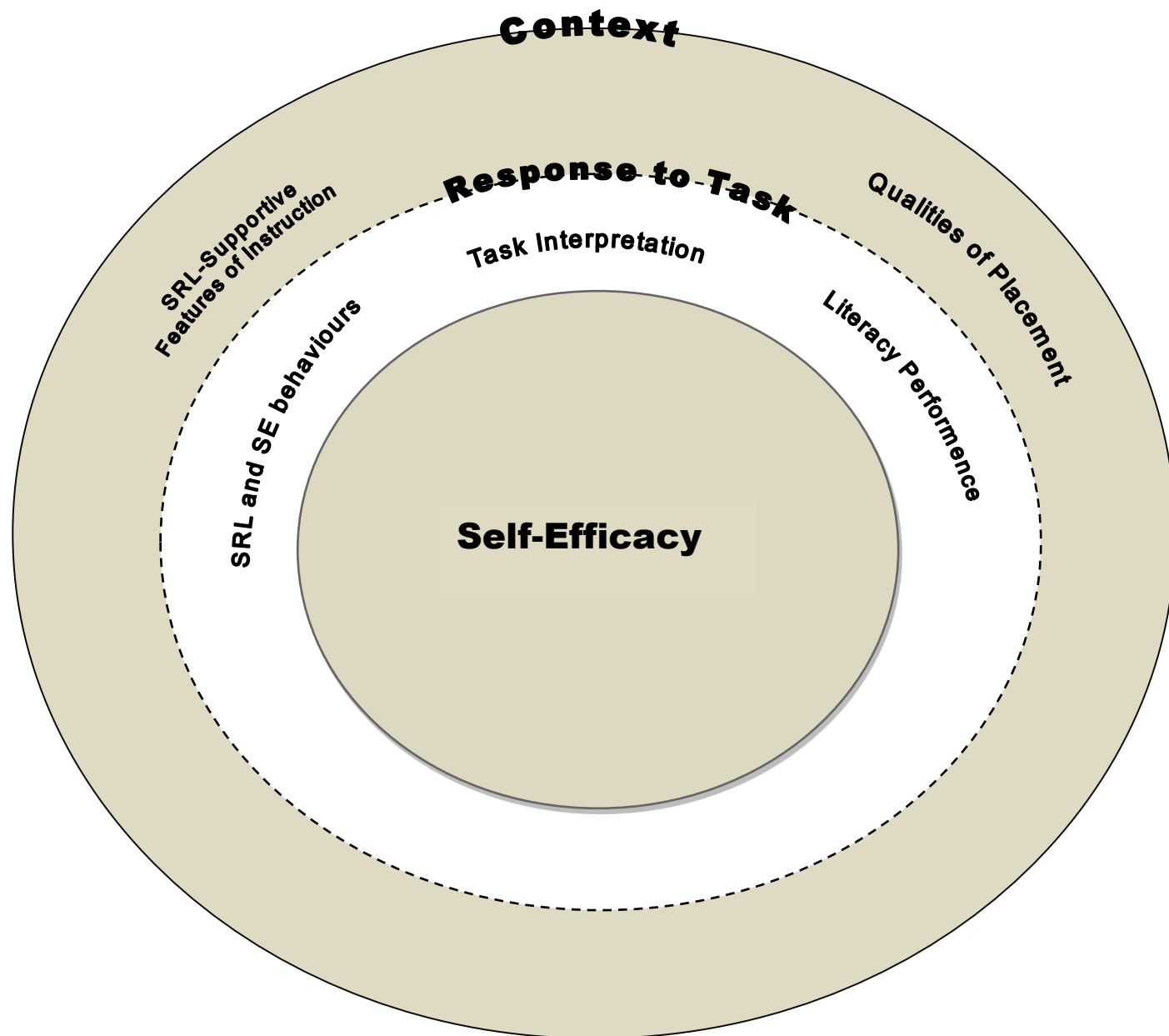


Figure 3. Interactions between SE and SRL



*Figure 4.* Descriptive Portrait of Students' SE Embedded in Context and Response to Tasks

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## RECRUITMENT LETTER

### **Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers**

#### Why this study is being conducted...

Students often lack self-efficacy, or confidence, in their learning, which is so necessary to being successful. This is especially the case for students with learning disabilities. This study seeks to understand how teachers can set up inclusive and support classrooms to support students' confidence in reading and writing.

#### Study method...

In the first part of the study, teachers will be observed to learn about the classroom practices they employ to support strategic, confident learning. In the second part of the study, students in some of those teachers' classes will be observed to see how their strategic learning and confidence might be enhanced by teachers' classroom practices.

#### Who is conducting this research ...

Jennifer Scott, a learning support teacher and Masters Student is conducting this research as her master's thesis, under the supervision of Dr. Deborah Butler, a Professor in Education at UBC. Jennifer is interested in studying ways to support students in different kinds of educational placements.

#### Participants ...

This study is looking for Grade 4 and 5 teachers who are seeking to foster confident, strategic learning in their students.

#### Your Role ...

If you choose to participate, your classroom practices will be observed 2-3 times (in Phase One). In Phase Two of the study, students in your class will be briefly interviewed and observed 3-5 times to learn how their development of strategic learning and confidence might be connected to your classroom practices.

Please contact Jennifer Scott if you are interested in participating in this study or have any questions.

(Researcher's phone number)

(Researcher's email address)

## Appendix B

### TEACHER CONSENT FORM

#### **Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers**

**Principal Investigator:**

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**Co-Investigator:**

Jennifer Scott

Master of Arts Student

Department of Educational and Counselling Psychology, and Special Education

University of British Columbia

(Researcher's phone number)

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**Purpose:**

This study will explore how practices teachers put in place to support strategic reading and writing might also support students' development of self-efficacy, or confidence. Attention will focus on students with learning disabilities and their peers from different reading achievement groups in their inclusive and support placement classes.

**Study Procedures:**

If you participate in this study, you may be involved in up to two phases:

Phase One: Your instruction will be observed to understand how you are fostering your students to be confident, strategic learners.

- The co-investigator, Jennifer Scott, will consult with you to find times where your class will be working on reading and writing tasks. Jennifer will observe in your class 2 -3 times, taking notes about the kinds of opportunities created to support students' strategic learning. Each observation will last between 30 – 60 minutes.

At this point, you will be asked to distribute parent/guardian consent and student assent forms to students in your class. This study aims to enroll a total of twelve students, across grades four and five, four with learning disabilities, four low readers, and four normal readers. Selection will be based on the provision of parental consent and student assent, and seeking variety in gender, age, and reading level.

Phase Two: Student participants will be observed in your class to relate their confidence and strategy use to instructional features.

- Student participants will be asked to participate in one 10-15 minute interview at the start of phase two at a time that will not disrupt regular classroom activities.
- Jennifer will consult with you to find times where your class will be working on reading or writing tasks. Jennifer will observe in your class, 3 - 5 times, for 30 – 60 minutes each time. During this time, Jennifer will observe, take notes, and ask students questions about their perceptions of the task and classroom environment. The purpose of these observations will be to see how students respond to classroom practices that support strategic learning, and how those practices can be linked to their development of self-efficacy.
- At the end of the study, students will be asked to participate in one 10 – 15 minute interview at a time that does not disrupt regular classroom activities.  
This study will take between 4 – 6 weeks to complete.

### **Risks:**

There will be no risks for your participation in this study. Observations are designed to document the relationship between instructional practices and students' development of strategic learning and self-efficacy.

### **Benefits:**

This research may help understand how classroom practices designed to support strategic learning might also be related to students' self-efficacy.

### **Confidentiality:**

Confidentiality is assured in this thesis research. All documents collected will be identified by code number and will be kept in a locked filing cabinet. Electronic data will be stored as computer files that are encrypted and password protected. Participants, including both teachers and students, will not be identified by name or any descriptors in any reports of the completed study.

### **Contact for Study Information:**

If you have any questions or would like more information about this study, please contact Jennifer Scott or Dr. Butler using the contact information above.

### **Contact for Participant Rights:**

If you have any concerns about your rights as a research participant, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598 or e-mail [RSIL@ors.ubc.ca](mailto:RSIL@ors.ubc.ca).

### **Consent:**

Participation in this study is entirely voluntary. You may refuse to participate or withdraw from the study at any time without consequence.

## TEACHER CONSENT FORM

### Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers

☐ I have read the consent form and kept a copy of it for my own records.

If you agree to participate, please sign this form indicating your consent, and return it to your principal.

**School:** \_\_\_\_\_

**Name (printed):** \_\_\_\_\_  
(First) (Last)

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

If you would like a copy of the study report, please fill in your mailing address below. Thank you.

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Appendix C

**Teacher Observation Instrument**

(Adapted from Perry, 1998)

**Section A**

Teacher \_\_\_\_\_ Date \_\_\_\_\_

School \_\_\_\_\_ Time \_\_\_\_\_ - \_\_\_\_\_

Class \_\_\_\_\_ Activity \_\_\_\_\_

**Section B**

Running Record



**Section C**

Continued ...

**Instructional Features**

The categories below act as a guide for observations, other factors that arise can also be documented. Record all instructional features, descriptions, and ratings in the space provided below.

<b>Complexity</b> <ul style="list-style-type: none"><li>- reading material</li><li>- outcome expectation</li></ul> <b>Choices about</b> <ul style="list-style-type: none"><li>- who the students work with</li><li>- what they work on</li><li>- how they approach, complete, and/or evaluate the task</li><li>- where they work</li><li>- when they work</li></ul>	<b>Non-threatening Assessment</b> <ul style="list-style-type: none"><li>- criteria for assessment</li><li>- self-assessment at end</li></ul> <b>Instrumental Support</b> <ul style="list-style-type: none"><li>- Modeling (teacher/peer)<ul style="list-style-type: none"><li>o task (successful/coping)</li><li>o SRL</li></ul></li><li>- Scaffolding<ul style="list-style-type: none"><li>o procedural</li><li>o instrumental</li></ul></li></ul>	
Instructional Feature	Description	Rating

## Teacher Observation Instrument: Guide

Complexity: Tasks that are complex involve cognitively demanding activities. In the context of literacy tasks, complex task attend to multiple goals, entail large chunks of meaning, expand over extended periods of time, facilitate students to implement cognitive and metacognitive processes, and enable creation of diverse products (Perry et al., 2004). If there is no complexity indicate this with a “0” rating. If the task includes some, but not all elements of complexity assign a “1” rating. If all elements of complexity are present record a “2” rating.

Examples:

Task:

attends to multiple goals: the task requires students to draw from prior knowledge, add new information about the topic, and apply that knowledge to move on to the next step

entails large chunks of meaning: the task requires students to gain extensive knowledge about a subject

expands over extended periods of time: the task builds on topics students have been learning about over the course of several lessons

facilitates students to implement cognitive and metacognitive processes: the students must regulate their reading comprehension and/or writing process

enables creation of diverse products: students can express their final literacy product in a variety of ways such as presenting it orally to the class, creating a PowerPoint, writing a poem, etc.

Choice: Choice refers to the degree of selection that students have when they are working on literacy tasks. Choices may be provided in a variety of ways such as: who the students work with, what they work on, how they approach, complete, and/or evaluate the task, where they work (physical location), and when they work. For each potential or given choice, indicate the quality of choice using a “0” for no choice, a rating of “1” for choice provided with constraints, and a “2” rating for choice without constraints. Constraints refer to choices between a collection or set of items or choices that the teacher has provided. A choice without constraints would involve a free choice of material, topic, approach, etc.

Examples:

Note that this is not an exhaustive list, rather several examples to illustrate rating of scenarios.

Type of Choice	0 = No Choice	1 = Choice with Constraints	2 = Choices without Constraints
Choice of topic	Students are assigned a topic	Students select a topic from a set provided by teacher	Students choose own topic
Choice of who students work with	Students are assigned partners or independent work	Students are allowed to choose a set number of partners, a partner from their group, ...	Students have the choice to work independently or with any number of their peers
Choice of material	Students are assigned specific reading or writing material	Students select material for a set provided by the teacher	Students are responsible for finding and selecting their own material
Choice of evaluation	Students are provided with evaluation criteria	Students selected between evaluation criteria provided by teacher	Students select their own evaluation criteria

Non-threatening Assessment Practices: These evaluation practices involve students evaluating, assessing, or reflecting on their work. This process may be formal such as using a rubric or checklist, or informal such as a discussion on self-assessment i.e. the teacher poses the question, “How will you know when you are finished”, or “How do you think you did on this task”. In contrast to self-assessments, teachers may employ teacher-assessment practices such as assigning marks, or having students write tests or quizzes. When observing, use a “0” when there is no self-assessment, “1” for both student self-assessment and teacher-assessment, or “2” when there is only student self-assessment.

Examples:

0 (no self-assessment): students are graded by submitting their final product to their teacher for grading

1 (both self-assessment and teacher-assessment): students are asked to provide a self-rating on literacy performance, i.e. reading book and writing a report, and their teacher grades their final product

2 (only self-assessment): students verbally share the process and/or product from their literacy task with their class or with their teacher, students fill out a self-assessment checklist

Instrumental Support – Modeling: Models demonstrate successful completion of tasks or articulate SRL behaviours such as planning, implementing, monitoring, or altering strategy use. Rate the quality of modeling using a “0” for no modeling, “1” for modeling of successful task completion and “2” for modeling of SRL behaviours. Indicate whether teachers or peers were models for each instance.

Examples:

0 (no modeling): teaching explains literacy task and does not demonstrate, teacher show students completed work from other classes but does not demonstrate

1 (modeling of successful task completion): teacher or student model demonstrates reading a passage and writing down information they learn from reading, teacher calls on student to show class their notes of important information from reading, student model reads a passage aloud and explains what they learned

2 (modeling of SRL behaviours): teacher or student model articulates their plan to when approaching literacy tasks by stating “I am going to use a highlighter to mark important ideas while I am reading”, teacher or student model illustrates implementing strategies by taking notes of important information, teacher or student model shows monitoring strategies by re-reading sections to ensure comprehension, teacher or student model demonstrates altering strategy use by starting with reading and highlighting ideas and then changing to taking notes

Instrumental Support – Scaffolding: Scaffolding occurs when teachers support students’ learning while creating opportunities for them to become successful independently. Scaffolding can occur throughout the task including when students interpret literacy tasks, when they model their progress towards goals, or as they reflect on their work in relation to their goals. For each instance of scaffolding indicate the quality using a “1” if scaffolding is procedural (presented as directive) or a “2” if scaffolding is instrumental (assists students to solve problem independently). In the case that no scaffolding is provided, signify this with a “0” rating.

Example:

0 (no scaffolding): students worked independently, no support was requested or provided from teacher

1 (scaffolding is procedural): a student requested help with the reading passage and the teacher read passage aloud and explained what it meant, a student expressed difficulty with the spelling of a word and the teacher provides that spelling

2 (scaffolding is instrumental): a student requested help with the reading passage, teacher prompted student to generate and use strategies such as rereading or looking up unknown words, a student expressed difficulty with the spelling of a word and the teacher prompts them to sound out the word, or brainstorm what strategies to use to find spelling such as looking up in the dictionary or finding the word in a book

**PARENT/GUARDIAN CONSENT FORM**

**Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers**

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**Co-Investigator:**

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Master of Arts Student

Department of Educational and Counselling Psychology, and Special Education

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(Researcher's phone number)

(Research's email address)

**Purpose:**

This study will explore how practices teachers put in place to support strategic reading and writing might also support students' development of self-efficacy, or confidence. Attention will focus on students with learning disabilities and their peers from different reading achievement groups in their inclusive and support placement classes.

**Study Procedures:**

If you provide consent for your child to join in this study, he/she will be involved in these activities:

1. Interviews: Jennifer Scott, the co-investigator, will meet with your child twice for 10 – 15 minutes interviews, once at the start of the study, and once at the end. Your child will be asked questions during these interviews about his or her perceptions about reading and writing. These interviews will take place at a time that does not disrupt their regular classroom activities.
2. Observations: Your child will be observed during their normal school tasks 3-5 times in their regular classroom (and support class if applicable) for 30 – 60 minutes each time. Jennifer will sit near your child to observe and take notes of your child's behaviours and the class environment. At times Jennifer will ask your child questions about his or her confidence and perceptions of the task and class environment.

**Risks:**

Your child will be asked questions about how he or she thinks about reading and writing and his or herself as a reader or writer, which some students might feel sensitive about. However,

questions will be asked with great sensitivity, and students will always be given a choice as to whether or not to answer questions. There will be no other costs or risks for participating in this study. Interviews will be held at times that do not interfere with your child's regular classroom work. Observations will occur during normal school tasks.

**Benefits:**

This research may help understand how classroom practices designed to support strategic learning might also be related to students' self-efficacy.

**Confidentiality:**

Confidentiality is assured in this thesis research. All documents collected will be identified by code number and will be kept in a locked filing cabinet. Electronic data will be stored as computer files that are encrypted and password protected. Participants, including both teachers and students, will not be identified by name or any descriptors in any reports of the completed study.

**Contact for Study Information:**

If you have any questions or would like more information about this study, please contact Jennifer Scott or Dr. Butler using the contact information above.

**Contact for Participant Rights:**

If you have any concerns about your child's rights as a research participant, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598 or e-mail [RSIL@ors.ubc.ca](mailto:RSIL@ors.ubc.ca).

**Consent:**

Participation in this study is entirely voluntary. You or your child may refuse to participate or withdraw from the study at any time without jeopardy to your child's class standing.

**Note:** \*Please keep the first two pages for your own records.

\*Please detach and return the following page to your child's teacher.

## **PARENT/GUARDIAN CONSENT FORM**

### **Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers**

☐ **I have read the consent form and kept a copy of it for my own records.**

**Please circle one:**

I consent to my child's participation in this study.

**I do not** consent to my child's participation in this study.

**Child's School:** \_\_\_\_\_

**Child's Classroom Teacher:** \_\_\_\_\_

**Child's Name (printed):** \_\_\_\_\_  
(First) (Last)

**Parent/Guardian Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

If you would like a copy of the study report, please fill in your mailing address below. Thank you.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Appendix E

### STUDENT ASSENT FORM

#### **Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers**

This study looks at what teachers can do to help students improve their reading and writing and at how students feel about reading and writing.

If you would like to be in this study, you will be take part in these things:

1. Interviews: You will take part in two interviews. Each interview will take about 10 to 15 minutes. You will be asked questions about your reading and writing and how you feel about reading and writing.
2. Observations: You will be observed 3 – 5 times in your regular classroom (and in writing support if you attend) for between 30 - 60 minutes each time. Observations will take place as you work on your regular reading or writing tasks. During this time you will be asked questions about what you are doing.

During the study, you do not have to answer any of the questions if you do not want to. You can stop taking part in the study at any time.

You will not miss any class time but may be asked to miss some of your break time at lunch or recess to do the two interviews.

Any information about you will not be shared with anyone else.

If you have any questions, please ask your parents or your teacher.

This page is for you to keep. Please fill out and give the next page to your teacher.

## STUDENT ASSENT FORM

### Relationship between Instructional Practices and the Development of Self-Efficacy among Students with Learning Disabilities and their Peers

☐ I have read the assent form and kept a copy of it.

**Please circle one:**

I am willing to participate in this study.

I **do not** want to participate in this study.

**School:** \_\_\_\_\_

**Name (printed):** \_\_\_\_\_  
(First) (Last)

**Classroom Teacher:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## Appendix F

### Student Interview Protocol

Interviews with students throughout the study will be semi-structured in nature. The focus of the initial interview will be on students' perceptions of, and self-efficacy for, literacy tasks. During observations, questions will explore students' perceptions of, and self-efficacy for, a given literacy task and their perceptions of the context. Finally, questions at the end of the study will again probe students' self-efficacy about reading and writing, and will clarify emerging themes or residual questions that the investigator may have about the student's literacy engagement.

Examples of types of questions that could be asked are as follows:

#### **At the start of the study (initial interview):**

##### ***Perceptions and self-efficacy for literacy tasks:***

How do you feel about reading? Do you like reading?

How do you feel about writing? Do you like writing?

What do you read? How often do you read?

When do you write?

*I will show them a literacy task from their class. What were you asked to do when you were given this activity? If I asked you to read this now how would you feel about it? Do you enjoy doing these types of activities?*

*I will ask them the two self-efficacy probes and ask them to explain their responses after each.*

#### **During Observations:**

##### ***Perceptions of a given literacy task:***

What are you asked to do? Why?

##### ***Self-efficacy for literacy:***

*I will ask them the two self-efficacy probes and ask them why after each.*

##### ***Perceptions of Context***

*As instances of instructional features that provide opportunities to support students' self-regulated learning and identified qualities of placement occur, I will ask the student how they feel about them. For example, if a choice was present: I noticed that you had a choice of books to read. Tell me about that. Why did you make that choice? Were you happy with your choice?*

#### **At the End of the Study (final interview):**

*I will raise questions about students' self-efficacy for reading and engagement in literacy tasks in different classroom contexts. For example, if instrumental support was present: When you asked your teacher for help when you were reading she would often asked you to brainstorm reading strategies. Tell me about that. Does that help you? Why or who not?*

*I will ask them again about their responses to the SE measure. I will also ask them the two self-efficacy probes and ask them to explain their responses after each.*

## Appendix G

### SELF-EFFICACY MEASURE

(Adapted from Butler, 1998)

Investigator explains: “This is an example of a literacy task. These tasks can use reading and/or writing.”

Investigator shows the student an example of a task where they are asked to read a passage and write a response and asks the student if he/she can come up with some examples of when he/she was asked to complete this type of task.

Investigator instructs: “When you are answering these questions, think of when you are asked to read a passage and write a response.

Instructions: How confident are you that you can do these things when you are asked to read a passage and write a response?

	Not at all confident	Somewhat confident	Very confident
(1) Understand what I am reading	1 _____	3 _____	5 _____
(2) Learn a new idea or concept	1 _____	3 _____	5 _____
(3) Explain what I read to another student	1 _____	3 _____	5 _____
(4) Summarize what I have learned in my own words	1 _____	3 _____	5 _____
(5) Remember what I have learned	1 _____	3 _____	5 _____

## Appendix H

### **Self-Efficacy Probes** (Adapted from Bandura, 2006)

Think about this type literacy task, how often do you think that you can complete it successfully?

1	2	3	4	5
Never		About half the time		Always

Think about the activity you have in front of you. How confident are you that you can complete this task successfully?

1	2	3	4	5
Not at all confident		Somewhat confident		Very confident

Appendix I  
**Student Observation Instrument**  
(Adapted from Perry, 1998)

**Section A**

Student \_\_\_\_\_ Date \_\_\_\_\_  
Class \_\_\_\_\_ Time \_\_\_\_\_ - \_\_\_\_\_  
Teacher \_\_\_\_\_ Activity \_\_\_\_\_  
School \_\_\_\_\_

**Section B**

Running Record

## Section C

The categories below act as a guide for observations, other factors that arise can also be documented. Record all descriptions, events, and behaviours on the follow page, using the format provided.

Instructional Features	Qualities of Placement	Student's Self-Efficacy (SE) and Self-Regulated Learning (SRL) Behaviours
<p><i>Complexity:</i></p> <ul style="list-style-type: none"> <li>- reading material</li> <li>- outcome expectation</li> </ul> <p><i>Choices:</i></p> <ul style="list-style-type: none"> <li>- who the students work with</li> <li>- what they work on</li> <li>- how they approach, complete, and/or evaluate the task</li> <li>- where they work</li> <li>- when they work</li> </ul> <p><i>Non-threatening Assessment:</i></p> <ul style="list-style-type: none"> <li>- criteria for assessment</li> <li>- self-assessment at end</li> </ul> <p><i>Instrumental Support:</i></p> <ul style="list-style-type: none"> <li>- Modeling (teacher/peer) <ul style="list-style-type: none"> <li>o task (successful/coping)</li> <li>o SRL</li> </ul> </li> <li>- Scaffolding <ul style="list-style-type: none"> <li>o procedural</li> <li>o instrumental</li> </ul> </li> </ul>	<p>Instructional Focus</p> <ul style="list-style-type: none"> <li>- curriculum</li> <li>- learning skills</li> <li>- both</li> </ul> <p>Teacher to Student Ratio</p> <p>Students' perceptions of Peer Relations</p>	<p><i>SE:</i></p> <p>Persistency</p> <p>Effort</p> <p>Level of Challenge in Goals</p> <p>Completion of Task</p> <p>Motivation to Read</p> <p><i>SRL:</i></p> <p>Task Interpretation</p> <p>Personal Objectives</p> <p>Planning</p> <p>Cognitive Strategies</p> <p>Self-Regulating Strategies</p> <p>Monitoring</p> <p>Adjusting</p> <p>Self-Assessment</p>



### Section C – Continued

Complete the following sections indicating any connections inferred between instructional features, qualities of placements, and SE/SRL behaviours using connecting lines with explanations in the column provided. Attach additional pages if more space is required.

Instructional Features	Instructional Feature		Description		Rating	Connections
Qualities of Placements	Instructional Focus		Teacher-Student Ratio		Peer Relations	
SRL/SE Behaviours	SE Behaviours			SRL Behaviours		Connections

## **Student Observation Instrument: Guide**

Complexity: Tasks that are complex involve cognitively demanding activities. In the context of literacy tasks, complex task attend to multiple goals, entail large chunks of meaning, expand over extended periods of time, facilitate students to implement cognitive and metacognitive processes, and enable creation of diverse products (Perry et al., 2004). If there is no complexity indicate this with a “0” rating. If the task includes some, but not all elements of complexity assign a “1” rating. If all elements of complexity are present record a “2” rating.

Examples:

Task:

attends to multiple goals: the task requires students to draw from prior knowledge, add new information about the topic, and apply that knowledge to move on to the next step

entails large chunks of meaning: the task requires students to gain extensive knowledge about a subject

expands over extended periods of time: the task builds on topics students have been learning about over the course of several lessons

facilitates students to implement cognitive and metacognitive processes: the students must regulate their reading comprehension and/or writing process

enables creation of diverse products: students can express their final literacy product in a variety of ways such as presenting it orally to the class, creating a PowerPoint, writing a poem, etc.

Choice: Choice refers to the degree of selection that students have when they are working on literacy tasks. Choices may be provided in a variety of ways such as: who the students work with, what they work on, how they approach, complete, and/or evaluate the task, where they work (physical location), and when they work. For each potential or given choice, indicate the quality of choice using a “0” for no choice, a rating of “1” for choice provided with constraints, and a “2” rating for choice without constraints. Constraints refer to choices between a collection or set of items or choices that the teacher has provided. A choice without constraints would involve a free choice of material, topic, approach, etc.

Examples:

Note that this is not an exhaustive list, rather several examples to illustrate rating of scenarios.

	0 = No Choice	1 = Choice with Constraints	2 = Choices without Constraints
Choice of topic	Students are assigned a topic	Students select a topic from a set provided by teacher	Students choose own topic
Choice of who students work with	Students are assigned partners or independent work	Students are allowed to choose a set number of partners, a partner from their group, ...	Students have the choice to work independently or with any number of their peers
Choice of material	Students are assigned specific reading or writing material	Students select material for a set provided by the teacher	Students are responsible for finding and selecting their own material
Choice of evaluation	Students are provided with evaluation criteria	Students selected between evaluation criteria provided by teacher	Students select their own evaluation criteria

Non-threatening Assessment Practices: These evaluation practices involve students evaluating, assessing, or reflecting on their work. This process may be formal such as using a rubric or checklist, or informal such as a discussion on self-assessment i.e. the teacher poses the question, “How will you know when you are finished”, or “How do you think you did on this task”. In contrast to self-assessments, teachers may employ teacher-assessment practices such as assigning marks, or having students write tests or quizzes. When observing, use a “0” when there is no self-assessment, “1” for both student self-assessment and teacher-assessment, or “2” when there is only student self-assessment.

Examples:

0 (no self-assessment): students are graded by submitting their final product to their teacher for grading

1 (both self-assessment and teacher-assessment): students are asked to provide a self-rating on literacy performance, i.e. reading book and writing a report, and their teacher grades their final product

2 (only self-assessment): students verbally share the process and/or product from their literacy task with their class or with their teacher, students fill out a self-assessment checklist

Instrumental Support – Modeling: Models demonstrate successful completion of tasks or articulate SRL behaviours such as planning, implementing, monitoring, or altering strategy use. Rate the quality of modeling using a “0” for no modeling, “1” for modeling of successful task completion and “2” for modeling of SRL behaviours. Indicate whether teachers or peers were models for each instance.

Examples:

0 (no modeling): teaching explains literacy task and does not demonstrate, teacher show students completed work from other classes but does not demonstrate

1 (modeling of successful task completion): teacher or student model demonstrates reading a passage and writing down information they learn from reading, teacher calls on student to show class their notes of important information from reading, student model reads a passage aloud and explains what they learned

2 (modeling of SRL behaviours): teacher or student model articulates their plan to when approaching literacy tasks by stating “I am going to use a highlighter to mark important ideas while I am reading”, teacher or student model illustrates implementing strategies by taking notes of important information, teacher or student model shows monitoring strategies by re-reading sections to ensure comprehension, teacher or student model demonstrates altering strategy use by starting with reading and highlighting ideas and then changing to taking notes

Instrumental Support – Scaffolding: Scaffolding occurs when teachers support students’ learning while creating opportunities for them to become successful independently. Scaffolding can occur throughout the task including when students interpret literacy tasks, when they model their progress towards goals, or as they reflect on their work in relation to their goals. For each instance of scaffolding indicate the quality using a “1” if scaffolding is procedural (presented as directive) or a “2” if scaffolding is instrumental (assists students to solve problem independently). In the case that no scaffolding is provided, signify this with a “0” rating.

Example:

0 (no scaffolding): students worked independently, no support was requested or provided from teacher

1 (scaffolding is procedural): a student requested help with the reading passage and the teacher read passage aloud and explained what it meant, a student expressed difficulty with the spelling of a word and the teacher provides that spelling

2 (scaffolding is instrumental): a student requested help with the reading passage, teacher prompted student to generate and use strategies such as rereading or looking up unknown words, a student expressed difficulty with the spelling of a word and the teacher prompts them to sound out the word, or brainstorm what strategies to use to find spelling such as looking up in the dictionary or finding the word in a book

## II. Qualities of Placements

Instructional Focus: Instructional focus refers to the nature of lesson content, focusing on curriculum expectations, learning skills, or an amalgamation of the two. The focus may change throughout a lesson; therefore provide a description of all

Examples:

Qualities of Placements	Instructional Focus		Teacher-Student Ratio	Peer Relations
	Curricular	Direct instruction on Simple Machines		
	Learning skills	Brainstorm of reading comprehension strategies		
	Learning skills	Stopped class to brainstorm strategies for dealing with comprehension difficulties		
	Curricular and Learning skills	Created class chart of information they learned from reading about Simple Machines		

Teacher-to-student ratio: The teacher-to-student ratio in different placements is likely to differ. Record the number of students and teachers in each class. Document any additional teachers, teaching aids, or students who arrive throughout the lesson.

Examples:

Qualities of Placements	Instructional Focus		Teacher-Student Ratio	Peer Relations
			<p>Start of lesson: 23 students: 1 teacher</p> <p>At 10:30 when students began working independently 1 more student arrived. 24 students: 1 teacher</p>	

Peer Relations: Peer relations refer to students' relationships and interactions with other students in the classroom. Record any interactions that the student under observation has with their peers in the classroom.

Examples:

Qualities of Placements	Instructional Focus		Teacher-Student Ratio	Peer Relations
				<p>When given choice of texts, student A consults with peers R and Y regarding their choices. Student A chooses a different text than those peers.</p> <p>When student A asks a question about what the task is after instructions, peer R comments, "She just said to read it." Tone judged by observer as neutral.</p> <p>Teacher uses peer W as a model for coping with comprehension difficulties.</p>

## II. SRL/SE Behaviours

SE Behaviours: Behaviours associated with SE include: persistency when faced with difficulties, amount of effort allocated to tasks, degree of challenged selected for goals, completion of the task, and intrinsic motivation to read. When observing students engaged in literacy tasks, describe any behaviours which may be reflective of these SE characteristics. It is important to note that these descriptions are only observations of behaviours. The SE probes and student interviews will clarify any connections between these behaviours and students intentions. For example, the description of a student who stopped reading halfway through the passage cannot be interpreted until the student is asked about their intentions. It may be the case that they perceived the task too challenging so they gave up or that they thought the task was to read only half of the passage.

Examples:

SRL Behaviours: Students begin the SRL process by interpreting tasks and setting personal

	SE Behaviours	SRL Behaviours
SRL/SE Behaviours	Student proclaimed reading was too difficult, stopped reading and drew on desk.	
	Student expressed difficulty reading text, asked for teacher help, and then continued reading.	
	Student stated the text they choose was, “so cool”, and read with focus until task was complete.	
	Student took 5 minutes get started on task with 2 prompts from teacher.	
	Student read for approximately 30 seconds and then wrote in notebook.	
	Student read for approximately 5 minutes and then wrote list in notebook.	
	Student alternated between reading passage and writing notes in notebook.	
	Student set goal to learn about how the heart pumped blood.	
	Student set goal to read faster than peers.	

objectives. In order to reach these objectives, they employ both cognitive and self-regulating

strategies to plan, monitor, adjust, and assess their progress (Butler & Cartier, 2005). Describe any behaviours which may indicate task interpretation, setting personal objective, cognitive or self-regulating strategies, planning, monitoring, adjusting, and assessing. As with SE behaviours, it is important to note that these descriptions are only observations of behaviour that may be linked to SRL behaviours. The SE probes and student interviews will clarify the intent behind these behaviours. For example, it may be recorded that the student used markers to highlight sections of their reading passage. The student's reasoning for this may be linked to the cognitive strategy of highlighting main ideas or they may use the highlighters to track what they have read so far.

Examples:

SRL/SE Behaviours	SE Behaviours	SRL Behaviours
		<p>Student reads while taking notes.</p> <p>Student highlights title and files reading passage into binder.</p> <p>Student gets out markers before reading and highlights text in reading passage.</p> <p>Student asks teacher for a graphic organizer halfway through writing.</p> <p>Student throws out notebook page that they have been writing on.</p> <p>Student stops reading after the first paragraph and starts reading from the beginning.</p> <p>Student uses finger tracking while reading.</p> <p>Student turns page of reading right after peers do.</p> <p>When prompted by teacher to reread notes from reading, the student does not do this but rather files their page into their notebook.</p>

#### IV. Connections



Connections: Qualities of placements may afford or constrain the ways in which SRL-supportive instructional features are provided in different placements. As well, qualities of placements and SRL-supportive instructional features may impact students SE and SRL behaviours. Note any observed potential connections using connecting lines with explanations in the column provided.

Examples:

SRL-supportive instructional features	Instructional Feature		Description		Rating	Connections
	Complexity		Reading Material		2	
	Choice		Topic		2	
	Choice		Materials		2	
	Instrumental Support		Modeling – Teacher		1	
	Instrumental Support		Scaffolding		1	
Qualities of Placements	Instructional Focus		Teacher-Student Ratio	Peer Relations		
	Learning skills	Stopped class to brainstorm strategies for dealing with comprehension difficulties	20 students: 1 teacher	When given choice of texts, student A consults with peers R and Y regarding their choices. Student A chooses a different text than those peers.		
	Curricular and Learning skills	Created class chart of information they learned from reading about the human body				
SRL/SE Behaviours	SE Behaviours		SRL Behaviours			
	Student stated the text they choose was, “so cool”		Student gets out markers before reading and highlights text in reading passage.			
	Student read while making notes.					
			Student turned body in desk away from peers who were talking.			